

Documentation for the First Through Fifth Waves of the 2007–08 Beginning Teacher Longitudinal Study

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Chapter 1. Introduction

The Beginning Teacher Longitudinal Study (BTLS) is sponsored by the National Center for Education Statistics (NCES) on behalf of the U.S. Department of Education and was conducted by the U.S. Census Bureau. BTLS is a study of a national cohort of beginning public school teachers who were initially interviewed as part of the 2007–08 Schools and Staffing Survey (SASS). BTLS was conducted on a yearly basis and followed the same group of individuals as they moved in and out of elementary- and secondary-level teaching for 5 years. For more information on the justification of the BTLS, see appendix A. BTLS began in the 2007–08 school year as part of SASS. Follow-ups were conducted in the 2008–09 school year, as part of the Teacher Follow-up Survey (TFS), and in the 2009–10, 2010–11, and 2011–12 school years as a stand-alone data collection. BTLS included all beginning public school teachers who participated in the 2007–08 SASS, including teachers who subsequently left the K–12 teaching profession, teachers who remained in the K–12 teaching profession, and teachers who returned to the profession after a short leave. Beginning teachers who were sampled for, but who did not respond to, the 2007–08 SASS were not included in the data collection of subsequent BTLS waves.

Beginning public school teachers were defined in BTLS as teachers who began teaching in 2007 or 2008 in a traditional public or public charter school that offered any of grades K–12 or comparable ungraded levels. These teachers included regular full- and part-time teachers, itinerant teachers, and long-term substitutes as well as any administrators, support staff, librarians, or other professional staff who taught at least one regularly scheduled class in the 2007–08 school year (excluding librarians teaching library skills classes).

Background

The first wave of data collection for BTLS took place in school year 2007–08 as part of the 2007–08 SASS. SASS is the largest, most extensive survey of K–12 school districts, schools, teachers, and administrators in the United States today. It provides extensive data on the characteristics and qualifications of teachers and principals, teacher hiring practices, professional development, class size, and other conditions in schools across the nation. SASS focuses in particular on teacher demand and shortage, teacher and administrator characteristics, school programs, and general conditions in schools. SASS also collects data on teachers' perceptions of school climate and problems in their schools, teacher compensation, district hiring practices, and basic characteristics of the student population. For more information on the 2007–08 SASS, see the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

The second wave of data collection for BTLS was conducted in school year 2008–09, together with the 2008–09 TFS. The purpose of TFS is to determine how many teachers remain at the same school, move to another school, or leave the profession in the year following the SASS data collection. The 2008–09 TFS was administered to a sample of teachers who completed SASS in the previous year, including all responding beginning public school teachers. The 2008–09 TFS used four questionnaires; two were for public school teachers who began teaching in 2007 or 2008 (beginning teacher versions) and two were for the rest of the TFS sample (national versions). Of the two questionnaires for beginning teachers, one was for teachers who had left teaching since the previous SASS (the Questionnaire for Former Teachers) and one was for teachers who were still teaching, either in the same school as in the SASS year or in a different school (the Questionnaire for Current Teachers). The topics included in the Questionnaire for Current Teachers were current teaching assignment, satisfaction with teaching, reasons for moving to a new school (if applicable), current teaching position relative to last year's position, and demographic characteristics that may have changed since the previous year. The topics included in the Questionnaire for Former Teachers were employment status, reasons for leaving teaching, impressions of their current

job relative to their teaching position, and demographic characteristics that may have changed since the previous year. BTLS second wave data contained all items on the beginning teacher versions of the TFS questionnaires. These items went through processing specifications different from the ones used for TFS data due to the longitudinal nature of BTLS. Fewer assumptions were made in the processing specifications to avoid potential inconsistencies with the data to be collected in later waves. For more information on the 2008–09 Teacher Follow-up Survey, see the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011).

The third through fifth waves of data collection are known as BTLS and are separate from SASS and TFS. The third through fifth years of data collection took place during the 2009–10, 2010–11, and 2011–12 school years. The purpose of these waves was to collect data that would enable researchers to determine the attrition rate of beginning teachers 2, 3, and 4 years after they began teaching; determine the rate of reentry into the teaching profession; and examine the characteristics of those who stay in the same school, move to a new school, leave the teaching profession, or return to the teaching profession. In addition, researchers can examine the activities and occupations of teachers who leave the teaching profession and explore the subsequent career patterns of teachers who remain in the profession.

BTLS was administered by paper questionnaire in the first wave and by paper and internet-based questionnaires in the second wave; in the third through fifth waves only an internet-based questionnaire was used. The BTLS third through fifth wave web instruments displayed only questions applicable to the respondent's teaching status (i.e., current or former teacher question paths). Current teachers were asked questions regarding teaching status and assignments; earnings; having a mentor; and their opinions on various aspects of teaching, reasons for moving to a new school, and reasons for returning to teaching. Similarly, former teachers were asked questions about their current employment status, their opinions on various aspects of teaching and their current job, their decision to leave teaching, and whether they had applied for a new teaching position.

Objectives

BTLS has two objectives. The first is to permit a better understanding of how school and/or district characteristics and policies are reflected in beginning teacher satisfaction, mobility, and attrition. The second is to gain a better understanding of how teachers respond to transitions in their careers (such as moving to a different school, changing grade levels or subjects taught, becoming a mentor, transitioning into a K–12 administration position, or exiting the teaching field). In pursuit of these objectives, BTLS examines the characteristics of those who stay in the teaching profession and those who leave. BTLS collects information on respondents' training, experiences entering the profession, attitudes about the teaching profession and job satisfaction, as well as demographic data. BTLS data can address questions such as the following:

- Are beginning teachers who received formal mentoring from their school or district less likely to leave the profession or change schools in the first few years of their teaching career?
- Do mobility rates of teachers, both within and outside of school districts, change over time?
- Why do teachers leave the teaching profession, and what factors have greater importance at various stages in their careers and lives?
- What proportion of teachers return to teaching after a break in their teaching career?
- What motivating factors bring former teachers back to the profession?

Basic demographic information about each teacher (sex, year of birth, race/ethnicity), except marital status (which was collected during the second wave), was collected as part of the first wave of data collection in the 2007–08 SASS.

Data File

The BTLS data are being released as a restricted-use data file; currently, there are no plans to release public-use data files. This release of BTLS includes data from all five waves of data collection (see chapter 7 for more details) and is the final dataset for BTLS.

Contents of Documentation

This report provides documentation and guidance to users of the five waves of the Beginning Teacher Longitudinal Study. It includes chapters on the survey instruments used for each wave, the sample design, data collection procedures and response rates, data processing (including edits and imputations), weighting and variance estimation, data quality, data file structure, and user notes.

Additional materials are also provided in the appendixes, as follows:

Appendix A. BTLS Justification

Appendix B. Glossary of Key Terms for BTLS

Appendix C. Questionnaire Availability

Appendix D. First Cognitive Testing of TFS Items: Summary of Findings and Recommendations

Appendix E. Second Cognitive Testing of TFS Items: Summary of Findings and Recommendations

Appendix F. Cognitive Testing of Proposed Items for BTLS: Summary of Findings and Recommendations (2009)

Appendix G. Cognitive Testing of BTLS Survey Items: Summary of Findings and Recommendations (2010)

Appendix H. Cognitive Testing of Proposed Items for BTLS: Summary of Findings and Recommendations (2011)

Appendix I. 2010–11 BTLS Incoming Call Training Self Study, BTLS Telephone Follow-up Self Study, and BTLS-27 Call Scripts

Appendix J. Quality Assurance for BTLS First and Second Wave Keying and Mailout Operations

Appendix K. Results of Incentive Experiment in the 2009–10 BTLS

Appendix L. Changes Made to Variables During the Consistency and Logic Edits, by BTLS Wave

Appendix M. Imputation Changes to Variables, by BTLS Wave

Appendix N. BTLS Items With a Base-Weighted Response Rate of Less Than 75 percent, by BTLS Wave

Appendix O. Frame and Created Variables

Appendix P. Crosswalk of BTLS Items by Wave

Chapter 2. Instrumentation

This chapter describes the questionnaires used in the Beginning Teacher Longitudinal Study (BTLS). The questionnaire used in the first wave was the Teacher Questionnaire of the 2007–08 Schools and Staffing Survey (SASS). The questionnaires used in the second wave were the beginning teacher versions of the Questionnaire for Former Teachers (Form TFS-2L) and the Questionnaire for Current Teachers (Form TFS-3L) of the 2008–09 Teacher Follow-up Survey (TFS). The questionnaires used in the third through fifth waves were online instruments based on the SASS and TFS questionnaires.

Brief descriptions of each of these questionnaires are presented below. More detailed descriptions of the SASS and TFS questionnaires can be found in the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010) and the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011), respectively. A crosswalk of questionnaire items (ordered by source code/variable name) for all five waves of BTLS is in appendix P of this survey documentation.

First Wave Questionnaire

The first wave of BTLS was administered using the Teacher Questionnaire of the 2007–08 SASS. The major objectives of the first wave questionnaire were to obtain information on topics such as teachers' education and training, teaching assignment, certification, workload, and perceptions and attitudes about teaching. The questionnaire can be found at this link: <http://nces.ed.gov/surveys/btls/questionnaires.asp>.

Description of Content

Below are brief descriptions of the major content areas of the 2007–08 SASS Teacher Questionnaire.

The 2007–08 SASS Teacher Questionnaire had nine sections:

Section I—General Information obtained information about teaching status, teaching experience, and other professional experiences.

Section II—Class Organization obtained information about class enrollments, students with an Individualized Education Program, students with limited English proficiency, class organization, subjects taught, and class size.

Section III—Educational Background obtained information on academic degrees, teacher assessments, and teacher preparation programs.

Section IV—Certification and Training obtained information on the types of teaching certification held by the teacher, as well as the content areas and grades covered by the certification. For new teachers, information was collected on attitudes toward preparation for teaching, participation in an induction program, and mentoring.

Section V—Professional Development obtained information about professional development activities and their impact.

Section VI—Working Conditions obtained information about hours worked, money spent on classroom supplies without reimbursement, and methods used to communicate with parents or students outside of the regular school day.

Section VII—School Climate and Teacher Attitudes obtained attitudinal information about teachers' influence on planning and teaching, collaboration between teachers, satisfaction with teaching, student problems, and school safety.

Section VIII—General Employment and Background Information obtained information about teacher salary, supplemental income, union affiliation, gender, age, and race/ethnicity.

Section IX—Contact Information obtained respondents' personal contact information as well as contact information for two people who would be able to reach them if they relocated before the mailing of the TFS in the following year.

Testing of Content

The first wave questionnaire was the 2007–08 SASS Teacher Questionnaire, which was based on the 2003–04 SASS Teacher Questionnaire. For details about the testing of content for the 2007–08 SASS, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

Second Wave Questionnaires

The second wave of BTLS was administered using the beginning teacher versions of the Questionnaire for Former Teachers (Form TFS-2L) and the Questionnaire for Current Teachers (Form TFS-3L) of the 2008–09 TFS. The Questionnaire for Current Teachers obtained information on sampled teachers who were teaching any of grades preK–12¹ in the 2008–09 school year; the Questionnaire for Former Teachers obtained information on sampled teachers who left K–12 teaching after the 2007–08 school year. The questionnaires can be found at this link: <http://nces.ed.gov/surveys/btls/questionnaires.asp>.

The major objectives of the second wave were to measure the 1-year attrition rate of teachers, examine the characteristics of teachers who stayed in the teaching profession and those who changed professions or retired, obtain activity or occupational data for those who left the position of a K–12 teacher, obtain reasons for moving to a new school or leaving the K–12 teaching profession, and collect data on job satisfaction.

Description of Content

Below are brief descriptions of the major content areas of the second wave questionnaires for former and current teachers.

Questionnaire for Former Teachers

The purpose of the second wave Questionnaire for Former Teachers was to obtain information about respondents who left teaching in the year after SASS. The questionnaire asked respondents about their employment status, their reasons for leaving teaching, and their impressions of their current job relative to their teaching position. It also asked about demographic characteristics that may have changed since the previous year.

The questionnaire had six sections:

Section I—Employment Status obtained general information about employment, salary, pension from a teacher retirement system, and retirement incentives.

Section II—Information on Leaving the Teaching Profession obtained information about the factors that influenced the respondent's decision to leave the position of a K–12 teacher and about whether the respondent had applied for a K–12 teaching position for the 2008–09 school year.

¹ Only K-12 teachers were eligible for SASS. All of the teachers who responded to SASS were eligible for TFS even if they changed to teach preK in the TFS year.

Section III—Your Impressions of Teaching and of Your Current Job obtained information about many aspects of the respondent’s current position relative to teaching, such as salary, benefits, professional development and advancement opportunities, recognition, safety, and job security.

Section IV—Information About Your Teaching Position in the 2007–08 School Year obtained data on the year and month when the respondent first began to teach at the elementary or secondary level, and, if applicable, about being assigned a mentor and the characteristics of the respondent’s alternative certification program.

Section V—Background Information obtained information about work history, citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section VI—Contact Information obtained respondents’ personal contact information.

Questionnaire for Current Teachers

The purpose of the second wave Questionnaire for Current Teachers was to obtain information about current teachers, including those who continued to teach in the same school as in the previous year and those who changed schools. It obtained information on teachers’ current teaching assignment, satisfaction with teaching, reasons for moving to a new school (if applicable), current teaching position relative to last year’s position, and demographic characteristics that may have changed since the previous year.

The questionnaire had seven sections:

Section I—Assignments at Your Current School obtained information on the teacher’s main activity, full-time/part-time status, grades taught, main teaching assignment, class organization, and Highly Qualified Teacher² status.

Section II—Information About Your Teaching Position in the 2007–08 School Year obtained data on the year and month when the teacher first began to teach at the elementary or secondary level and, if applicable, about being assigned a mentor and the characteristics of an alternative certification program.

Section III—Information About Changes From Last School Year to This School Year obtained information about whether the teacher was teaching at the same school as in the previous year and, if the teacher had changed schools, information about the new school and factors that influenced the decision to leave the previous school.

Section IV—Your Current School: Conditions and Experiences obtained information on how teachers rated various aspects of their current teaching position relative to last year’s teaching position; on their overall satisfaction with being a teacher at their current school; and, if they participated in a mentoring program, on its effectiveness.

Section V—General Employment Information obtained information about earnings from summer school, nonteaching jobs, and nonschool jobs; various additional forms of compensation received during the 2008–09 school year; base teaching salary; and receipt of a teacher pension.

² Generally, to have Highly Qualified Teacher (HQT) status, teachers must (1) have a bachelor’s degree; (2) hold full state certification or licensure, including an “alternative certification”; and (3) demonstrate competency in the subject area(s) they teach. The HQT requirement is a provision under the No Child Left Behind (NCLB) Act of 2001, U.S. Code 20 (2002), Section 7801(23).

Section VI—Background Information obtained information about work history, citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section VII—Contact Information obtained respondents' personal contact information.

Testing of Content

The questionnaires used in the second wave of BTLS were based on the 2004–05 TFS questionnaires, but revised substantially. Because of this, two series of cognitive interviews were conducted, in the summer of 2007 and the spring of 2008, to test new and revised questions. The Census Bureau contracted with Macro International, a research and evaluation company in Calverton, Maryland, to carry out both rounds of interviews. The purpose of the interviews was to gather feedback from both current and former teachers.

The first round of cognitive interviews, in the summer of 2007, tested the following items for both TFS and BTLS:

- amount of teacher retirement pension;
- early retirement incentive;
- reasons for leaving the position of a K–12 teacher; and
- reasons for leaving the previous year's school.

In the spring of 2008, revisions to the following items were tested for both TFS and BTLS, based on comments received in the first round of cognitive interviews as well as additional changes to the instrument:

- reasons for leaving the position of a K–12 teacher;
- reasons for leaving the previous year's school;
- number of dependents being supported financially;
- whether the principal had changed since the previous year (only for teachers who were still teaching in the same school);
- general satisfaction as a teacher; and
- main occupation of leavers who continued to work in the field of preK–12 education.

In addition to the items tested for both TFS and BTLS, the following items were tested specifically for BTLS during the two rounds of cognitive testing:

- whether former teachers had applied for a position as a K–12 teacher in the 2008–09 school year;
- factors influencing the decision not to apply for a position as a K–12 teacher;
- whether a mentor worked with the teacher on various activities throughout the school year and the extent to which those activities improved teaching;
- if the teacher entered teaching through an alternative certification program, whether the program was effective at developing necessary skills;

- length of the alternative certification program, including length of time spent on training prior to entering the classroom;
- length of time of teaching commitment required by alternative certification program; and
- work history prior to becoming a teacher, including a description of duties and years in that occupation.

After the testing was completed, all of the items—except time required to commit to teaching—were added to either the former teacher or the current teacher questionnaires.

Details on the methodology and findings of the first and second cognitive testings can be found in appendixes D and E.

Third Wave Questionnaire

The third wave questionnaire for BTLS was administered through an online instrument. The questionnaire began with several screening questions used to determine teachers' status in the 2009–10 school year (as well as their status in the 2008–09 school year, if they were nonrespondents in the second wave of BTLS). Based on the responses to these screening questions, the instrument set different paths for respondents. Each respondent answered only questions appropriate to his or her teaching status. The questionnaire can be found at this link: <http://nces.ed.gov/surveys/btls/questionnaires.asp>.

The major objective of the third wave was to measure the 2-year attrition rate of teachers who began teaching in the 2007 or 2008 calendar year. The third wave could also examine the characteristics of teachers who remained in the preK–12 teaching profession and those who returned to it after leaving in the previous year; obtain activity or occupational data for those who left the preK–12 teaching profession; obtain reasons for moving to a new school, leaving the preK–12 teaching profession, or returning to the preK–12 teaching profession; and obtain data on the further development of teachers' educational and professional credentials.

Description of Content

Below are brief descriptions of the major content areas in each path (for former and current teachers, respectively) of the questionnaire used in the 2009–10 BTLS.

Questionnaire path for former teachers

This questionnaire path obtained information on former teachers' employment status, information on their decision to leave teaching, and education and training.

The former teacher path had five sections:

Section I—Employment Status obtained general information about employment, salary, pension from a teacher retirement system, and retirement incentives.

Section II—Information on Leaving the Teaching Profession and Future Plans obtained information about the factors that influenced respondents to leave their preK–12 teaching position and about whether they had applied for a preK–12 teaching position for the 2009–10 school year.

Section III—Education and Training obtained information on the renewal of teaching certificates and course enrollment during the 2009–10 school year.

Section IV—Background Information obtained information on work history, citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section V—Contact Information obtained respondents' personal contact information.

Questionnaire path for current teachers

This questionnaire path obtained information on current teachers' teaching status and assignments, perception of principal support, and the reasons that influenced their decision to change schools (if applicable).

The current teacher path had seven sections:

Section I—Information About Your Current School obtained information on current school location, grade level, and perception of principal support.

Section II—Information About Changes From Last School Year to This School Year or Information About Returning to PreK–12 Teaching obtained information about whether the teacher was teaching or teaching at the same school as in the previous year, and, if the teacher had changed schools or returned to teaching, general information about the new school and factors that influenced the decision to leave the previous school or return to teaching.

Section III—Assignments and Activities at Your Current School obtained information on main activity, full-time/part-time status, grades taught, main teaching assignment, class organization, Highly Qualified Teacher status, and activities and leadership roles.

Section IV—Education and Training obtained information on teaching certificates, courses teachers were enrolled in during the 2009–10 school year, and assignment as a mentor.

Section V—General Employment Information obtained information about earnings from summer school, nonteaching jobs, and nonschool jobs; various additional forms of compensation received during the 2009–10 school year; base teaching salary; and receipt of a teacher pension.

Section VI—Background Information obtained information about work history, citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section VII—Contact Information obtained respondents' personal contact information.

Testing of Content

Although the BTLS third wave questionnaire was based on the first and second wave questionnaires, some items needed to be revised and new items were added. The Census Bureau again contracted with Macro International to carry out cognitive interviews to test the new and revised items. The interviews included teachers who were currently teaching in K–12 schools, but who had left teaching for at least a year; teachers who had experience as a mentor teacher; and teachers who had been laid off as part of a reduction in force. The purpose of these interviews was to gather feedback for the 2009–10 administration of BTLS. The interviews were conducted in two phases, in May to July of 2009.

The first phase of cognitive interviews, in May and June, tested the following items:

- factors influencing the decision to return to preK–12 teaching;
- completion of a teacher preparation or alternative certification program;

- renewal of a teaching certificate or addition of an endorsement to an existing certificate;
- completion of an advanced degree;
- training and preparation for becoming a mentor; and
- certification activities in teaching assignment.

The second phase, conducted in June and July, tested the following items:

- reasons for a reduction in force;
- satisfaction with the principal and agreement with statements about the principal;
- input in choosing mentees;
- principal's involvement in discussing the mentee/mentor relationship;
- existence of a strong support system for the teacher; and
- teacher leadership activities.

After the cognitive testing was completed, all of the items were added to the questionnaire used in the 2009–10 administration of BTLS. Details on the methodology and findings of the testing can be found in appendix F.

Fourth Wave Questionnaire

The fourth wave questionnaire for BTLS was administered through an online instrument. The questionnaire began with several screening questions used to determine teachers' status in the 2010–11 school year (as well as their status in the 2009–10 school year, if they were nonrespondents in the third wave of BTLS). Based on the responses to these screening questions, the instrument set different paths for former teachers and current teachers. The questionnaire can be found at this link: <http://nces.ed.gov/surveys/btls/questionnaires.asp>.

The major objectives of the fourth wave were to measure the 3-year attrition rate of teachers who began teaching in the 2007 or 2008 calendar year; examine the characteristics of teachers who remained in the preK–12 teaching profession and those who returned to it after leaving it; obtain activity or occupational data for those who left the preK–12 teaching profession; obtain reasons for moving to a new school, leaving the preK–12 teaching profession, or returning to the preK–12 teaching profession; and obtain data on the development of teachers' educational and professional credentials.

Description of Content

Below are brief descriptions of the major content areas in each path (for former and current teachers, respectively) of the questionnaire used in the 2010–11 BTLS.

Questionnaire path for former teachers

This questionnaire path obtained information on former teachers' employment status, information on their decision to leave teaching, and education and training.

The former teacher path had five sections:

Section I—Current Employment Status obtained general information about employment, salary, and general job satisfaction.

Section II—Information on Leaving the Teaching Profession and Future Plans obtained information about the factors that influenced respondents to leave their preK–12 teaching position and about whether they had applied for a preK–12 teaching position for the 2010–11 school year.

Section III—Education and Training obtained information on the renewal of teaching certificates and course enrollment during the 2010–11 school year.

Section IV—Background Information obtained information about citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section V—Contact Information obtained respondents' personal contact information.

Questionnaire path for current teachers

This questionnaire path obtained information on current teachers' teaching status and assignments, perception of principal support, and the reasons that influenced their decision to change schools or return to teaching (if applicable).

The current teacher path had seven sections:

Section I—Information About Your Current School obtained information on current school location, grade level, tenure, perception of principal support, and teacher evaluations.

Section II—Information About Changes From Last School Year to This School Year or Information about Returning to PreK–12 Teaching obtained information about whether the teacher was teaching at the same school as in the previous year, and, if the teacher had changed schools or returned to teaching, general information about the new school and factors that influenced the decision to leave the previous school or return to teaching.

Section III—Assignments and Activities at Your Current School obtained information on main teaching assignment, grades taught, class organization, Highly Qualified Teacher status, and activities and leadership roles.

Section IV—Education and Training obtained information on teaching certificates, teacher preparation programs, courses teachers were enrolled in during the 2010–11 school year, and assignment as a mentor.

Section V—General Employment Information obtained information about earnings from summer school, nonteaching jobs, and nonschool jobs; various additional forms of compensation received during the 2009–10 school year; base teaching salary; and receipt of a teacher pension.

Section VI—Background Information obtained information about citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section VII—Contact Information obtained respondents' personal contact information.

For the third wave (200910) nonrespondents, an additional section, *Information About the 2009–10 School Year and Changes in Teaching Status*, was added before the fourth wave (2010–11)

questionnaire items. It obtained their teaching status in the 2009–10 school year, occupational status and reasons they left the teaching profession if they were not teaching and their reasons to leave their 2008–09 schools if they moved to another school.

Testing of Content

Although the BTLS fourth wave questionnaire was based on the first, second, and third wave questionnaires, some items needed to be revised and new items were added. The Census Bureau again contracted with Macro International to carry out cognitive interviews to test the new and revised items. The purpose of these interviews was to gather feedback for the 2010–11 administration of BTLS. The interviews were conducted in June of 2010.

The following items were tested:

- factors influencing the decision to change schools, leave preK–12 teaching, or return to preK–12 teaching;
- completion of a teacher preparation or alternative certification program;
- renewal of a teaching certificate or addition of an endorsement to an existing certificate;
- completion of an advanced degree;
- enrollment in any degree or nondegree courses;
- number of financially dependent family members;
- changing of school involuntarily;
- reasons for changing school involuntarily;
- whether school offers tenure and if teachers are tenured;
- formal evaluations;
- whether they teach any regularly scheduled classes;
- whether they were teaching in the same school; and
- main occupational status.

After the cognitive testing was completed, all of the items were added to the questionnaire or revised for the 2010–11 administration of BTLS. The cognitive interview instruments and summary report are available as appendix G.

Fifth Wave Questionnaire

The fifth wave questionnaire for BTLS was administered through an online instrument. The questionnaire began with several screening questions used to determine teachers' status in the 2011–12 school year (as well as their status in the 2010–11 school year, if they were nonrespondents in the fourth wave of BTLS). Based on the responses to these screening questions, the instrument set different paths for former teachers and current teachers. The questionnaire can be found at this link:

<http://nces.ed.gov/surveys/btls/questionnaires.asp>.

The major objectives of the fifth wave were to measure the 4-year attrition rate of teachers who began teaching in the 2007 or 2008 calendar year; examine the characteristics of teachers who remained in the preK–12 teaching profession and those who returned to it after leaving it; obtain activity or occupational

data for those who left the preK–12 teaching profession; obtain reasons for moving to a new school, leaving the preK–12 teaching profession, or returning to the preK–12 teaching profession; and obtain data on the development of teachers’ educational and professional credentials.

Description of Content

Below are brief descriptions of the major content areas in each path (for former and current teachers, respectively) of the questionnaire used in the 2011–12 BTLS.

Questionnaire path for former teachers

This questionnaire path obtained information on former teachers’ employment status, information on their decision to leave teaching, and education and training.

The former teacher path had five sections:

Section I—Current Employment Status obtained general information about employment, salary, and general job satisfaction.

Section II—Information on Leaving the Teaching Profession and Future Plans obtained information about the factors that influenced respondents to leave their preK–12 teaching position and about whether they had applied for a preK–12 teaching position for the 2010–11 school year.

Section III—Education and Training obtained information on the renewal of teaching certificates and course enrollment during the 2010–11 school year.

Section IV—Background Information obtained information about citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section V—Contact Information obtained respondents’ personal contact information.

Questionnaire path for current teachers

This questionnaire path obtained information on current teachers’ teaching status and assignments, perception of principal support, and the reasons that influenced their decision to change schools or return to teaching (if applicable).

The current teacher path had seven sections:

Section I—Information About Your Current School obtained information on current school location, grade level, tenure, perception of principal support, and teacher evaluations.

Section II—Information About Changes From Last School Year to This School Year or Information about Returning to PreK–12 Teaching obtained information about whether the teacher was teaching at the same school as in the previous year, and, if the teacher had changed schools or returned to teaching, general information about the new school and factors that influenced the decision to leave the previous school or return to teaching.

Section III—Assignments and Activities at Your Current School obtained information on main teaching assignment, grades taught, class organization, Highly Qualified Teacher status, and activities and leadership roles.

Section IV—Education and Training obtained information on teaching certificates, teacher preparation programs, courses teachers were enrolled in during the 2010–11 school year, and assignment as a mentor.

Section V—General Employment Information obtained information about earnings from summer school, nonteaching jobs, and nonschool jobs; various additional forms of compensation received during the 2010–11 school year; base teaching salary; and receipt of a teacher pension.

Section VI—Background Information obtained information about citizenship status, renting/owning a residence, family household income, marital status, and how many people the respondent and spouse/partner supported.

Section VII—Contact Information obtained respondents' personal contact information.

For the fourth wave (2010–11) nonrespondents, an additional section, *Information About the 2010–11 School Year and Changes in Teaching Status*, was added before the fifth wave (2011–12) questionnaire items. It obtained their teaching status in the 2010–11 school year, occupational status and reasons they left the teaching profession if they were not teaching and their reasons to leave their 2009–10 schools if they moved to another school.

Testing of Content

Although the BTLS fifth wave questionnaire was based on the first, second, third, and fourth wave questionnaires, some items needed to be revised and new items were added. The Census Bureau again contracted with Macro International to carry out cognitive interviews to test the new and revised items. The purpose of these interviews was to gather feedback for the 2011–12 administration of BTLS. The interviews were conducted in June and July of 2011.

The following items were tested:

- factors influencing the decision to change schools, leave preK–12 teaching, or return to preK–12 teaching;
- teacher reports of Highly Qualified Teaching (HQT) status according to their state's requirements;
- teacher reports of activities outside of the classroom that might be viewed as examples of leadership roles;
- training related to mentoring provided by their school or district; and
- the extent to which the teacher felt prepared to be a mentor.

After the cognitive testing was completed, the results of the testing items were incorporated into revisions of the tested items for the 2011–12 administration of BTLS. The cognitive interview instruments and summary report are available as appendix H.

Chapter 3. BTLS Frame Creation and Sample Selection Procedures

This chapter discusses how the Beginning Teacher Longitudinal Study (BTLS) sampling frame was created and how cases were sampled. BTLS consists of public school teachers who started teaching in 2007 or 2008 and responded to the 2007–08 Schools and Staffing Survey (SASS). Therefore, BTLS frame creation and sample selection are essentially the frame creation and sample selection for SASS public schools and teachers, with minor changes.

There are two major sections in this chapter. The first section begins by discussing the creation of the frame for public schools, including schools deleted, added, and otherwise edited for the administration of the 2007–08 SASS. It then discusses the school sampling procedure for traditional public and public charter schools. The second section begins with a description of the SASS teacher frame creation and sampling procedure, then discusses the creation of the BTLS teacher sample.

School Sampling Frame and Sample Selection

SASS Public School Frame Creation

The foundation of the 2007–08 SASS public school frame was the 2005–06 Common Core of Data (CCD) Nonfiscal School Universe data file. The CCD is based on survey data collected annually by the National Center for Education Statistics (NCES) from each state education agency. For the 2005–06 school year, state education agencies used their administrative record data to report information for 102,952 schools. NCES and the state education agencies worked cooperatively to ensure comparability between the elements reported. The CCD³ is believed to be the most complete public school listing available.

Due to an accelerated survey schedule, the preliminary 2005–06 CCD file, rather than the final version, was used as the basis for the SASS sampling frame. When the final CCD file became available, the two files were compared and any major updates were added to the SASS frame. A number of updates were made, primarily to locale, but also to county codes to identify urbanicity for the physical location of the school.

In SASS, a school was defined as an institution or part of an institution that provides classroom instruction to students, has one or more teachers to provide instruction, serves students in one or more of grades 1–12 or the ungraded equivalent, and is located in one or more buildings. If two or more schools shared the same building, they were treated as different schools if they had different administrators (i.e., principals).

The SASS definition of a school was generally similar to the CCD's, with some exceptions. The CCD included some schools that do not offer teacher-provided classroom instruction in grades 1–12 or the equivalent ungraded levels. In some instances, schools included in the CCD were essentially administrative units that provided oversight or funding to entities that offered classroom instruction. SASS did not include such administrative units. SASS also collapsed CCD schools that shared a common location, address, and phone number on the assumption that the respondent would consider these to be a

³ The CCD includes regular schools; special education, alternative, vocational or technical schools; public charter schools; and Bureau of Indian Education (BIE)-funded schools in the 50 states, District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, and both the domestic and overseas Department of Defense dependents schools.

single school. (Further discussion of this issue is provided in the “School Collapsing” section below.) Since the CCD and SASS differ in scope and in their definition of a school, some CCD records were deleted, added, or modified in order to provide better coverage and a more efficient sample design for SASS. Eliminating out-of-scope cases prior to sampling increases the efficiency of the design by increasing the in-scope rate of the selected sample.

Frame Deletions

The following types of school records were deleted during the creation of the SASS sampling frame: closed schools; schools in American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, or the U.S. Virgin Islands; overseas⁴ Department of Defense schools; homebound programs; adult education programs; schools offering only kindergarten or prekindergarten; duplicates of Bureau of Indian Education (BIE)-funded schools; or any other programs that provided funding but did not directly oversee classroom instruction. A total of 6,287 school records were deleted.

Frame Additions

The following types of school records were added while creating the SASS sampling frame: records for districts that did not have schools and appeared to be schools themselves and records for schools that appeared to be administrative units (administrative units were contacted to obtain lists of schools that they operated). These schools were matched to the CCD to confirm they were not already covered, and nonmatches were added to the CCD. Career Technical Centers (CTCs) not already in the CCD were also added to the SASS sampling frame. CTC additions included schools obtained from a list provided to the Data on Vocational Education (DOVE) Technical Review Panel by State Directors of Career and Technical Education. An initial review and contact of these schools resulted in a list of 227 eligible or potentially eligible schools being provided to the Census Bureau. Following additional research by Census Bureau staff, it was determined that 191 CTC schools not in CCD were SASS-eligible and added to the frame. A total of 509 schools were added to the frame.

School Collapsing

There were 2,737 school records that were “collapsed” into other school records at the building level and deleted. Past data collections have shown that there are sampled schools that report survey data for the entire building when there is one head principal, instead of reporting only for the part of the school that has been sampled. This issue occurs most often in certain states, in rural areas, or in schools that offer grades K–12 in the same building with one head principal. The problem lies in the conflicting definition of a school as held by the schools themselves and as reported by states to the CCD. The schools often consider themselves one cohesive unit, while the state does not. In order to make the sampling frame more consistent with the school’s actual grade range, these potential problem schools were identified and collapsed to the appropriate building level. When the school records were collapsed, the student and teacher counts, grade range, and name as reported to the CCD were all modified to reflect the change.

After the adding, deleting, and collapsing of school records, the SASS school sampling frame consisted of 90,410 traditional public and 3,849 public charter schools, and 178 BIE-funded schools. From this point on, this is considered the 2007–08 SASS sampling frame.

⁴ Domestic Department of Defense (DoD) schools were included in SASS sampling frame. Location variables, including the STATE variable, for domestic DoD schools are based on the physical location of the school.

Frame Corrections

As mentioned above, the preliminary version of the 2005–06 CCD file was used as the basis for the 2007–08 SASS sampling frame. Using this file required the correction of variables necessary for sampling or conducting the survey, such as grade range, enrollment, teacher count, enrollment by race, school county code, school name, address information, and phone number. The steps taken to correct these variables are outlined below.

Grade range. The school’s grade range was edited to drop grades with no enrollment or fewer than three students. This procedure was not applied to schools with fewer than 50 students. Correction of the grade range was important for stratification.

If the school’s grade range was missing from the CCD file, three methods were used to resolve the issue:

- taking data from earlier CCD files or SASS data;
- assigning a generic grade range based on the school’s name;⁵ or
- calling the school for clarification. (During this process, a few schools were discovered to be closed or otherwise out-of-scope and were deleted from the sampling frame.)

Student and teacher counts. The student and teacher counts were imputed for schools that were missing this information by applying one of the methods listed below in the following hierarchical order:

- pulling information from CCD data for that school;
- extrapolating from current CCD student–teacher ratios and averages for the state; or
- using data that were collected in the 2003–04 SASS for that particular school.

High American Indian/Alaska Native enrollment. School-level counts of student enrollment and counts of students by race/ethnicity were used to identify schools in which American Indian or Alaska Native students composed at least 19.5 percent of the enrollment. These schools were sampled at a different rate than other public schools, so they needed to be identified during the creation of the SASS frame. These schools were identified using one of the following hierarchical methods:

- examining the current CCD enrollment by race/ethnicity, if present;
- examining previous CCD enrollment by race/ethnicity; or
- reviewing the characteristics of the surrounding schools. (If most of the surrounding schools in the county were flagged as having a high American Indian or Alaska Native enrollment, the school in question was also flagged.)

School name. In instances where the school name implied considerably fewer grades than the school actually offered, the name was modified to eliminate inappropriate descriptions. These schools were identified by comparing the school’s name to the grades currently offered. For instance, if the name contained “High School,” but the grades offered were K–12, the name was modified accordingly.

Due to time constraints, missing address information and phone numbers were filled in after the school sample was selected. These fields were not crucial to the selection of the school sample. For complete

⁵ Elementary was assumed to be preK–5, middle schools were assumed to be 6–8, and high schools were assumed to be 9–12.

details regarding the SASS school frame creation, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

SASS Public School Sample Allocation

The goals for the public school sample of the 2007–08 SASS were as follows:

- Produce state-level estimates of the number of elementary and secondary public schools, by selected school characteristics (e.g., size, locale, percentage nonwhite, percentage free or reduced-price lunch).
- Produce national-level estimates of combined-grade public schools (that is, schools that offer grades that span both the elementary and secondary levels), by selected school characteristics.
- Produce national-level estimates of public schools by various geographic designations (e.g., region and locale), by selected school characteristics.
- Oversample schools with 19.5 percent or greater American Indian or Alaska Native enrollment, in order to produce national-level estimates of these schools, by selected school characteristics.
- Produce national- and regional-level estimates of public charter schools, by selected school characteristics.

Methodology

The SASS sample is not a simple random sample, but rather is a stratified probability proportionate to size (PPS) sample.⁶ The first level of stratification for public and BIE-funded schools was school “type”—(A) BIE-funded schools were selected with certainty (automatically in sample); (B) schools with high American Indian or Alaska Native student enrollment (schools with 19.5 percent or more American Indian or Alaska Native students); (C) schools in Delaware, Florida, Maryland, Nevada, and West Virginia, where at least one school from each district in the state was selected (as described in the “SASS Public School Sample Selection” section below); (D) public charter schools; (E) Career Technical Centers (CTCs); and (F) all other schools. Schools falling into more than one category were assigned to types A, B, D, E, and C, in that order.

The second level of stratification varied within school type. All of the type A schools were selected for the sample, so no additional stratification was needed. Type B schools were stratified by state (Arizona, California, Montana, New Mexico, Washington, the remaining western states, Minnesota, North Dakota, South Dakota, the remaining midwestern states, North Carolina, Oklahoma, and the remaining states except Alaska⁷). Type C schools were stratified first by state and then school district. Type D schools were stratified by state (Alaska, Arizona, California, Colorado, Hawaii, Idaho, New Mexico, Oregon, Utah, the remaining western states, Indiana, Minnesota, Michigan, Ohio, Wisconsin, the remaining midwestern states, Delaware, the District of Columbia, Florida, Georgia, Louisiana, North Carolina, Texas, the remaining southern states, Massachusetts, New Jersey, New York, Pennsylvania, and the remaining northeastern states). Type E schools were all placed into one stratum due to the small size of the group. The type F schools were stratified by state (all remaining states, plus the District of Columbia).

⁶ See Cochran, W.G. (1977), *Sampling Techniques* (New York: Wiley), for further discussion of PPS sampling.

⁷ Alaska was excluded because most schools have a high Alaska Native enrollment and because the sampling rate applied to Alaska schools was higher than the sampling rate applied to other schools with high American Indian or Alaska Native student enrollment. Also note that Alaska does not have any BIE-funded schools: Alaska’s statehood legislation specifically excluded its schools from becoming funded by the BIE.

Each of the school types in categories B through F was then stratified by grade level (elementary, secondary, and combined) as defined below:

- elementary: lowest grade ≤ 6 and highest grade ≤ 8 ;
- secondary: lowest grade ≥ 7 and highest grade ≤ 12 ; and
- combined: lowest grade ≤ 6 and highest grade > 8 , or school is ungraded.⁸

The 2007–08 SASS sample was allocated so that state-level elementary and secondary public school estimates and national estimates of combined public schools could be made. The sample was allocated to each state by grade range and school type (traditional public, public charter, and schools with high American Indian enrollment).

Sample Sort

To facilitate the calculation of school district weights, it was important that, within a stratum, all schools belonging to the same school district be listed together. This could have been achieved by sorting first by the school district's identification variable (LEAID). However, to increase the efficiency of the school sample design, it was better to sort by other variables before LEAID. To achieve both goals, the zip code variables were recoded to make them the same for every school within a stratum/school district. After the zip code was recoded, the non-BIE schools were sorted by the following variables:

- school stratum code or school type (as defined in the “Methodology” section above);
- state;
- locale code:
 - 11 = city, large: territory inside an urbanized area and inside a principal city with a population of 250,000 or more;
 - 12 = city, midsize: territory inside an urbanized area and inside a principal city with a population than 250,000 and greater than or equal to 100,000;
 - 13 = city, small: territory inside an urbanized area and inside a principal city with a population less than 100,000;
 - 21 = suburb, large: territory inside an urbanized area and outside a principal city with a population of 250,000 or more;
 - 22 = suburb, midsize: territory inside an urbanized area and outside a principal city with a population fewer than 250,000 and greater than or equal to 100,000;
 - 23 = suburb, small: territory inside an urbanized area and outside a principal city with a population fewer than 100,000;
 - 31 = town, fringe: territory inside an urban cluster that is fewer than or equal to 10 miles from an urbanized area;

⁸ Ungraded school refers to schools that serve students whose grade levels are not defined as grades 1–12, but serve students of an equivalent age range. For example, special education centers and alternative schools often classify their students as ungraded.

- 32 = town, distant: territory inside an urban cluster that is more than 10 miles and fewer than or equal to 35 miles from an urbanized area;
- 33 = town, remote: territory inside an urban cluster that is more than 35 miles from an urbanized area;
- 41 = rural, fringe: Census-defined rural territory that is fewer than or equal to 5 miles from an urbanized area, as well as rural territory that is fewer than or equal to 2.5 miles from an urban cluster;
- 42 = rural, distant: Census-defined rural territory that is more than 5 miles but fewer than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but fewer than or equal to 10 miles from an urban cluster; and
- 43 = rural, remote: Census-defined rural territory that is more than 25 miles from an urbanized area, as well as rural territory that is more than 10 miles from an urban cluster;
- recoded zip code (all schools in stratum/district had the same value for this variable);
- district ID as defined in the CCD (LEAID);
- school's highest grade offered (in descending order);
- recoded percentage of all race/ethnicities other than non-Hispanic White (in descending order) and defined as
 - 1 = less than 5.5 percent of all other race/ethnicities or unknown enrollment;
 - 2 = at least 5.5 percent but less than 20.5 percent of all other race/ethnicities enrollment;
 - 3 = at least 20.5 percent but less than 50.5 percent of all other race/ethnicities enrollment; and
 - 4 = at least 50.5 percent of all other race/ethnicities enrollment;
- total school enrollment, in serpentine sort order (defined as enrollment being sorted first in ascending, then descending order within the other sort variables); and
- CCD school ID.

This sort order differed slightly from that used in previous SASS administrations. The first four sort variables allowed a geographic balance to be achieved within locale for each state. The locale used was based on the new 12-level locale code rather than the 8-level code used in previous rounds of SASS. The fifth variable (LEAID) guaranteed that schools within a district and school stratum stayed together. The sixth variable (school's highest grade) allowed for the sampling of a sufficient number of middle schools to produce reasonably reliable state estimates. Since middle schools (defined in SASS as having both their lowest and highest grades in the range of 5 to 9) were not stratified explicitly into one grade-level stratum, some were classified as elementary and some as secondary. To better control the actual number of middle schools selected, this sort achieved that aim by placing middle schools at the end of the secondary stratum and at the beginning of the elementary school stratum. The seventh variable (recoded percentage of all race/ethnicities other than White, non-Hispanic) allowed a balance with respect to race/ethnicity. The eighth variable (school enrollment) also encouraged a balance with respect to school size.

SASS Public School Sample Selection

Within each stratum, schools were systematically selected using a PPS algorithm. The measure of size used was the square root of the number of full-time-equivalent teachers reported for each school or imputed during sampling frame creation. Any school with a measure of size greater than the sampling interval (the inverse of the rate at which the sample is selected) was included in the sample with certainty and automatically excluded from the probability sampling operation. This means that schools with an unusually high number of teachers relative to other schools in the same stratum were automatically included in the sample. In Delaware, Florida, Maryland, Nevada, and West Virginia, the probabilities of selection within each school district were analyzed. If the pattern of probabilities (i.e., the sum of the probabilities of schools within school district and grade level) did not guarantee a sampled school for that school district, the school with the highest probability of selection was included in the sample with certainty. This guaranteed that all school districts in these states would have at least one school in the sample. Excluding BIE-funded schools, this produced a school sample of 9,812 schools in the 2007–08 SASS: 453 high American Indian enrollment schools, 370 public charter schools, 20 CTC schools, and 8,969 other traditional public schools.

Table 1 shows the selected sample sizes for traditional public schools (excluding public charter, high American Indian or Alaska Native enrollment, and CTC schools). The public charter school sample is shown in table 2. The high American Indian or Alaska Native enrollment schools and CTC schools are presented in table 3. For complete details regarding the SASS sample selection, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

Table 1. Selected sample sizes for traditional public schools by school level, the total number of sampled schools, and the percentage of the frame in sample, by state: 2007–08

State	School level			Total sample schools	Percent of state's frame in sample
	Elementary	Secondary	Combined		
Total	4,233	3,613	1,123	8,969	10.13
Alabama	80	80	17	177	11.29
Alaska	80	53	60	193	39.55
Arizona	80	80	17	177	12.66
Arkansas	80	80	24	184	19.21
California	230	128	37	395	4.35
Colorado	72	72	17	161	11.10
Connecticut	80	80	17	177	16.71
Delaware	77	29	17	123	58.57
District of Columbia	71	23	10	104	59.77
Florida	98	94	41	233	7.11
Georgia	72	72	17	161	6.83
Hawaii	72	29	6	107	41.63
Idaho	80	80	17	177	26.86
Illinois	80	80	17	177	4.30
Indiana	80	80	17	177	9.28
Iowa	72	72	17	161	12.30
Kansas	72	72	17	161	12.14
Kentucky	72	72	17	161	11.60
Louisiana	72	72	17	161	11.03
Maine	80	80	13	173	25.98
Maryland	80	80	17	177	12.67
Massachusetts	80	80	13	173	9.93
Michigan	93	80	26	199	5.59
Minnesota	103	86	63	252	12.36
Mississippi	72	72	17	161	15.42
Missouri	90	80	44	214	10.70
Montana	80	57	27	164	33.33
Nebraska	80	80	34	194	18.89
Nevada	80	65	15	160	30.65
New Hampshire	80	45	7	132	29.93
New Jersey	72	72	17	161	6.60
New Mexico	80	80	17	177	29.60
New York	80	72	17	169	3.69
North Carolina	72	72	17	161	7.28
North Dakota	80	44	61	185	49.47
Ohio	72	72	17	161	4.55
Oklahoma	72	72	17	161	19.21
Oregon	80	80	17	177	15.06
Pennsylvania	80	80	17	177	5.49
Rhode Island	80	41	3	124	38.99
South Carolina	80	80	10	170	14.98
South Dakota	80	32	41	153	38.73
Tennessee	72	72	17	161	9.72
Texas	86	103	61	250	3.01
Utah	80	80	17	177	19.75
Vermont	80	40	17	137	39.60
Virginia	129	80	17	226	11.06
Washington	80	80	17	177	8.40
West Virginia	80	80	17	177	22.50
Wisconsin	80	80	17	177	9.63
Wyoming	80	48	17	145	43.81

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Sample Data File," 2007–08.

Table 2. Selected sample sizes for public charter schools by school level, the total number of sampled schools, and the percentage of the frame in sample, by state: 2007–08

State	School level			Total sampled schools	Percent of state's frame in sample
	Elementary	Secondary	Combined		
Total	171	103	96	370	9.62
Arizona	14	12	4	30	6.62
California	21	16	13	50	8.33
Colorado	6	2	3	11	9.32
Idaho	2	2	2	6	20.00
New Mexico	2	2	2	6	10.91
Utah	2	2	2	6	13.95
Alaska	2	2	2	6	26.09
Hawaii	2	2	2	6	22.22
Oregon	2	2	2	6	11.76
Remaining Western states	2	2	2	6	31.58
Michigan	15	4	4	23	8.95
Ohio	11	8	13	32	8.14
Wisconsin	5	4	2	11	6.21
Indiana	2	2	2	6	17.14
Minnesota	5	3	2	10	6.45
Remaining Midwestern states	2	2	2	6	10.71
Florida	18	5	2	25	7.60
North Carolina	6	2	2	10	10.31
Texas	10	7	10	27	7.78
District of Columbia	7	4	4	15	31.25
Georgia	5	2	2	9	15.00
Louisiana	2	2	2	6	19.35
Delaware	2	2	1	5	31.25
Remaining Southern states	4	2	2	8	9.20
Pennsylvania	6	2	4	12	10.34
Massachusetts	4	2	2	8	13.56
New Jersey	4	2	2	8	14.81
New York	6	2	2	10	12.66
Remaining Northeastern states	2	2	2	6	17.65

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing (SASS), "Public School Sample Data File," 2007–08.

Table 3. Selected sample sizes for public schools with high American Indian or Alaska Native enrollment and Career Technical Centers by school level, the total number of sampled schools, and the percentage of the frame in sample, by state: 2007–08

State	School level			Total sampled schools	Percent of state's frame in sample
	Elementary	Secondary	Combined		
Public schools with high American Indian or Alaska Native enrollment schools	223	150	80	453	26.65
Arizona	24	28	2	54	29.19
California	8	8	2	18	12.95
Minnesota	7	8	3	18	17.82
Montana	9	4	6	19	25.00
New Mexico	20	15	2	37	31.90
North Carolina	12	5	2	19	38.00
North Dakota	3	3	3	9	27.27
Oklahoma	92	50	42	184	30.16
South Dakota	10	4	6	20	23.81
Washington	7	5	2	14	20.59
Remaining Western states	11	8	2	21	23.08
Remaining Midwestern states	13	8	5	26	25.49
Remaining Southern states and Northeastern states	7	4	3	14	31.11
Career Technical Centers	0	20	0	191	10.47

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing (SASS), "Public School Sample Data File," 2007–08.

Teacher Frame and Sample Selection

SASS Teacher Frame Creation

In the 2007–08 SASS, Teacher Listing Forms (rosters) were collected primarily by mail from schools and keyed and sampled at a central location. The keying and sampling were done on an ongoing basis throughout the roster collection period. For complete details regarding the SASS teacher frame creation, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

Along with the names of their teachers, sampled schools were asked to provide the following descriptive characteristics about each teacher:

Teacher experience: Teachers in their first, second, or third year of teaching were classified as new teachers; teachers with 20 or more years of teaching experience were classified as highly experienced; teachers with 4–19 years of teaching experience were classified as midcareer.

Teaching status: Teachers were classified as part time or full time.

Subject matter taught: Teachers were classified as special education, general elementary, math, science, English/language arts, social studies, vocational/technical, or other.

Expectation for next year: Whether the responding school official felt the teacher would likely be teaching at the same school next year.

SASS Teacher Stratification

Within each sampled school, teachers were stratified into one of five teacher types:

- A. new teachers expected to stay at their current school (new stayer);
- B. midcareer or highly experienced teachers expected to stay at their current school (experienced stayer);
- C. new teachers expected to leave their current school (new leaver);
- D. midcareer teachers expected to leave their current school (midcareer leaver); or
- E. highly experienced teachers expected to leave their current school (highly experienced leaver).

If any of this information was missing for a teacher, the teacher was assumed to be an experienced stayer and therefore was not oversampled.

SASS Teacher Sample Allocation

The goals of the teacher sampling were as follows:

Select approximately 1,500 public school teachers expecting to leave.

Select a minimum of 2,300 new teachers, defined as being in the first 3 years of teaching.

Oversampling was not required due to the large number of sampled schools with new teachers. Therefore, teachers were allocated to the new and experienced categories proportional to their numbers in the school.

Select a minimum of 1 and a maximum of 20 teachers per school.

Minimize the variance of teacher estimates within school strata by attempting a self-weighting design. This constraint was relaxed to accommodate the other goals of teacher sampling.

Select an average of three to eight teachers per school depending upon grade range and sector.

The average teacher sample size was limited to this to avoid overburdening schools while allowing for a large enough teacher sample to provide reasonable analytic capability.

Before teachers were allocated to strata, schools were first allocated an overall number of teachers to be selected. This overall sample size was chosen so as to equalize the teacher weights within school strata (i.e., state/grade level). Teacher weights within strata were not always equalized, however, due to the minimum and maximum constraints. Table 4 provides the average number of teachers to be selected within each public school by school level.

Table 4. Average expected number of teachers selected per public school, by school level: 2007–08

School type	Average number of teachers selected, by school level		
	Elementary	Secondary	Combined
Public school	3.77	7.54	5.66

SOURCE: *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332), Schools and Staffing Survey (SASS), 2007–08, U.S. Department of Education, National Center for Education Statistics.

For a given school, the teacher sample size was chosen to equalize the teacher weights within a school stratum. Since the school sample was selected proportional to the square root of the number of teachers in the school, an equally weighted teacher sample within a school stratum was obtained by selecting t_i teachers in school i .

$$t_i = W_i * T_i (C/Y)$$

where

W_i is the school weight for school i (the inverse of the school selection probability).

T_i is the number of teachers in school i , as reported on the Teacher Listing Form.

C is the average teacher cluster size in the frame/grade level category (see table 4 above).

Y is the simple average of the school's base-weighted number of teachers over all schools in the school stratum.

Given the number of teachers selected in each school, t_i , teachers were allocated to the teacher type strata, A through E, in the following manner.

$$t_{ij} = \frac{t_i * T_{ij} * K_j}{\sum_{j=A}^E T_{ij} * K_j}$$

where

K_j is the oversampling factor for the particular teacher stratum, j .

T_{ij} is the number of teachers from stratum j in school i .

t_{ij} is the number of sample teachers selected from school i and stratum j .

The values of K that were applied to the teacher sampling were fixed for teacher strata A and B (at 1.0). The values for strata C, D, and E were adjusted throughout the teacher sampling operation to help meet the sample size goals of the teacher sampling operation. Accordingly, the ranges of oversampling rates given in table 5 were applied to the teachers expected to leave the school.

Table 5. Ranges of oversampling factors applied to SASS sampled teachers expected to leave their school in the following school year, by type of teacher: 2007–08

Type of teacher	Oversampling factor (ranges)
New teachers expected to leave	1.54–1.92
Midcareer teachers expected to leave	1.03–1.73
Highly experienced teachers expected to leave	1.23–2.53

SOURCE: *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332), Schools and Staffing Survey (SASS), 2007–08, U.S. Department of Education, National Center for Education Statistics.

To ensure that schools would not be overburdened, the maximum number of teachers per school was set at 20. When the number of sampled teachers exceeded 20 in a school, the sample size, t_i , was reduced proportionally in all strata to achieve a final sample size of 20.

SASS Teacher Sample Selection

Teacher records within a school were sorted by the teacher stratum code, the teacher subject code, and the teacher line number code. The teacher line number is a unique number assigned to identify the teacher within the list of keyed teachers. Within each teacher stratum in each school, teachers were selected systematically with equal probability. Table 6 shows the number of public school teachers selected as described above.

Table 6. Number of selected public school teachers in the SASS sample, by teacher stratum: 2007–08

Teacher stratum	Public
Total	48,353
New stayer	9,167
Experienced stayer	37,730
New leaver	387
Midcareer leaver	369
Highly experienced leaver	700

SOURCE: *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332), Schools and Staffing Survey (SASS), 2007–08, U.S. Department of Education, National Center for Education Statistics.

The selected sample was computed based on CCD universe files from 2 years earlier instead of reported teacher counts from the school just prior to data collection. Also, about 13 percent of the in-scope public schools did not provide teacher lists. For these schools, no teachers were selected. A factor in the teacher weighting was used to adjust the weights to reflect the fact that some schools did not provide teacher lists. These factors caused the overall average number of teachers per school to be slightly different from the target numbers.

To reduce the variance of teacher estimates, one goal of the teacher selection was to make the teacher sample self-weighting (i.e., have equal probabilities of selection) within teacher and school strata, but not across strata. The goal was generally met. However, since the sample size of teachers in some schools was altered due to the minimum constraint (i.e., at least one teacher per school) or the maximum constraint (i.e., no more than either twice the average stratum allocation or 20 teachers per school), this goal was not fully achieved in all schools. For complete details regarding the SASS teacher sample selection, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

Field Sampling Activities

Once a sampled school was contacted in the screener⁹ or the Teacher Listing Form quality check, the grade range was verified. Occasionally, the grade range differed considerably due to a difference between the school's actual grade range and how it was reported in the sampling frame. When a considerable difference occurred and the school reported fewer grades than expected, the sampled school was considered to have split into two or more schools. In this instance, the responding school was asked to provide a list of all of the schools that covered the sampled grade range. Consequently, one school was randomly subsampled from the list of schools covering the expected grade range, and the school base weight was adjusted upward accordingly as described in chapter 6.

If the school reported having more grades than expected, the respondent was interviewed, and the sampling frame was reviewed to see if the school corresponded to more than one sampling frame record. When this occurred, the sampled school was considered a merged school, and the base weight was adjusted downward to account for the fact that the respondent could have fallen into the sample through more than one sampling frame record. Once the appropriate sampled school was identified, the corresponding teachers were identified on the Teacher Listing Form for the sampled school. Teacher sampling then proceeded as described for other teacher sampling. This field sampling generally caused some deviation from the goal of a self-weighted design.

BTLS Teacher Sample Selection

All SASS public or public charter school teachers who responded to the 2007–08 SASS Teacher Questionnaire and reported their first year of teaching as 2007 or 2008 were included in the BTLS sample, with the exception of BIE school teachers, who were not eligible for BTLS. The original BTLS sample included about 2,100 teachers.

A telephone operation was conducted prior to the third wave to research 145 teachers who reported something other than 2007 or 2008 as their starting year in the second wave. Teachers who were found to have inadvertently reported 2007 or 2008 as their first year of teaching or to have been misidentified as teachers were excluded from the BTLS sample. This process revealed 101 sampled teachers who did not meet the study definition of a beginning teacher and resulted in the dropping of these teachers prior to the wave 3 administration.

During wave 3 processing, an additional seven cases were dropped from the sample because it was revealed that they, too, did not meet the definition of a beginning teacher because they were determined to never have been a teacher or did not begin teaching in 2007 or 2008. During wave 4 data collection, two additional teachers were dropped from the sample because they were determined to never have been a teacher or did not begin teaching in 2007 or 2008. The result of this process is a wave 1 to wave 5 data file with 1,990 cases in the BTLS sample.

Three of these 1,990 teachers were found to be deceased (two in the fourth wave and one in the fifth wave) and have been flagged as such in the data file. These teachers are part of the population for BTLS because they were beginning teachers in 2007 or 2008.

⁹ The screener is a computer-assisted telephone interviewing (CATI) instrument used to verify school information, establish a survey coordinator, and follow up on the Teacher Listing Form.

Chapter 4. Data Collection, Response Rates, and Bias Analysis

This chapter provides details on the data collection process and response rates for all five waves of the Beginning Teacher Longitudinal Study (BTLS). The data collection section includes a discussion of the collection methodology, predata collection activities, and collection details for the internet, paper, and telephone versions of the questionnaires. The response rate section includes unit and item response rates and unit and item bias analysis results.

Data collection for the BTLS began as part of the 2007–08 Schools and Staffing Survey (SASS). All public school teachers who indicated in the SASS Teacher Questionnaire that they began teaching in either 2007 or 2008 were selected for the BTLS sample. The SASS data for these beginning teachers are considered to be the BTLS first wave data. For complete details regarding SASS, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

The second wave of BTLS was conducted as part of the 2008–09 Teacher Follow-up Survey (TFS). Beginning teachers received the beginning teacher versions of the TFS questionnaires—either the Questionnaire for Former Teachers (TFS-2L) or the Questionnaire for Current Teachers (TFS-3L)—in paper form or through an online instrument. The beginning teacher versions contained more items on mentoring and job preparation than the national versions received by the other teachers who participated in the 2008–09 TFS. For more information about TFS, refer to the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011).

The third through fifth waves of BTLS were conducted independently of SASS and TFS during the 2009–10, 2010–11, and 2011–12 school years using an online instrument. Based on several screener questions, the instrument determined what questionnaire paths respondents should follow.

Data Collection

Data collection procedures for BTLS followed a number of standard steps, but the details across waves varied because of administration or wave-specific differences. The administration of the first two waves, as part of SASS and TFS, required that BTLS cases follow SASS and TFS procedures. The third through fifth waves were collected independent of another administration, resulting in differences in some of the procedures. For example, teacher sampling for the first wave BTLS took place within the SASS survey while procedures for locating respondents were introduced in the third wave and carried out in subsequent years. Differences across waves will be identified throughout this chapter.

The Census Bureau conducted the first wave collection utilizing a primarily mail-based methodology, with telephone and field follow-up. At the beginning of data collection, the Census Bureau telephone centers attempted to establish a survey coordinator at each school for all of the SASS questionnaires.¹⁰ Nonrespondents were contacted by telephone interviewers and/or field representatives.

¹⁰ The role of the survey coordinator was the main contact person at the school. A survey coordinator's duties included facilitating data collection by passing out questionnaires to the appropriate staff, reminding the staff to complete the questionnaires, and collecting the questionnaires to return to the Census Bureau.

The second wave of BTLS was conducted as part of the 2008–09 TFS. The second wave data were collected primarily through an internet instrument, although paper versions of the questionnaires also were offered. Nonrespondents were contacted by telephone interviewers.¹¹

The Census Bureau conducted BTLS again in the 2009–10, 2010–11, and 2011–12 school years. In these waves, data were collected solely through an internet instrument, with follow-up efforts conducted by telephone—either to encourage participation or to collect data from nonrespondents.

Overview of Methodology

The 2007–08 SASS was composed of several components that collected data from schools, school districts, principals, library media centers, and teachers. The SASS teacher data collection began in August 2007. The BTLS cases were identified at the end of the teacher data collection, and their SASS data made up the BTLS first wave data. The following discussion includes SASS procedures relevant to BTLS and subsequent TFS and BTLS procedures.

Predata Collection Activities

A number of activities occurred prior to data collection. These steps included soliciting endorsements, training staff, locating respondents, revising and testing survey instruments, and conducting other related activities. This section provides an overview of predata collection activities for the first and second waves, but includes details for the BTLS third through fifth waves not documented elsewhere. For complete details regarding predata collection activities for the first and second waves, refer to SASS and TFS documentation (Tourkin et al. 2010, Graham et al. 2011).

Endorsements, First and Second Waves

The National Center for Education Statistics (NCES) sought input for its surveys from various education groups and asked these groups to endorse the surveys that NCES conducts. Since the first and second waves of BTLS were collected using SASS and TFS instruments, the endorsements obtained for SASS and TFS were included. Group endorsements for SASS included TFS, so the list of groups that endorsed the first and second waves were identical. Detailed lists of endorsements for the first two waves may be obtained from the SASS and TFS documentation (Tourkin et al. 2010, Graham et al. 2011).

Endorsements, Third Through Fifth Waves

NCES contacted similar groups prior to the third wave of BTLS. The following groups endorsed the 2009–10, 2010–11, and 2011–12 BTLS:

- American Association of Teachers of German;
- American Council on the Teaching of Foreign Languages;
- Association for Middle Level Education;

¹¹ During data collection, the Census Bureau determined that there were 154 cases where there was either a discrepancy between the first year of teaching as reported in the first and second waves or the year when the teacher first began teaching was left blank in the second wave. Telephone follow-up was conducted to resolve cases with this discrepancy or to collect the missing data, as well as to encourage participation or collect data over the phone from nonrespondents. Ninety-nine cases were confirmed to have begun teaching before 2007 and were removed from the sample. Throughout the telephone follow-up, paper questionnaires were mailed upon request. Finally, paper questionnaires were mailed in June 2009 to teachers who had not yet completed the survey.

- Computer Science Teachers Association;
- International Reading Association;
- National Association for Music Education;
- National Association of Biology Teachers;
- National Coalition of Girls' Schools;
- National Council for the Social Studies;
- National Council of Teachers of Mathematics; and
- National Science Teachers Association.

Collecting the Teacher Listing Forms, SASS (First Wave)

During SASS, a list of teachers was collected from each sampled school using the SASS Teacher Listing Form in order to select a sample of teachers to receive the Teacher Questionnaire. Data collection for the Teacher Listing Form consisted of mailing the form to the school principal, following up with a reminder telephone call, and mailing a second Teacher Listing Form, if necessary. Finally, field representatives followed up on the Teacher Listing Form with telephone calls and/or personal visits, as needed.

Collecting Teacher Status Information, TFS (Second Wave)

The second wave included a teacher status operation as the first part of the TFS. In September 2008, the TFS Teacher Status Form¹² and a letter were mailed to each school that had at least one teacher who participated in the 2007–08 SASS. A knowledgeable person at the school (e.g., a school administrator or a member of the office staff) was asked to complete the Teacher Status Form by indicating each teacher's current occupational status. This information was used to determine whether each teacher listed was still teaching in that school (stayer), was teaching in another school (mover), or had left teaching (leaver). This information was not needed for the internet instrument, which used questionnaire paths to collect data by teacher status. However, when paper questionnaires were mailed in April 2009, the information from the Teacher Status Form was used to determine what type of questionnaire to send to respondents.

One week after the Teacher Status Form mailing, reminder postcards were sent to the sampled schools. Before telephone follow-up began, approximately 35 percent of schools had not completed a Teacher Status Form. Census Bureau clerical staff were responsible for the nonresponse follow-up for these cases. Nonresponse follow-up efforts consisted of staff placing scripted telephone calls to the schools in order to obtain teacher status information. Staff documented each call attempt by entering an outcome code in a call record; this outcome code indicated what had happened during each follow-up attempt (e.g., a complete interview was collected, a partial interview was collected, the school refused to participate). The final 2008–09 TFS response rate for the Teacher Status Form operation was 98.5 percent. For further information about the Teacher Status Form operation and TFS sample selection procedures, refer to chapter 3 of the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011).

¹² The Teacher Status Form was an instrument used to collect teacher status in 2008–09, and schools were asked to complete the form by indicating whether each teacher listed was still teaching in that school (stayer), was teaching in another school (mover), or left the teaching profession altogether (leaver).

Address Research Operations, Second Wave

SASS data collection procedures included a procedure for collecting school address information for all first wave BTLS teachers. The primary methods for informing teachers of the internet instrument for the second through fifth waves were by e-mail, mail, and telephone; therefore, valid contact information was necessary. Typically, the home address and telephone number provided by the respondent on the 2007–08 SASS Teacher Questionnaire were used. However, because some teachers did not provide contact information in the first wave, the Census Bureau clerical staff conducted an address and telephone number research operation in order to obtain valid contact information.

In December 2008, clerical staff began the address research operation to obtain contact information by searching various online databases and by calling the teacher’s contact person(s)¹³ and 2007–08 school for the second wave. Clerical staff researched the teacher’s home address, work address, and/or telephone numbers. If a new address was found, the new address was used for the initial mailing in February 2009. If no address was found, the correspondence was mailed to the teacher’s former school address.

After the initial mailing, questionnaires that the U.S. Postal Service (USPS) returned to the Census Bureau’s clerical processing center as “Undeliverable as Addressed” were sent to clerical staff for further address research. On a weekly basis, correspondence was resent to the new addresses that were found. If no new address was found, the Census Bureau attempted to contact the respondent by telephone and by e-mail, when possible. When contact was not possible by telephone or e-mail, NCES used additional locating resources to attempt to obtain contact information.

Locating Respondents, Third Through Fifth Waves

In November 2009, prior to the third wave, the Census Bureau mailed a precontact letter to all sample individuals informing them that they would be contacted shortly to participate in BTLS. A Contact Information Update Card was sent with the letter. The Contact Information Update Card was preprinted with all the contact information that respondents provided on their second wave questionnaires or, if they were nonrespondents in TFS, the information provided on their 2007–08 SASS Teacher Questionnaires. The sample individuals were asked to update their contact information as necessary, or mark a box indicating that the preprinted information was correct, and return the card to the Census Bureau.

In December 2009, before the initial letters were mailed, the Census Bureau staff researched cases where the precontact letter with the Contact Information Update Card was returned by the USPS as “Undeliverable as Addressed.”

In January 2010, the Census Bureau staff researched cases where the initial letter inviting survey participation was returned by the USPS as “Undeliverable as Addressed.” This same process and methodology were followed for the fourth and fifth waves.

¹³ The 2007–08 SASS Teacher Questionnaire included a section that asked the teacher to provide the address and telephone number of two people who would know how to get in touch with him or her during the coming years.

Instrument Development and Testing, Second Through Fifth Waves

The second wave internet instrument contained questionnaire paths for both current and former teachers. The respondents' answers to initial screening questions determined which path they followed. The screening questions were considered critical items¹⁴ and needed to be completed before the respondent could proceed to the next question. (Refer to exhibit 8 in chapter 5 for a complete list of critical items.) In addition, the internet instrument automated skip patterns so that, based on the respondent's answers, the appropriate items would be presented. The internet instrument also incorporated soft edit checks, which prompted the respondent to review his or her entry for accuracy and allowed the respondent to continue the interview without changing the answer. Staff from NCES, the American Institutes for Research (AIR), and the Census Bureau were responsible for testing the content, logic, and skip patterns in the internet instrument.

Testing of the internet instrument included a 3-day end-to-end operations test. The test included the following activities:

- delivering a preload file¹⁵ to the internet instrument developers;
- loading the preload file into the instrument;
- testing the instrument;¹⁶
- retrieving the internet data on a daily basis;
- reviewing the internet data output; and
- revising the internet instrument as needed.

The internet instrument for the third through fifth waves contained two questionnaire paths: one for current teachers and one for former teachers. Respondents' answers to the initial screening questions determined which questionnaire path they followed. In addition, the internet instrument automated skip patterns and presented the appropriate questions based on the respondents' answers to previous questions.

Staff from NCES, AIR, and the Census Bureau were responsible for testing the content, logic, and skip patterns in the internet instrument.

Training Telephone Center Staff, Second Through Fifth Waves

The Census Bureau telephone center staff in Jeffersonville, Indiana, attended two training sessions before the second through fifth waves of BTLS data collection prior to accepting incoming calls from and placing outgoing calls to sample individuals. Each training session consisted of a 4-hour self-study and practice interviews. The first training session covered procedures for handling incoming telephone calls from respondents; the second training session covered procedures for following up with nonrespondents to encourage participation or to conduct the interview over the telephone. The Census Bureau telephone

¹⁴ These items must be answered in order for a questionnaire to be considered complete.

¹⁵ The preload file allows the internet instrument to display information collected from previous waves of data collection, including control number, respondent name, respondent address, home phone number, home e-mail address, work e-mail address, user type, user name, and password. The respondent's name and contact information were preloaded into the survey to allow the respondent to verify and correct the information as necessary. The user name and password were necessary for the respondent to access the survey.

¹⁶ Testing was conducted for each of waves 2 through 5. Testing with prepared scenarios was conducted for the second, third, and fourth waves.

center staff used the internet instrument to conduct the interview and record the data directly into the internet instrument during the third through fifth wave data collection (see appendix I).

Internet, Paper, and Telephone Center Collection Procedures

As noted above, the primary data collection methodology varied for each wave of BTLS. The first wave data, collected with SASS, were collected primarily using a mail-based survey with telephone and field follow-up. The second wave, collected with TFS, were collected primarily through an internet instrument with telephone follow-up. Throughout the telephone follow-up, paper questionnaires were mailed upon request. The third through fifth wave data, collected independently, were collected solely through an internet instrument with follow-up efforts conducted by telephone. The specifics of each collection are described below.

First Wave Data Collection

Collecting the Teacher Questionnaires as Part of SASS, First Wave

The sample of teachers for the Teacher Questionnaire for the first wave, collected with SASS, was selected on a weekly basis as the Teacher Listing Forms were received, beginning in September 2007. The Teacher Questionnaires were then mailed to the survey coordinators (or to individual teachers, if survey coordinators had not been established). Follow-up efforts began by contacting the coordinators (or the teachers directly, if there was no survey coordinator). Follow-up efforts included reminder telephone calls, reminder postcards, and a second questionnaire mailing. If the reminder telephone call was placed to a teacher, the teacher was given the option of completing the questionnaire by telephone.

Nonresponding teachers were contacted by field representatives during field follow-up in February and March 2008. Because the response rate for teachers was sufficiently high toward the end of data collection, the final phase of field follow-up was cancelled. Nonresponding teachers were sent a third questionnaire in lieu of the field follow-up operation in April 2008.

Timing of SASS Data Collection

Data collection for the 2007–08 SASS began in June 2007 and continued through April 2008. Exhibit 1 summarizes the specific data collection activities and the time frame in which each occurred.

Exhibit 1. SASS data collection time schedule: 2007–08

Activity	Month and year of activity
Advance letters mailed to schools to verify school name and address	June 2007
Initial school package (included Teacher Listing Form) mailed to the school principal	August 2007
Telephone operation (screener and Teacher Listing Form telephone follow-up) to verify school information, establish a survey coordinator, and follow up on the Teacher Listing Form	August–October 2007
Second school package mailed to the survey coordinator or the school principal	September 2007
Teachers sampled and Teacher Questionnaires mailed to survey coordinators or individual teachers	September 2007–March 2008
Reminder postcards mailed to survey coordinators	October 2007
Field follow-up of Teacher Listing Forms	October–November 2007
Phase 1 of a telephone reminder operation to remind survey coordinators or individual respondents to complete and return the questionnaires	November–December 2007
Postcard mailed to survey coordinators and individual respondents	December 2007–January 2008
Replacement questionnaire mailed to all nonrespondents	January 2008
Phase 1 of a telephone nonresponse follow-up operation to attempt to complete interviews over the phone with nonrespondents	January–February 2008
Phase 1 of field nonresponse follow-up for school-level and teacher questionnaires	January–February 2008
Phase 2 of a telephone reminder operation to remind survey coordinators or individual respondents to complete and return the questionnaires	January–February 2008
Phase 2 of a telephone nonresponse follow-up operation to attempt to complete interviews over the phone with nonrespondents	February 2008
Phase 2 of field nonresponse follow-up for school-level and teacher questionnaires	February–March 2008
Reminder postcards mailed to teachers	March 2008
Replacement questionnaire mailed to all nonresponding teachers	April 2008

SOURCE: U.S. Department of Education, National Center for Education Statistics, School and Staffing Survey (SASS), 2007–08.

Second Wave Data Collection***Collecting the Teacher Questionnaires, Second Wave***

The BTLS second wave data were collected primarily through an internet instrument. In February 2009, all teachers were mailed a letter inviting their participation in the TFS using the internet instrument. At the same time, teachers who provided e-mail addresses in their 2007–08 SASS Teacher Questionnaire were sent a similar e-mail invitation. The invitation explained the purpose of the survey and included the URL of the internet survey, along with a user name and password to access it, a statement of authority, and an assurance of confidentiality.

The invitation also included a toll-free telephone number and e-mail address for teachers to contact if they had additional questions or needed assistance accessing the internet survey. The Census Bureau telephone center staff was responsible for handling the incoming telephone calls. The Census Bureau headquarters staff in Washington, DC, was responsible for responding to the e-mail inquiries.

Reminder letters were sent to all teachers in March 2009, before the telephone follow-up operation. At the same time, reminder e-mails were sent to nonrespondents for whom the Census Bureau had an e-mail address. From February to April 2009, respondents were only offered the internet option for completing the questionnaire, unless they requested a paper questionnaire. In April 2009, all nonrespondents were mailed a paper questionnaire. Of the interviews that were successfully completed, 86.1 percent were collected via the Internet.

In late May 2009, letters were mailed to respondents who had partially completed the internet survey, encouraging them to fully complete it. Additional e-mail reminders were sent to nonrespondents at various times during the entire data collection period.

The Census Bureau headquarters staff was responsible for retrieving the internet data on a daily basis.

Telephone Collection Procedures

Before telephone follow-up began in late March, approximately 24 percent of respondents had completed the TFS internet questionnaire. Follow-up efforts consisted of telephone calls to the nonrespondents, encouraging them to participate in the survey. Telephone center staff also offered to conduct the interview over the phone, in which case the interviewer would key the data directly into the internet questionnaire. Paper questionnaires were mailed upon request. Individuals who had neither completed the questionnaire on the Internet nor returned a completed paper questionnaire were included in nonresponse follow-up.

After a follow-up action was completed (e.g., conducted an interview, left a message, logged a paper questionnaire request), the telephone center interviewer recorded the outcome code and notes into the call log associated with the case. Progress reports for the nonresponse cases were produced twice weekly. All follow-up activities were completed by the telephone center. There were no personal visits by field representatives for the second wave of BTLS.

Paper Collection Procedures

In April 2009, approximately 1 month after telephone follow-up began, a separate letter and a paper version of the survey—the Questionnaire for Former Teachers or the Questionnaire for Current Teachers—were sent to all nonrespondents. The Questionnaire for Former Teachers was sent to sampled persons who were reported by school administrators as having left the K–12 teaching profession (leavers). The Questionnaire for Current Teachers was sent to sampled persons who were reported as still teaching at the elementary or secondary level, either in the same school as in the SASS year (stayers) or in a different school (movers). All questionnaires were sent to the home address if one was provided in the 2007–08 SASS Teacher Questionnaire. Otherwise, questionnaires were sent to the 2007–08 SASS school address.

School administrators did not always correctly identify the current teaching status of a sampled teacher on the Teacher Status Form. As a result, the paper questionnaires received by the sampled teachers may not have applied to them and the correct form would need to be sent to them. These cases were referred to as “switcher” cases. For example, if Teacher A’s 2007–08 school reported her as having left the teaching profession, she was considered a “leaver” and was mailed the Questionnaire for Former Teachers. However, it may have been the case that this teacher left her 2007–08 SASS school and was working as a preK–12 teacher elsewhere during the 2008–09 school year. This meant that she should complete the

Questionnaire for Current Teachers (rather than the Questionnaire for Former Teachers that was mailed to her). Switcher cases were instructed to return the incorrect form that they had received to clerical processing staff, who would then mail the correct form for completion.

In early June 2009, a second paper questionnaire was sent via Federal Express to nonrespondents. The questionnaire was accompanied by a letter, as well as a hand-written note encouraging the respondent to participate.

The Census Bureau processing staff in Jeffersonville, Indiana, was responsible for checking in completed paper questionnaires, capturing data, and implementing quality control procedures. Information about questionnaire check-in, data capture methods used to convert data from paper to electronic format, and criteria for determining final response rates can be found in chapters 5 and 6 of the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011).

Timing of Second Wave Data Collection

Data collection for the second wave of BTLS began in September 2008 and continued through July 2009. Exhibit 2 summarizes the specific data collection activities and the time frame in which each occurred.

Exhibit 2. TFS data collection time schedule: 2008–09

Activity	Month and year of activity
Teacher Status Form (TFS-1) and letter mailed to sampled schools	September 2008
Reminder postcards for the TFS-1 mailed to sampled schools	October 2008
Nonresponse follow-up of schools that did not return the TFS-1	November 2008
Premailout address research operation	December 2008
Initial mailing inviting participation in the survey	February 2009
Initial e-mail inviting participation in the survey	February 2009
Reminder mailing of letter inviting participation in the survey	March 2009
First and second reminder e-mails	March 2009
Telephone follow-up for all nonrespondents	March–July 2009
Third and fourth reminder e-mails	April 2009
Paper questionnaire mailout to all nonrespondents	April 2009
“Undeliverable as Addressed” research operation and mailout	Ongoing
Fifth and sixth reminder e-mails	May 2009
Letter mailout to all teachers who partially completed the internet survey (including all of the critical items)	May 2009
Second paper questionnaire (package included a letter and a hand-written note encouraging participation) mailout to all nonrespondents via Federal Express	June 2009
Seventh reminder e-mail	June 2009
Eighth reminder e-mail	July 2009

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), 2008–09.

Third Through Fifth Wave Data Collection***Monetary Incentive***

The third wave of BTLS included an experiment to determine the effect of a monetary incentive on survey participation. All sample persons were mailed a monetary incentive with the letter inviting their participation in BTLS. The sample was divided into two groups. One group received \$10 in cash; the other group received \$20 in cash. The results showed that \$20 cash incentives were more effective than \$10 cash incentives in boosting final response rates, as well as early response rates before the start of the telephone follow-up operation. Appendix K provides additional information about the BTLS incentive experiment. As a result of the third wave experiments, respondents in the fourth and fifth waves received an incentive of \$20 in cash with the letter inviting their participation in BTLS.

Internet Collection Procedures, Third Through Fifth Waves

The BTLS third through fifth wave data were collected solely through an internet instrument. At the beginning of collection for each wave, all teachers were mailed a letter inviting their participation in

BTLS. The invitation explained the purpose of the survey and included the URL of the internet instrument, along with a user name and password, a statement of authority, and assurance of confidentiality. The letter inviting participation included a monetary incentive to participate in the survey for the third wave. At the same time, a similar e-mail invitation was sent to teachers who provided e-mail addresses in the 2008–09 TFS Questionnaire; for TFS nonrespondents, the e-mail invitation was sent to the e-mail address provided in the 2007–08 SASS Teacher Questionnaire.

The invitation also included a toll-free telephone number and e-mail address for respondents to contact if they had additional questions or needed assistance accessing the internet survey. The Census Bureau telephone center staff in Jeffersonville, Indiana, was responsible for handling the incoming telephone calls from the respondents. The Census Bureau headquarters staff in Washington, DC, was responsible for responding to the e-mail inquiries.

Reminder letters were sent to all respondents in mid-January 2010. At the same time, reminder e-mails were sent to nonrespondents for whom the Census Bureau had an e-mail address. Additional e-mail reminders were sent to nonrespondents at various times during the entire data collection period. In early April 2010, a second reminder letter was mailed to nonrespondents.

The Census Bureau headquarters staff was responsible for retrieving the internet data on a daily basis.

Telephone Collection Procedures, Third Through Fifth Waves

Before telephone follow-up began in the beginning of February of the respective collection year, individuals who had not completed the questionnaire were included in nonresponse follow-up. Nonresponse follow-up efforts consisted of telephone calls to nonrespondents encouraging them to participate in the survey. Telephone center staff also offered to conduct the interview over the phone, in which case the interviewer keyed the data directly into the internet survey. All follow-up activities were completed by the telephone center. There were no personal visits by field representatives for the third through fifth waves of BTLS.

After a follow-up action was completed (e.g., conducted an interview or left a message), the telephone center interviewer recorded the outcome code and notes into the paper call log associated with the case. Follow-up calls to nonrespondents continued through the end of data collection. Progress reports for the nonresponse cases were produced twice a week.

Timing of Third Through Fifth Wave Data Collections

Data collection for the third through fifth waves of BTLS began in November of the collection year and continued through the following June. Exhibit 3 summarizes the specific data collection activities and the time frame in which each activity occurred for each wave.

Exhibit 3. BTLS data collection time schedule: 2009–10 through 2011–12

Administration	2009–10	2010–11	2011–12
Activity	Month and year of activity	Month and year of activity	Month and year of activity
Precontact letter and Contact Information Update Card mailed to sample individuals	November 2009	November 2010	December 2011
Address research operation for individuals whose precontact letter was returned by the USPS as “Undeliverable as Addressed”	December 2009	December 2010	December 2011
Initial mailing inviting participation in the survey	January 2010	January 2011	January 2012
Initial e-mail inviting participation in the survey	January 2010	January 2011	January 2012
Address research operation for individuals whose initial letter was returned by the USPS as “Undeliverable as Addressed”	January 2010	January 2011	January 2012
Reminder mailing of letter inviting participation in the survey	January 2010	January 2011	January 2012
First reminder e-mail	January 2010	January 2011	January 2012
Telephone follow-up for all nonrespondents	February–June 2010	February–June 2011	February–June 2012
Second reminder e-mail	February 2010	February 2011	March 2012
Third reminder e-mail	March 2010	February 2011	April 2012
Second reminder mailing of letter encouraging participation in the survey	April 2010	March 2011	March 2012
Fourth reminder e-mail	April 2010	April 2011	May 2012
Third reminder letter mailing	May 2010	April 2011	April 2012
Fifth and sixth reminder e-mails	May 2010	May 2011	April–May 2012
Fourth reminder letter		June 2011	May 2012
Seventh reminder e-mails	June 2010	May–June 2011	May–June 2012
Eighth reminder e-mails		June 2011	June 2012

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), 2011–12.

Overview of Response Rates

This section presents the overall survey, or “unit,” and item response rates for each wave of BTLS. The first wave of BTLS consisted of the public school teachers who indicated on the SASS Teacher Questionnaire that they began teaching in either 2007 or 2008. Whether or not a teacher was a beginning teacher was not known prior to the collection of the SASS teacher data. Therefore, the unit response rate for beginning teachers in SASS cannot be calculated. However, on the Teacher Listing Form, the SASS school was asked whether each teacher had 3 years of experience or less, 4 to 19 years, or 20 or more years. Because the general level of teaching experience of each teacher is known from the Teacher Listing

Form, the unit response rate of teachers with 1 to 3 years of teaching experience can be calculated, and this response rate can be used to approximate the BTLS first wave unit response rate.

The unit response rates for the rest of the waves will be presented together because the teachers sampled in the first wave were known and all sample cases could fall into one of three categories: a completed interview, a noninterview, or out-of-scope. A regular completed interview means that a sampled teacher who met the criteria for inclusion in BTLS (i.e., completed a 2007–08 SASS Teacher Questionnaire and began teaching in 2007 or 2008) substantially completed¹⁷ the respective BTLS second, third, fourth, or fifth wave questionnaire. “Noninterviews” refer to sampled teachers who met the criteria for inclusion in BTLS, but did not complete the respective questionnaire. Respondents who became deceased during the fourth and fifth waves of BTLS were not included in the calculation of the response rates for those waves.¹⁸

Second through fourth wave results include response rates for retrospective respondents. A retrospective completed interview means that a sampled teacher who met the criteria for inclusion in BTLS (i.e., completed a 2007–08 SASS Teacher Questionnaire and began teaching in 2007 or 2008) was a noninterview in the previous wave, but completed the required next wave questions¹⁹ during the that next wave.

First Wave Unit Response Rates

First wave unit response rate is the rate at which the sampled units respond by substantially completing the questionnaire. Unit response rates can be calculated as unweighted or weighted. The response rates presented in this section are those of the 2007–08 SASS public school teachers reported to have 1 to 3 years of experience, not just the beginning teachers included in BTLS.

The unweighted response rates are the number of 2007–08 SASS public school teachers reported to have 1 to 3 years of experience who were interviewed divided by the number of eligible (in-scope) sampled units, which includes respondents plus nonrespondents, but excludes ineligible (out-of-scope) units. The weighted response rates are the base-weighted number of interviewed cases divided by the base-weighted number of eligible cases. The base weight for each sampled unit is the initial basic weight (or weight based on the inverse of the probability of selection) multiplied by the sampling adjustment factor. For further discussion of the weighting procedures followed for BTLS, refer to chapter 6.

¹⁷ For their interviews to be considered complete, both former and current teachers had to answer three required questions. (See the BTLS second wave “Final Interview Status Classification” section in chapter 5 for more details.)

¹⁸ When teachers cannot respond to BTLS due to permanent incapacitation or death, they are excluded from the SASS numerators; they are also, for consistency, excluded from the denominators. That is, they are treated as ineligible and not included in the ratio adjustment. There were no cases like this in the first three waves of BTLS. There were two deceased cases identified in the fourth wave and one identified in the fifth wave. The BTLS ratio adjustment was equal to the ratio of the total number of SASS teachers who began teaching in 2007 or 2008 to the weighted BTLS sample estimate of the total number of teachers within each weighting class, or cell, defined for this step in the weighting procedure. The sample members identified as deceased in the fourth wave have final weights of zero for the fourth and fifth waves. The sample member identified as deceased in the fifth wave has final weights of zero for the fifth wave.

¹⁹ If the sampled teacher was a noninterview in the second through fourth waves, he or she was asked a series of retrospective questions about the previous wave (including the previous wave critical questions) during the third wave. (See the BTLS second wave “Final Interview Status Classification” and BTLS third wave “Receipt of Data” sections in chapter 5 for more details.)

Response rates are useful as indicators of possible nonresponse bias. The unweighted response rates provide an indication of the general success of the data collection efforts, while the base-weighted response rates provide measures of the quality of the data and the potential for nonresponse bias.

Table 7 summarizes the unweighted and base-weighted response rates for the 2007–08 SASS public school teachers reported to have 1 to 3 years of teaching experience. It also presents the overall response rate, which represents the response rate to the survey taking into consideration each stage of data collection. For a teacher to be eligible for SASS, it was necessary to have received the Teacher Listing Form from the school during the 2007–08 SASS data collection, which provided a sampling frame for teachers at that school. This overall response rate is the product of the survey response rates (i.e., the response rate for the SASS Teacher Listing Form multiplied by the response rate for SASS public school teachers reported to have 1 to 3 years of experience).

Table 7. Unweighted and base-weighted response rates for SASS public school teachers with 1 to 3 years of teaching experience: 2007–08

Type of response rate	2007–08 SASS Teacher Listing Form	2007–08 SASS public school teachers with 1 to 3 years of experience	Overall response rate
Unweighted	86.70	84.61	73.36
Base-weighted	86.17	84.31	72.65

NOTE: Base-weighted response rates use the inverse of the probability of selection and the sampling adjustment factor.

SOURCE: U.S. Department of Education, National Center for Education Statistics, School and Staffing Survey (SASS), “Public School Teacher Documentation Data File,” 2007–08.

Second Through Fifth Wave Unit Response Rates

Table 8 summarizes the unweighted and base-weighted unit response rates for the BTLS second wave, both with and without retrospective cases. Table 9 summarizes the unweighted and base-weighted response rates for cases in the BTLS third wave. Table 10 summarizes the unweighted and base-weighted response rates for cases in the BTLS fourth wave. Table 11 summarizes the unweighted and base-weighted response rates for cases in the BTLS fifth wave. All tables present the overall response rate, which represents the response rate to the survey, taking into consideration each stage of data collection. For a teacher to be eligible for BTLS, it was necessary to have received the Teacher Listing Form from the school during the 2007–08 SASS data collection, which provided a sampling frame for teachers at that school, and for the teacher to have responded to the SASS Teacher Questionnaire (BTLS first wave). This overall response rate is the product of the survey response rates (i.e., the response rate for the SASS Teacher Listing Form multiplied by the response rate for SASS public school teachers reported to have 1 to 3 years of experience multiplied by the response rate for the BTLS second, third, fourth, or fifth wave).

Table 8. Unweighted and base-weighted unit response rates by stage of data collection, wave, and type of weighting: 2007–08 through 2011–12

Wave and type of weighting	BTLS wave	2007–08 SASS Teacher Listing Form	2007–08 SASS public school teachers with 1 to 3 years of experience	Overall response rate
First wave (2007–08)				
Unweighted	†	86.7	84.6	73.4
Base-weighted	†	86.2	84.3	72.7
Second wave without retrospective cases (2008–09)				
Unweighted	84.7	86.7	84.6	62.1
Base-weighted	84.5	86.2	84.3	61.4
Second wave with retrospective cases (2008–09)				
Unweighted	91.8	86.7	84.6	67.4
Base-weighted	91.9	86.2	84.3	66.8
Third wave without retrospective cases (2009–10)				
Unweighted	86.2	86.7	84.6	63.3
Base-weighted	86.1	86.2	84.3	62.5
Third wave with retrospective cases (2009–10)				
Unweighted	91.2	86.7	84.6	66.9
Base-weighted	91.4	86.2	84.3	66.4
Fourth wave without retrospective cases (2010–11)				
Unweighted	83.7	86.7	84.6	61.4
Base-weighted	83.7	86.2	84.3	60.8
Fourth wave with retrospective cases (2010–11)				
Unweighted	84.8	86.7	84.6	62.2
Base-weighted	84.6	86.2	84.3	61.4
Fifth wave (2011–12)				
Unweighted	77.3	86.7	84.6	56.7
Base-weighted	77.7	86.2	84.3	56.5

† Not applicable.

NOTE: Second-wave retrospective cases are sample members who did not respond during the second wave, but provided replies to second-wave survey items during the third wave. Similarly, third-wave and fourth-wave retrospective cases did not respond during the collection wave, but answered retrospectively during the subsequent wave. Base-weighted response rates use the inverse of the probability of selection and the sampling adjustment factor.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Waves Data File,” 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12.

As mentioned previously, the BTLS third wave included an experiment to determine the effect of a monetary incentive on survey participation. The results and findings concluded that the larger incentive amount of \$20 was associated with a higher response rate. See appendix K for the analysis and additional details. Table 9 summarizes the unweighted and base-weighted response rates for cases in the BTLS third wave, by incentive amount.

Table 9. Unweighted and base-weighted response rates for the BTLS third wave, by incentive amount: 2009–10

Incentive amount	Unweighted response rate	Base-weighted response rate
Total	86.2	86.1
\$10	83.8	83.0
\$20	88.7	89.3

NOTE: Base-weighted response rates use the inverse of the probability of selection and the sampling adjustment factor.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Item Response Rates

Item response rates indicate the percentage of respondents who answered a given survey question or item. Weighted item response rates are produced by dividing the number of sampled cases responding to an item by the number of sampled cases eligible to answer the item and adjusting by either the base or the final weight. The base weight for each sampled unit is the initial basic weight multiplied by the sampling adjustment factor. The final weight for each sampled unit is the base weight adjusted for unit nonresponse and then ratio adjusted to the frame total. See chapter 6 for further discussion of the weighting.

For all BTLS items, a counted response is any item that is not missing, prior to any imputation.

For the BTLS first wave, SASS public school teachers who began teaching in 2007 or 2008, the base- and final-weighted item response rates ranged from 0 to 100 percent. Of all the items, 82.5 percent had a base-weighted response rate of 85 percent or higher, and 83.3 percent had a final-weighted response rate of 85 percent or higher. Table 10 summarizes the base- and final-weighted item response rates for BTLS public school teachers for all waves of BTLS. Appendix N provides information about the BTLS items that have a base-weighted response rate below 75 percent for all waves.

Item response rates for the BTLS second through fourth waves are calculated two ways: both with and without retrospective respondents.²⁰ Base-weighted item response rates are produced by dividing the number of sampled cases responding to an item by the number of sampled cases eligible to answer the item and adjusting by the base weight. The base weight for each sampled unit is the inverse of the probability of selection multiplied by the sampling adjustment factor. The final-weighted BTLS item response rates are produced by dividing the number of sampled teachers who responded to an item by the number of sampled teachers who were eligible to answer that item, adjusting by the final weight. Because the item response rates in table 10 are weighted, they do not reflect additional response loss due to respondents’ refusal to participate in the survey.

The base-weighted item response rates without retrospective cases for the BTLS second wave ranged from 4.3 to 100 percent, and the final-weighted item response rates ranged from 3.8 to 100 percent.

²⁰ The item response rates *without* retrospective cases are calculated using only the responses collected during the BTLS second wave data collection; item response rates *with* retrospective cases are calculated using both the responses collected during the BTLS second wave and the responses collected retrospectively during the third wave.

Within these cases, 87.2 percent of items had a base-weighted response rate of 85 percent or more and 86.8 percent had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates with retrospective cases for the BTLS second wave ranged from 4.3 to 100 percent, and the final-weighted item response rates ranged from 3.9 to 100 percent. Within these cases, 87.8 percent of items had a base-weighted response rate of 85 percent or more and 87.8 percent had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates for the BTLS third wave without retrospective cases ranged from 0 to 100 percent, as did the final-weighted item response rates. There were 86.3 percent of items that had a base-weighted response rate of 85 percent or more and 86.7 percent that had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates with retrospective cases for the BTLS third wave ranged from 0 to 100 percent, and the final-weighted item response rates also ranged from 0 to 100 percent. Within these cases, 85.5 percent of items had a base-weighted response rate of 85 percent or more and 85.9 percent had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates for the BTLS fourth wave without retrospective cases ranged from 46.6 to 100 percent, and the final-weighted item response rates ranged from 47.9 to 100 percent. There were 85.6 percent of items that had a base-weighted response rate of 85 percent or more and 84.7 percent that had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates with retrospective cases for the BTLS fourth wave ranged from 0 to 100 percent, as did the final-weighted item response rates. Within these cases, 84.9 percent of items had a base-weighted response rate of 85 percent or more and 84.5 percent had a final-weighted response rate of 85 percent or more.

The base-weighted item response rates for the BTLS fifth wave cases ranged from 50.3 to 100 percent, and the final-weighted item response rates ranged from 50.8 to 100 percent. There were 87.6 percent of items that had a base-weighted response rate of 85 percent or more and 86.5 percent that had a final-weighted response rate of 85 percent or more.

Table 10. Range of item response rates and percentage of items with selected rate ranges, by wave and type of weighting: 2007–08 through 2011–12

Wave and type of weighting	Range of item response rate	Percent of items with a response rate of 85.0 percent or more	Percent of items with a response rate of 70.0 percent to 84.9 percent	Percent of items with a response rate of less than 70.0 percent
First wave (2007–08)				
Base-weighted	0.0–100.0	82.5	10.1	7.4
Final-weighted	0.0–100.0	83.3	8.9	7.8
Second wave without retrospective cases (2008–09)				
Base-weighted	4.3–100.0	87.2	8.5	4.3
Final-weighted	3.8–100.0	86.8	8.9	4.3
Second wave with retrospective cases (2008–09)				
Base-weighted	4.3–100.0	87.8	7.8	4.4
Final-weighted	3.9–100.0	87.8	7.8	4.4
Third wave without retrospective cases (2009–10)				
Base-weighted	0.0–100.0	86.3	9.8	3.9
Final-weighted	0.0–100.0	86.7	9.4	3.9
Third wave with retrospective cases (2009–10)				
Base-weighted	0.0–100.0	85.5	10.6	3.9
Final-weighted	0.0–100.0	85.9	9.8	4.3
Fourth wave without retrospective cases (2010–11)				
Base-weighted	46.6–100.0	85.6	10.9	3.5
Final-weighted	47.9–100.0	84.7	11.8	3.5
Fourth wave with retrospective cases¹ (2010–11)				
Base-weighted	0.0–100.0	84.9	11.8	3.4
Final-weighted	0.0–100.0	84.5	12.2	3.4
Fifth wave² (2011–12)				
Base-weighted	50.3–100.0	87.6	9.0	3.4
Final-weighted	50.8–100.0	86.5	9.6	3.9

¹ One item for which no respondents were eligible to answer was excluded from the response rate calculations. The response rates of zero resulted from one retrospective-only item with only one eligible respondent who did not answer the item.

² Three items for which no respondents were eligible to answer were excluded from the response rate calculations. Two series of yes/no items pertaining to reasons that a former teacher left teaching or a current teacher moved to a different school were only asked in wave 5 if a respondent failed to answer an open-ended item asking for the reasons. This resulted in very small numbers of eligible respondents for these item series and zero respondents actually reporting data for these yes/no items. These 45 items were excluded from the item response rate calculations.

NOTE: Second-wave retrospective cases are sample members who were nonrespondents during the second wave, but provided replies to second-wave survey items during the third wave. Similarly, third-wave and fourth-wave retrospective cases did not respond during the collection wave, but answered retrospectively during the subsequent wave. Base-weighted response rates use the inverse of the probability of selection and the sampling adjustment factor. Final-weighted response rates use an initial basic weight, a SASS teacher weighting adjustment factor, a noninterview adjustment factor, and a ratio adjustment factor. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Waves Data File,” 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12.

Unit and Item Bias Analysis

Unit-Level Nonresponse

NCES Statistical Standard 4-4 requires analysis of unit nonresponse bias for any survey stage with a base-weighted response rate of less than 85 percent. Even though BTLS achieved or almost achieved an 85 percent base-weighted response rate in all stages, all waves of BTLS data files were evaluated for potential bias. Comparisons between the eligible respondents (respondents plus nonrespondents) and the respondents were made before and after the noninterview weighting adjustments were applied in order to

evaluate the extent to which the adjustments reduced or eliminated nonresponse bias. The following section explains the methodology and summarizes the conclusions.

Unit-Level Nonresponse Methodology

As outlined in appendix B of the *NCES Statistical Standards* (U.S. Department of Education 2003), the degree of nonresponse bias is a function of two factors: the nonresponse rate and how much the respondents and nonrespondents differ on survey variables of interest. The mathematical formulation to estimate bias for a sample mean of variable y is as follows:

$$B(\bar{y}_r) = \bar{y}_r - \bar{y}_t = \left(\frac{n_m}{n_t} \right) (\bar{y}_r - \bar{y}_m)$$

where

\bar{y}_t = the mean based on all sample cases, using the base weight

\bar{y}_r = the mean based only on respondent cases, using the base weight

\bar{y}_m = the mean based only on nonrespondent cases, using the base weight

n_t = the number of cases in the sample (i.e., $n_t = n_r + n_m$), using the base weight

n_m = the number of nonrespondent cases, using the base weight

n_r = the number of respondent cases, using the base weight

A variable-free estimate of the bias, referred to as a relative bias, was used to compare bias across all variables included in the analysis. The relative bias for an estimated mean using only the respondent data, \bar{y}_r , is calculated using the following formula:

$$RelB(\bar{y}_r) = \frac{B(\bar{y}_r)}{\bar{y}_r}$$

Relative bias was estimated for variables known for respondents and nonrespondents. For the first wave, beginning teachers were not identifiable from the sampling frame, although teachers in the first 3 years of their career were identified on the Teacher Listing Form. Therefore, a nonresponse bias analysis of 2007–08 SASS public school teachers with 1 to 3 years of experience was carried out as a proxy for the BTLS first wave. For this analysis, the following variables were available for the first wave: teacher main subject, status (full time/part time), charter status, school grade level, percentage of K–12 students approved for free or reduced-price lunch, school enrollment, school urbanicity, school magnet status, percentage of Hispanic enrollment, percentage of Asian enrollment, percentage of Black enrollment, percentage of Native American enrollment, percentage of White enrollment, and school Title I eligibility status.

For the second through fifth waves, and the longitudinal datasets, extensive data are available for all teachers from the 2007–08 SASS sampling frame and teacher data files. The variables used are presented in exhibit 4.

Exhibit 4. Variables used in the unit nonresponse bias analysis of the second through fifth waves of BTLS: 2008–09 through 2011–12

• Age	• Race/ethnicity
• Average number of students taught	• School level
• Base salary	• School type
• Census region	• Serious or moderate problems at school
• Certification type	• Sex
• Class organization	• Stayer/mover/leaver/returner status
• Community type	• Teacher career reflection
• Entered through alternative certification	• Teacher dissatisfaction
• Full- or part-time status	• Teacher has been physically attacked by a student
• Grade level of students taught	• Teacher participated in induction program in first year of teaching
• Highest degree	• Teacher participated in professional development activities
• Highly Qualified Teacher status	• Teacher plans to remain in teaching
• Main teaching assignment	• Teacher’s main activity in the last school year
• National Board for Professional Teaching Standards certification status	• Teacher’s evaluation of the usefulness of professional development activities
• Number of areas of classroom planning and teaching over which the teacher has no control or minor control	• Teacher’s Praxis or other exam results
• Number of school-related activities outside of normal teaching duties	• Teacher’s subject matter taught
• Number of separate class periods taught	• Total hours per week spent on all school-related activities
• Percentage of teacher’s students who are limited English proficient (LEP)	• Total hours per week spent on classroom instruction
• Percentage of teacher’s students with an Individualized Education Program (IEP)	• Total K–12 and ungraded enrollment in school
• Percentage of students in the school approved/eligible for the National School Lunch Program	• Total number of students taught
	• Total out-of-pocket expenses
	• Union member status

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Wave Documentation Data File,” 2007–12.

Several steps were followed to compute the relative bias. First, the nonresponse bias was estimated and tested to determine if the bias was significant at the .05 level. Second, noninterview adjustments were computed, and the variables listed above were included in the nonresponse models. The noninterview adjustments, which are included in the weights, were designed to significantly reduce or eliminate unit nonresponse bias for variables included in the models. Third, after the weights were computed, any remaining bias was estimated for the variables listed above and statistical tests were performed to check the remaining significant nonresponse bias. For this comparison, nonresponse bias was calculated as the difference between the base-weighted sample mean and the nonresponse-adjusted respondent mean, which evaluates the effectiveness of each noninterview adjustment in mitigating nonresponse bias. Table 11 contains summary statistics of the findings, which show that the nonresponse weighting adjustments eliminated some, but not all, significant bias. For example:

- Among the 2007–08 SASS public school teachers with 1 to 3 years of experience, both the mean and median estimated percent relative bias decreased after the weighting adjustment, but the percentage of variable categories that were significantly biased increased to about 5 percent.
- For the second wave without retrospective cases, about 7 percent of the variable categories were significantly biased before nonresponse weighting adjustments, but only about 3 percent were significantly biased after adjustments.
- For the third wave without retrospective cases, the percentage of the variable categories that were significantly biased decreased from about 10 percent before nonresponse weighting adjustments to about 6 percent after adjustments.
- For the fourth wave without retrospective cases, the percentage of the variable categories that were significantly biased decreased from about 6 percent before nonresponse weighting adjustments to about 3 percent after adjustments.
- For the waves 1–5 longitudinal respondents without retrospective cases, the weighting adjustments reduced the percentage of significantly biased variable categories from about 6 percent to about 3 percent.

Unit-Level Nonresponse Results

As shown in table 11, the weighting adjustments eliminated some, but not all, significant bias. For 2007–08 SASS public school teachers reported to have 1 to 3 years of experience, who were used as a proxy for the first wave of BTLS, both the mean and median estimated percent relative bias decreased after the weighting adjustment, but the percentage of variable categories that were significantly biased increased to about 5 percent out of the total of 66 categories (table 11). For the second wave respondents, about 7 percent of the variable categories were significantly biased before nonresponse weighting adjustments, but only about 3 percent out of the total of 221 categories were significantly biased after adjustments (table 11). For the second wave including retrospective respondents, the percentage of the variable categories that were significantly biased decreased from about 9 percent before weighting adjustments to about 6 percent out of the total of 221 categories after weighting adjustments; the mean relative bias also decreased (table 11). For the third wave respondents, the percentage of the variable categories that were significantly biased decreased from about 10 percent before weighting adjustments to about 6 percent out of the total of 221 categories after adjustments (table 11). For the fourth wave respondents, the percentage of the variable categories that were significantly biased decreased from about 6 percent before weighting adjustments to about 3 percent out of the total of 221 categories after adjustments (table 11). For the fifth wave respondents, the percentage of the variable categories that were significantly biased decreased from about 5 percent before weighting adjustments to about 1 percent out of the total of 221 categories after adjustments (table 11). Likewise, for the longitudinal respondents, the weighting adjustments reduced the percentage of variable categories that were significantly biased from about 6 to 3 percent out of the total of 221 categories (table 11). For the longitudinal data including retrospective cases, the weighting adjustments reduced the percentage of variable categories that were significantly biased from about 5 to 4 percent out of the total of 221 categories (table 11).

Table 11. Summary of SASS new teacher and BTLS nonresponse bias statistics, by wave and retrospective status: 2007–08 through 2011–12

	2007–08 SASS public school teachers with 1 to 3 years of experience	Second wave without retrospec- tive cases ¹	Second wave with retrospec- tive cases ¹	Third wave without retrospec- tive cases ²	Third wave with retrospec- tive cases ²	Fourth wave without retrospec- tive cases ³	Fourth wave with retrospec- tive cases ³	Fifth wave	Wave 1–5 longitudinal without retrospec- tive cases ⁴	Wave 1–5 longitudinal with retrospec- tive cases ⁴
Nonresponse bias statistic										
Before nonresponse adjustment										
Mean estimated percent relative bias	-0.08	-2.02	-1.38	-1.92	-1.19	-1.80	-1.59	-0.88	-2.31	-2.39
Median estimated percent relative bias	0.21	-0.10	0.09	0.31	0.23	0.23	0.23	0.04	-0.46	-0.05
Percent of variable categories significantly biased ⁵	#	6.79	9.05	9.95	7.69	5.88	4.98	5.43	6.33	5.43
After nonresponse adjustment										
Mean estimated percent relative bias	#	-1.28	-1.09	-1.49	-0.64	-1.36	-0.08	-0.38	-1.07	-1.33
Median estimated percent relative bias	0.13	0.21	0.14	0.29	0.22	0.14	0.13	0.24	0.10	0.00
Percent of variable categories significantly biased ⁵	4.55	2.71	6.33	5.88	4.98	2.71	3.17	1.36	3.17	3.62

Rounds to zero.

¹ Second-wave retrospective cases are sample members who were nonrespondents during the second wave, but provided replies to second-wave survey items during the third wave.

² Third-wave retrospective cases are sample members who were nonrespondents during the third wave, but provided replies to third-wave survey items during the fourth wave.

³ Fourth-wave retrospective cases are sample members who were nonrespondents during the fourth wave, but provided replies to fourth-wave survey items during the fifth wave.

⁴ Longitudinal cases are those who responded to all five waves. Longitudinal retrospective cases responded to the first and fifth waves at the time of data collection, but provided replies to second-wave items during the third wave, to third-wave items during the fourth wave, or to fourth-wave items during the fifth wave.

⁵ There were 221 variable categories in this nonresponse bias analysis.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Sample File,” and “Public School Teacher Documentation File,” 2007–08, and Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Waves Documentation Data File,” 2007–08, 2008–09, 2009–10, 2010–11, 2011–12.

Item-Level Nonresponse

Item-Level Nonresponse Analysis Methodology

The item-level bias analysis examined the overall response rate for each item in all five waves of BTLS data. The analysis included an examination of the item response rates by the characteristics listed in exhibit 5, using the final weight for all in-scope sampled units. If the overall response rate for an item fell below 70 percent and the item is used in any NCES publication, the item will be footnoted in the publication with “Item response rate fell below 70 percent” as a method of cautioning the user that the low item response rate introduces some potential for bias in the imputation procedure. Table 12 presents the number of items in each wave that had a response rate below 70 percent. More information on these items is provided in appendix N.

Table 12. Range of item response rates and percentage of items with selected rate ranges, by wave and type of weighting: 2007–08 through 2011–12

Wave and type of weighting	Range of item response rate	Percentage of items with a response rate of 85.0 percent or more	Percentage of items with a response rate of 70.0 percent to 84.9 percent	Percentage of items with a response rate of less than 70.0 percent
First wave (2007–08)				
Base-weighted	0.0–100.0	82.5	10.1	7.4
Final-weighted	0.0–100.0	83.3	8.9	7.8
Second wave without retrospective cases (2008–09)				
Base-weighted	4.3–100.0	87.2	8.5	4.3
Final-weighted	3.8–100.0	86.8	8.9	4.3
Second wave with retrospective cases (2008–09)				
Base-weighted	4.3–100.0	87.8	7.8	4.4
Final-weighted	3.9–100.0	87.8	7.8	4.4
Third wave without retrospective cases (2009–10)				
Base-weighted	0.0–100.0	86.3	9.8	3.9
Final-weighted	0.0–100.0	86.7	9.4	3.9
Third wave with retrospective cases (2009–10)				
Base-weighted	0.0–100.0	85.5	10.6	3.9
Final-weighted	0.0–100.0	85.9	9.8	4.3
Fourth wave without retrospective cases (2010–11)				
Base-weighted	46.6–100.0	85.6	10.9	3.5
Final-weighted	47.9–100.0	84.7	11.8	3.5
Fourth wave with retrospective cases¹ (2010–11)				
Base-weighted	0.0–100.0	84.9	11.8	3.4
Final-weighted	0.0–100.0	84.5	12.2	3.4
Fifth wave² (2011–12)				
Base-weighted	50.3–100.0	87.6	9.0	3.4
Final-weighted	50.8–100.0	86.5	9.6	3.9

¹ One item for which no respondents were eligible to answer was excluded from the response rate calculations. The response rates of zero resulted from one retrospective-only item with only one eligible respondent who did not answer the item.

² Three items for which no respondents were eligible to answer were excluded from the response rate calculations. Two series of yes/no items pertaining to reasons that a former teacher left teaching or a current teacher moved to a different school were only asked in wave 5 if a respondent failed to answer an open-ended item asking for the reasons. This resulted in very small numbers of eligible respondents for these item series and zero respondents actually reporting data for these yes/no items. These 45 items were excluded from the item response rate calculations.

NOTE: Second-wave retrospective cases are sample members who were nonrespondents during the second wave, but provided replies to second-wave survey items during the third wave. Similarly, third-wave and fourth-wave retrospective cases did not respond during the collection wave, but answered retrospectively during the subsequent wave. Base-weighted response rates use the inverse of the probability of selection and the sampling adjustment factor. Final-weighted response rates use an initial basic weight, a SASS teacher weighting adjustment factor, a noninterview adjustment factor, and a ratio adjustment factor. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Waves Data File,” 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12.

For any item with an item response rate less than 85 percent, an item-level nonresponse analysis was done using the respondent characteristics listed in exhibit 5. The exhibit 5 respondent characteristics were used to generate cell groupings of respondents. Cell response rates were compared to the response rates of all respondents. Where differences were noteworthy, a potential bias was reported. A noteworthy difference met each of the following conditions:

- The item response rate of the cell was significantly different from the item response rate of all respondents.
- The difference relative to the overall response rate for the particular item was greater than 10 percent.
- The absolute difference was greater than one percentage point.
- The coefficient of variation was less than 15 percent.
- The cell had at least 30 interviews.

Exhibit 5. Variables used in the BTLS item nonresponse bias analysis: 2007–12

• Census region	• Teacher’s stayer/mover/leaver status
• Community type	• Teacher’s age
• Main teaching assignment	• Teacher’s detailed race/ethnicity
• Percentage of enrolled students approved for the National School Lunch Program	• Teacher’s highest degree earned
• School level	• Teacher’s sex
• School type	• Total hours per week spent on all school-related activities
• Teacher career reflection	• Total K–12 and ungraded enrollment in school
• Teacher out-of-pocket expenses	• Total years of teaching experience
• Teacher participated in induction program in first year of teaching	• Union member status

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Third Wave Documentation Data File,” 2007–10.

Summary of Item-Level Nonresponse Analysis Results

An item-level nonresponse bias analysis was also conducted for each wave of BTLS data. A detailed analysis was conducted to assess potential nonresponse bias for survey items with an item-level response rate lower than 85 percent. The final-weighted item response rates for items within first-wave school and teacher characteristics (e.g., school level, community type) were compared to the total final-weighted item response rate for that item. An item response rate within a subpopulation may be higher or lower than the response rate for the item across the total population, indicating a potential source of item-level nonresponse bias. For waves 1–3, the nonresponse bias analysis conducted at the item level revealed no substantial evidence of bias in the data files. For wave 4, the analysis indicated that the following fourth-wave items and first-wave subpopulations were a potential source of item-level nonresponse bias:

- For W4CERTI (teacher preparation program for initial teaching certificate), the subpopulations of (1) teacher’s age = 35–44; (2) main teaching assignment = mathematics; and (3) school size = 750–999 had higher item response rates than the overall item response rate.

- For W4ENDOR (added content area, field, or grade level to teaching certificate), the subpopulation of charter status = charter school had a lower item response rate than the overall item response rate.

For wave 5, the analysis indicated that the following fifth-wave items and first-wave subpopulations were a potential source of item-level nonresponse bias:

- For W5ACTSP (participate in any other leadership activity), the subpopulation of school level = middle schools had a lower item response rate than the overall item response rate.
- For W5ENDOR (added content area, field, or grade level to teaching certificate), the subpopulation of community type = city had a lower item response rate than the overall item response rate.
- For W5ERNSA (summer earnings from nonschool job), the subpopulation of school level = elementary had a higher item response rate than the overall item response rate.
- For W5EROUA (school-year compensation from job outside school system), the subpopulations of (1) percentage of K–12 students approved for free lunch = 50–75 percent; and (2) total weekly hours spent on all activities = 45–55 hours had higher item response rates than the overall item response rate.
- For W5ERSSA (summer earnings from teaching summer school), the subpopulations of (1) total weekly hours spent on all activities = 65 or more hours; and (2) school size = 1,000 or more students had higher item response rates than the overall item response rate.

Chapter 5. Data Processing

The Beginning Teacher Longitudinal Study (BTLS) first wave data were collected using the Teacher Questionnaire (Form SASS-4A) of the 2007–08 Schools and Staffing Survey (SASS). The BTLS second wave data were collected as part of the 2008–09 Teacher Follow-up Survey (TFS).⁴² The third, fourth, and fifth wave data were collected independently of SASS or TFS during the 2009–10, 2010–11, and 2011–12 school years. All questionnaires used to collect data for the BTLS are available on the BTLS website: <http://nces.ed.gov/surveys/btls/>. Data processing for these surveys includes the data capture, imaging, quality control, formatting, editing, and imputation of the internet or paper survey data to produce the final data files. The various steps included in data processing for each wave of BTLS are described in this chapter.

Data processing began once the collection of the questionnaire data was complete. Data processing included all of the steps related to reformatting, reviewing, editing, and imputing the survey responses. If the data were collected on a paper questionnaire, they were converted from paper to electronic format. All data were then reformatted into SAS datasets for review.

The Census Bureau analysts began the review process by assigning a preliminary interview status code to each case. A series of reviews, computer edits, and programs were then run on the data to identify inconsistencies and assign a final interview status. Data processing was conducted within each BTLS wave data file.

Imputation for each wave of BTLS data occurred on a limited basis for a small set of key variables determined to be important to analysis and reporting. Key variables were imputed using cross-wave imputation of a response that was provided by the respondent in an earlier or subsequent wave of BTLS. If a cross-wave response was not available, the SASS hot-deck imputation was used for the first wave of data and weighted sequential hot-deck imputation was used for the second and third waves of data. This process required all three data files to be fully edited and reviewed prior to imputation. Once the “not answered” key variables were imputed and analysts had reviewed all data, the weights were created, confidentiality edits were run, and the restricted-use BTLS data file was prepared. Weighting and confidentiality edits are discussed in chapters that follow.

Data Processing Overview

After the BTLS first wave data collection was completed, all questionnaires were mailed to the Census Bureau clerical processing staff at the National Processing Center (NPC) in Jeffersonville, Indiana, where they were assigned a check-in code that indicated their completion status. The data from completed questionnaires were captured and sent to Census Bureau analysts in weekly waves of reformatted

⁴² Detailed information about SASS and TFS is available in the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010) and the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011), respectively.

datasets, by questionnaire type.⁴³ All BTLS first wave data processing was conducted starting with the SASS Public School Teacher data file.⁴⁴

In the second wave of BTLS, which was conducted as part of the Teacher Follow-up Survey, data were collected using two methods: paper questionnaires and an internet instrument. Data processing began once the data collection was completed. The Census Bureau clerical processing staff at the NPC in Jeffersonville, Indiana, were responsible for the first phase of data processing. This involved using the Automated Tracking and Control (ATAC) system to assign a check-in status code for each paper questionnaire received; questionnaires completed on the Internet were automatically assigned check-in codes by the internet instrument that identified completion status and respondent path. The check-in codes for both the paper and internet questionnaires included codes documenting the completion status (partial or complete). The internet check-in status included the status of critical items. Critical items are items required to be answered for the survey to be considered “completed.” The paper check-in codes included additional codes indicating mailing status (e.g., Unavailable as Addressed) or correspondence from the respondent or others relating to the respondent’s availability or eligibility for the survey. The data from completed paper questionnaires were then captured (converted from paper to electronic format), combined with data from the internet instrument, and sent to Census Bureau analysts in reformatted SAS datasets for review.

Data processing was conducted within each of the two questionnaire types that made up the BTLS second wave. Both questionnaires are for 2007–08 SASS public school teacher respondents who began teaching in 2007 or 2008. The Questionnaire for Current Teachers (Form TFS-3L) collected information on sampled teachers who were currently teaching students in any of grades preK–12, and the Questionnaire for Former Teachers (Form TFS-2L) collected information on sampled teachers who were not teaching at the preK–12 level in the 2008–09 school year. In addition, the Questionnaire for Current Teachers (Form TFS-3L) and the Questionnaire for Former Teachers (Form TFS-2) were administered as part of the 2008–09 TFS.

The third, fourth, and fifth waves of BTLS were conducted independently of SASS and TFS. The third through fifth wave data were collected using an internet instrument, which automatically assigned check-in codes to submitted questionnaires; the data were then reformatted into SAS datasets for review. Data processing was conducted within each survey respondent type.⁴⁵ For each BTLS wave, the Census

⁴³ The 2007–08 SASS consisted of nine questionnaires. BTLS includes only teachers who taught in a public school in the 2007–08 school year; therefore, the only SASS questionnaire type that is discussed here is the Teacher Questionnaire.

⁴⁴ After all processing of the SASS Teacher Questionnaire data was completed, the BTLS first wave data file was created; it includes only those public school teachers who began teaching in 2007 or 2008. All other respondents were omitted from the file.

⁴⁵ The BTLS third through fifth wave internet instruments contained a single survey with questionnaire paths based upon whether a respondent was a “current” or “former” teacher during the prior and current waves of BTLS. The respondent types were indicated in the format of “CC” or “CF,” where the first capital letter represents the respondent’s prior wave teaching status (Current, in both the CC and CF examples) and the second capital letter denotes the respondent’s current wave teaching status (Current, in the CC example, and Former, in the CF example). In the second wave, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). If the sampled teacher was a nonrespondent in the second wave, he or she was asked a series of second wave questions during the third wave to determine if the sampled person was a nonrespondent current teacher (denoted “Nc”) or a nonrespondent former teacher (denoted “Nf”) for the second wave. Finally, during the third wave, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). Thus, the resulting potential BTLS third wave respondent types were the following: third wave current teachers (CC, FC, NcC, and NfC) and third wave former teachers (CF, FF, NcF, and NfF). This questionnaire path and respondent type code assignment was utilized in the fourth and fifth wave data collection, as well.

Bureau analysts began the data review process by assigning each case a preliminary interview status code. A series of reviews, computer edits, and programs were then run on the data to identify inconsistencies, assign a final interview status, and impute predetermined key variables⁴⁶ that were classified as “not answered” after taking into account item responses left blank due to a questionnaire skip pattern.

The next stage of data processing, imputation, ensured that there were valid values on the files for each of the key variables. In each wave, the process looked for a cross-wave imputation value first, a response from the same respondent for the same item on an earlier or subsequent wave of BTLS. If a cross-wave imputation value was not available, a second method of imputation occurred. Since BTLS first wave data were fully imputed for SASS, the SASS hot-deck imputation value was retained if a cross-wave value was not available. If a missing item was reported in the second through fifth waves of BTLS for a key item and there was not a cross-wave imputation value available, weighted sequential hot-deck imputation occurred. The remainder of BTLS second through fifth wave data are coded as missing for all other unanswered items. In the second through fifth waves, this process occurred after all editing occurred and after the assignment of the final interview status.

The steps for processing the data for each of the BTLS waves are presented in more detail below.

Receipt of Data

The first step of data processing involves the receipt of the data. This section provides details on the receipt of the data, noting the differences in receipt of the data for each wave that reflect collection differences for these waves. The first wave was collected primarily with a paper instrument with some telephone follow-up. The second wave included a paper and internet instrument as well as telephone follow-up. The third through fifth wave collections included an internet instrument with telephone follow-up. Details on the process for nonrespondent follow-up and the process of collecting data in the alternate formats are included in the “Data Collection” section of chapter 4.

First Wave, Paper Questionnaire

First wave BTLS data were collected using a paper questionnaire. BTLS first wave sample members were encouraged to complete and mail their completed Teacher Questionnaires to the NPC. Questionnaires mailed to the NPC were immediately checked into the Automatic Tracking and Control (ATAC) system by clerical staff. At this stage, the paper questionnaires received an outcome code of “complete” if any item on the questionnaire was answered. Additional outcome codes that could be set included refusals, blanks, duplicates, Unavailable as Addressed (UAA), and various out-of-scope codes. The questionnaires were then grouped into batches by interview status (i.e., interviews, noninterviews, and out-of-scope for the study) for data capture.

Nonresponding first wave cases were sent first into telephone follow-up and then to a field representative in order to urge respondents to complete their questionnaires or to collect critical questionnaire items (see chapter 4 for more details on collection methods). Critical items were those that had to be answered for a questionnaire to be considered complete (see exhibit 6). Questionnaires completed over the phone were recorded on paper questionnaires. These phone interviews and those picked up by a field representative were grouped into batches of 100 and shipped to the clerical processing staff at the NPC for ATAC check-in and data keying with the rest of the completed Teacher Questionnaires.

⁴⁶ Some variables were selected as key variables for imputation due to their importance in data analysis and reporting.

Exhibit 6. BTLS first wave critical items (Form SASS-4A): 2007–08

Page	Item	Source code ¹	Description
4	1 or 4	W1T0025 or W1T0028	Position at school or full- or part-time teaching status was reported
6	8 or 9	W1T0036 or W1T0037	Year began teaching at this school or at any school was reported
9	12	W1T0050–W1T0064	Listed teaching at least one grade
9	15	W1T0067 or W1T5067	Main teaching assignment at the school was reported
And at least one of the following questions			
13	23a	W1T0110	Bachelor’s degree
14	25a	W1T0120	Master’s degree
15	26a	W1T0124	Other degrees

¹ Source codes are used to identify particular items in SASS questionnaires. The last four digits of the source code can be found to the left of the first answer choice.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Wave,” 2007–08.

Second Wave, Paper Questionnaire

Second wave data were collected using both a paper and internet questionnaire, requiring different procedures to be followed for each survey type. The procedures for the receipt of second wave paper questionnaire data are described here. The Census Bureau clerical processing staff received questionnaires directly both from the sampled teachers and from the Jeffersonville Telephone Center, where all telephone follow-ups were conducted. Upon receipt, staff assigned a check-in code (e.g., completed questionnaire, blank questionnaire, refusal, teacher deceased) to each questionnaire to indicate its status. A paper questionnaire was checked in as a completed questionnaire⁴⁷ when the respondent completed all of the critical items (see exhibit 7). Clerical processing staff also looked at question 1 on all questionnaires to see if respondents indicated they were sent the incorrect questionnaire type (due to their former school inaccurately reporting their teaching or other occupational status on the TFS Teacher Status Form);⁴⁸ these respondents were assigned a unique “switcher” check-in code. (See chapter 4 for further information about “switchers.”) The remaining check-in codes were assigned based upon any notes or indicators written on the cover of or attached to the returned questionnaire. If staff members were unsure of what check-in code to assign, the case was sent to Census Bureau analysts at headquarters for reconciliation.

All questionnaires were assigned a check-in code. The code for the mailed paper questionnaires was entered into the ATAC system. If there was a change in address, either marked on the questionnaire label or indicated by the U.S. Postal Service, the address information was updated in the ATAC system. The

⁴⁷ The check-in code indicating a completed questionnaire does not necessarily indicate that a case is a complete interview. Interview status was assigned during both the preliminary and final interview status recode (ISR) stages of data processing. See the second wave “Preliminary Interview Status Recode Classification” and “Final Interview Status Classification” sections of this chapter for a detailed description of the criteria for Former and Current Teacher Questionnaire complete interviews.

⁴⁸ The Teacher Status Form was mailed to TFS sampled schools that provided lists of teachers during the 2007–08 SASS. These schools were asked to complete the form by indicating whether each teacher listed was still teaching in that school (stayer), was teaching in another school (mover), or had left the teaching profession for the 2008–09 school year (leaver).

questionnaires were then grouped into batches by questionnaire type, doc type,⁴⁹ and check-in code. Only completed interviews were sent on for the next step of data processing: data capture.

Second Wave, Internet Questionnaire Data

The procedures for the receipt of second wave internet questionnaire data are described here. Approximately 86.5 percent of respondents who completed a 2008–09 BTLS second wave questionnaire completed the internet version, which included questionnaire paths for both current and former teachers. Questionnaires completed on the Internet were automatically assigned check-in codes by the internet instrument.

The internet instrument was programmed so that internet respondents could not skip over critical items, which were the items that must be answered in order for a questionnaire to be considered complete (see exhibit 7). On the last screen of the internet questionnaire, the respondent was given the option of submitting the completed questionnaire. The internet questionnaire was assigned a check-in code of “complete” as long as the respondent completed all of the critical items, regardless of whether he or she successfully reached the end of the questionnaire or submitted the completed survey. In all other situations where the respondent accessed the instrument but did not complete it, the questionnaire was considered to be partially complete and was assigned an interview status code during the preliminary and final interview status record (ISR) stages of data processing that was dependent upon which items were answered. For further information about the preliminary ISR classification, refer to the discussion of the BTLS second wave in the “Data Review” section of this chapter.

Several of the critical items in the internet questionnaire served as screener questions because the respondent’s answers to these questions determined which questionnaire path the respondent would follow. The combination of the first two items determined whether the respondent would follow the former or current teacher path. Further down the current teacher questionnaire path, a question asked whether the respondent was teaching at the same school as in the previous year. This question determined whether a current teacher would follow the “mover” or “stayer” path. See the discussion of the BTLS second wave in the “Final Interview Status Classification” section of this chapter for a detailed description of the criteria for Former and Current Teacher Questionnaire complete interviews.

⁴⁹ The doc type indicates whether the questionnaire that was received by the clerical staff was from the first mailing, the second mailing, or a remail requested by the respondent.

Exhibit 7. BTLS second wave critical items, by survey population: 2008–09

Survey population	Page	Item	Source code ¹	Description
Former teachers (TFS-2L)	5	1a	W2REGCL	Do you currently teach any regularly scheduled class(es) in any of grades preK–12? (A “No” response will continue on the Former Teacher Questionnaire path. The path taken for a “Yes” response depends upon the answer to item 1c.)
	5	1c	W2POSSC	Note: This question is asked only when item 1a is marked “Yes.” How do you classify your position at your current school, that is, the activity at which you spend most of your time during the school year? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with Former Teacher Questionnaire path.)
Current teachers (TFS-3L)	6	3	W2OCCST	What is your current main occupational status?
	5	1a	W2REGCL	Do you currently teach any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with Current Teacher Questionnaire path.)
	5	1b	W2POSSC	How do you classify your position at your current school, that is, the activity at which you spend most of your time during the school year? (Response should <i>not</i> be short-term substitute, student teacher, or teacher aide.)
	11	16a	W2MOVYN	Are you currently teaching in the same school as you were last year (2007–08)?

¹ Source codes are used to identify particular items in Teacher Follow-up Survey (TFS) questionnaires. For each questionnaire type, the last five characters of the source code can be found to the left of the first answer choice.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave,” 2008–09.

Third Through Fifth Wave, Internet Questionnaire Data

The BTLS third through fifth wave internet instruments included questions for both current and former teachers. The internet instrument was programmed so that internet respondents could not skip over critical items (see exhibit 8). On the last screen of the internet questionnaire, the respondent was given the option of submitting the completed questionnaire. The internet questionnaires were automatically assigned a check-in code of “complete” if the respondent completed all of the critical items, regardless of whether he or she successfully reached the end of the questionnaire or submitted the completed survey. In all other situations where the respondent accessed the instrument but did not complete it, the questionnaire was considered to be partially complete and was assigned an interview status code during the preliminary and final ISR stages of data processing that was dependent upon which items were answered. For further information about the preliminary ISR classification, refer to the discussion of the BTLS third through fifth wave in the “Data Review” section of this chapter.

Several of the critical items in the BTLS third through fifth waves served as screener questions because the answers to them determined which questionnaire path the respondent would follow: the former teacher path or the current teacher path. See the discussion of the BTLS third through fifth wave in the “Final Interview Status Classification” section of this chapter for a detailed description of the criteria for determining whether each case could be classified as a completed interview.

Exhibit 8. BTLS third wave critical items, by survey respondent type: 2009–10

Survey population	BTLS respondent type ¹	Third-wave source code ²	Fourth-wave source code ²	Fifth-wave source code ²	Description
Former teachers	CF and FF	W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (A “No” response will continue on the former teacher questionnaire path to OCCST. The path taken for a “Yes” response depends upon the answer to POSSC.)
		W3POSSC	W4POSSC	W5POSSC	Note: This question is asked only when REGCL is answered “Yes.” How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with the former teacher path.)
		W3OCCST	W4OCCST	W5OCCST	Note: This question is asked only when ONLEA is answered “No.” What is your current MAIN occupational status?
	NcF	W2REGCL	W3REGCL	W4REGCL	Last school year (<i>year</i>), did you teach any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with retrospective current teacher questionnaire path.)
		W2POSSC	W3POSSC	W4POSSC	How would you classify your position at LAST YEAR’S school, that is, the activity at which you spent most of your time? (Response should not be short-term substitute, student teacher, or teacher aide)
		W2MOVYN	W3MOVYN	W4MOVYN	Last school year (<i>year</i>), were you still teaching at PRELOADED PREVIOUS SCHOOL?
		W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (A “No” response will continue on the former teacher questionnaire path to OCCST. The path taken for a “Yes” response depends upon the answer to POSSC.)
		W3POSSC	W4POSSC	W5POSSC	Note: This question is asked only when REGCL is answered “Yes.” How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with the former teacher path.)

See notes at end of table.

Exhibit 8. BTLS third- through fifth-wave critical items, by survey population and respondent type: 2009–10 through 2011–12—Continued

Survey population	BTLS respondent type ¹	Third-wave source code ²	Fourth-wave source code ²	Fifth-wave source code ²	Description
Former teachers (continued)	NcF	W3OCCST	W4OCCST	W5OCCST	Note: This question is asked only when ONLEA is answered “No.”
					What is your current MAIN occupational status?
	NfF	W2REGCL	W3REGCL	W4REGCL	Last school year (<i>year</i>), did you teach any regularly scheduled class(es) in any of grades preK–12? (A “No” response will continue on the former teacher questionnaire path to OCCST. The path taken for a “Yes” response depends upon the answer to POSSC.)
					How would you classify your position at LAST YEAR’S school, that is, the activity at which you spent most of your time? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with the retrospective former teacher path.)
		W2OCCST	W3OCCST	W4OCCST	What was your MAIN occupational status last year?
		W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (A “No” response will continue on the former teacher questionnaire path to OCCST. The path taken for a “Yes” response depends upon the answer to POSSC.)
					Note: This question is asked only when REGCL is answered “Yes.”
		W3POSSC	W4POSSC	W5POSSC	How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with the former teacher path.)
					Note: This question is asked only when ONLEA is answered “No.”
		W3OCCST	W4OCCST	W5OCCST	What is your current MAIN occupational status?

See notes at end of table.

Exhibit 8. BTLS third- through fifth-wave critical items, by survey population and respondent type: 2009–10 through 2011–12—Continued

Survey population	BTLS respondent type ¹	Third-wave source code ²	Fourth-wave source code ²	Fifth-wave source code ²	Description
Current teachers	CC	W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with current teacher questionnaire path.)
		W3POSSC	W4POSSC	W5POSSC	How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should not be short-term substitute, student teacher, or teacher aide.)
		W3MOVYN	W4MOVYN		Last school year (<i>year</i>), you were teaching in PRELOADED PREVIOUS SCHOOL. Are you still teaching in that school?
			W4NRSAS	W5NRSAS	Are you currently teaching in the SAME SCHOOL as you were last year? (For waves 4 and 5, whether respondent is asked MOVYN or NRSAS is dependent upon preloaded information. One must be answered.)
	FC	W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with current teacher questionnaire path.)
		W3POSSC	W4POSSC	W5POSSC	How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should not be short-term substitute, student teacher, or teacher aide.)
		W3RESAS			You were teaching in PRELOADED PREVIOUS SCHOOL during the (<i>year</i>) school year. Did you return to that school?
	NcC	W2REGCL	W3REGCL	W4REGCL	Last school year (<i>year</i>), did you teach any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with retrospective current teacher questionnaire path.)
		W2POSSC	W3POSSC	W4POSSC	How would you classify your position at LAST YEAR’S school, that is, the activity at which you spent most of your time? (Response should not be short-term substitute, student teacher, or teacher aide.)
		W2MOVYN	W3MOVYN	W4MOVYN	Last school year (<i>year</i>), were you still teaching at PRELOADED PREVIOUS SCHOOL?
		W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with current teacher questionnaire path.)

See notes at end of table.

Exhibit 8. BTLS third- through fifth-wave critical items, by survey population and respondent type: 2009–10 through 2011–12—Continued

Survey population	BTLS respondent type ¹	Third-wave source code ²	Fourth-wave source code ²	Fifth-wave source code ²	Description
Current teachers (continued)	NcC	W3POSSC	W4POSSC	W5POSSC	How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should not be short-term substitute, student teacher, or teacher aide.)
		W3NRSAS	W4NRSAS	W5NRSAS	Are you currently teaching in the SAME SCHOOL as you were last year?
			W4MOVYN		Last school year (<i>year</i>), you were teaching in PRELOADED PREVIOUS SCHOOL. Are you still teaching in that school? (For waves 4 and 5, whether respondent is asked MOVYN or NRSAS is dependent upon preloaded information. One must be answered.)
	NfC	W2REGCL	W3REGCL	W4REGCL	Last school year (<i>year</i>), did you teach any regularly scheduled class(es) in any of grades preK–12? (Response should be “No” in order to continue with retrospective former teacher questionnaire path.)
		W2POSSC	W3POSSC	W4POSSC	How would you classify your position at LAST YEAR’S school, that is, the activity at which you spent most of your time? (Response should be short-term substitute, student teacher, or teacher aide in order to continue with the retrospective former teacher path.)
		W2OCCST	W3OCCST	W4OCCST	What was your MAIN occupational status last year?
		W3REGCL	W4REGCL	W5REGCL	Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12? (Response should be “Yes” in order to continue with current teacher questionnaire path.)
		W3POSSC	W4POSSC	W5POSSC	How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (<i>year</i>)? (Response should not be short-term substitute, student teacher, or teacher aide.)

See notes at end of table.

Exhibit 8. BTLS third- through fifth-wave critical items, by survey population and respondent type: 2009–10 through 2011–12—Continued

Survey population	BTLS respondent type ¹	Third-wave source code ²	Fourth-wave source code ²	Fifth-wave source code ²	Description
Current teachers (continued)	NfC	W3RESAS			You were teaching in PRELOADED PREVIOUS SCHOOL during the <i>(year)</i> school year. Did you return to that school?

¹ The BTLS internet instrument contained a single survey with questionnaire paths based upon whether a respondent was a “current” or “former” teacher during the current and previous waves of BTLS. The respondent types were indicated in the format of “XY” or “XxY,” where the “X” (or “Xx” in the case of nonrespondents) denotes the respondent’s previous-wave teaching status and the “Y” denotes the respondent’s current-wave teaching status. In the previous wave, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). If the sampled teacher was a nonrespondent in the previous wave, he or she was asked a series of previous-wave questions during the current wave to determine if the sampled person was a nonrespondent current teacher (denoted “Nc”) or a nonrespondent former teacher (denoted “Nf”) for the previous wave. Finally, during the current wave, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). Thus, the resulting potential BTLS respondent types were the following: current-wave current teachers (CC, FC, NcC, and NfC) and current-wave former teachers (CF, FF, NcF, and NfF).

² Source codes are used to identify particular items in BTLS questionnaires.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third through Fifth Waves, 2009–10, 2010–11, and 2011–12.”

Data Capture, Imaging, and Quality Assurance

The BTLS first wave questionnaire data were captured (converted from paper to electronic format) using a combination of manual data keying and imaging technology, both of which were facilitated by the integrated computer-assisted data entry (iCADE) system. Keying programs were developed prior to data capture. Images of the forms were captured during data entry, and these image files were used by analysts to view the actual questionnaires online.

The BTLS second wave data collected in the mailed paper questionnaires were captured (i.e., converted from paper to electronic format) using manual data keying. The data collected in the internet instrument did not go through a data capture operation because they were automatically captured and saved by the internet system.

BTLS third wave data were collected using only an internet instrument, so data capture and imaging were not required.

Paper Questionnaire Data

During data capture for the first wave, a data quality check was performed on both the manually keyed and the imaging-technology-captured questionnaire data. During this check, a percentage of blank and nonblank fields were sampled so that clerks could verify the output. A detailed discussion of the data capture operations and the results of the keying verification for the 2007–08 SASS Teacher Questionnaires are provided in appendix H.

During second wave check-in, paper questionnaires were split into batches by questionnaire type, doc type, and check-in code and were then manually keyed. Manual data keying for the BTLS second wave questionnaires was accomplished using a key-from-paper (KFP) data capture system. Analysts wrote specifications for data keying, and programmers used these specifications to develop the KFP system for each survey prior to keying. This system presented screens of questionnaire items to data keying staff, who reviewed each page of the questionnaire and keyed any entries into the appropriate fields on the screens.

All second wave KFP entries were 100 percent verified by the keying staff, meaning that every field in every keyed record was keyed twice and the results compared automatically for discrepancies and, subsequently, verified as accurate. The verification during this operation allowed up to a 1 percent error on a field-to-field basis. Error rates were calculated by dividing the total number of keying errors by the total number of keyed fields. If an entire batch of questionnaires had a total error of more than 1 percent, the batch was unacceptable, and all questionnaires within the batch were 100 percent verified a second time. A more detailed discussion of data capture and the results of the keying verification for the BTLS second wave questionnaires are provided in appendix J.

Images of each second wave questionnaire were captured after data entry was completed. The image files were used during subsequent steps of data processing to view the images of the actual questionnaires electronically in order to resolve discrepancies.

Internet Questionnaire Data

Data for the second through fifth wave internet questionnaires did not go through a separate data capture operation. As respondents completed questions in the BTLS second through fifth wave internet questionnaires, data were automatically captured and saved by the system. At this point, the data were already in electronic format. Unlike the paper questionnaires in the first and second waves, there were no images of the internet questionnaires to be captured and stored as image files. Therefore, during subsequent stages of data processing, Census Bureau analysts referred to the original data entered by the respondents.

Reformatting

As the BTLS first wave questionnaire data were being captured, batches of output files were reformatted from ASCII files into SAS datasets in order to facilitate the remaining data processing and cleaning. Once these batches of output files were reformatted, they were sent to Census Bureau analysts weekly for review.

After the second wave paper questionnaire data were captured, the output files were reformatted from ASCII files into SAS datasets. The internet data were in a different electronic format and also needed to be reformatted. Census Bureau analysts provided specifications to programmers that indicated how to merge the paper and internet data files into two formatted SAS datasets, by questionnaire type. This allowed analysts to proceed with data processing and cleaning of the paper and internet data in merged SAS datasets.

Since the BTLS second wave data were collected in two modes—paper surveys (with multiple mailings in some cases) and an internet instrument—duplicate interviews sometimes occurred. In these situations, Census Bureau analysts compared the data in the duplicate records and determined which record to keep, based on completion of critical items and overall completeness (item counts, etc.). When the duplicate records were equally complete, the record completed on paper was deleted in favor of the internet record. Occasionally, duplicate records contained contradictory data and, subsequently, underwent review to determine which data were more consistent. In some cases, analysts added data from the dropped record to the retained record.

After data collection was completed, the BTLS third through fifth wave data from the internet instrument were reformatted into SAS datasets. Since data for these waves were collected using only an internet instrument (which locked the respondent out once the interview had been submitted), duplicate interviews did not occur, as they did in the second wave.

Data Review

The data review process began as soon as Census Bureau analysts began receiving batches of keyed data or reformatted internet data. The overall goal was to make sure that the final datasets contained accurate, clean, and consistent data.

During the review process, analysts looked at the frequencies of data items, source code by source code (or by groups of source codes, as necessary), in order to observe the changes that occurred in the data throughout the different stages of processing. These data processing steps, which are outlined and discussed further in the chapter sections below, included:

- a preliminary interview status classification;
- a series of computer edits that checked that
 - the data were in range and consistent throughout a questionnaire record, and
 - the correct skip pattern was followed and logically followed from responses in related SASS questionnaires;
- a final interview status classification; and
- a set of imputation stages, during which “not answered” survey items were imputed.

By reviewing the frequency counts of data items at each stage of processing, analysts were able to make sure that the edit programs were working correctly. The review also helped to ensure that the edited and imputed values were consistent with other data in the questionnaire record.

Another reason that Census Bureau analysts examined the frequencies of each data item at each stage of processing was to identify any suspicious values (e.g., if an item’s response was outside the range of possible answer choices or if an answer seemed unlikely, given the respondent’s other responses in the survey). Occasionally, the image of the questionnaire page was checked in order to verify that the data were keyed correctly. Appropriate fixes were made to the data files when necessary.

Preliminary Interview Status Recode Classification

The preliminary ISR was a preliminary determination of whether each case was an interview (i.e., complete interview), a noninterview, or out-of-scope. In general, cases that had been assigned an “out-of-scope” outcome code during data collection were classified as out-of-scope (ISR = 3) for the preliminary ISR, and cases with data entries were classified as complete interviews (ISR = 1). For the first wave, cases with no data and cases in which the district or school had refused to participate were classified as noninterviews (ISR = 2). For the second and third waves, cases with no data and cases in which the sampled teacher had refused to participate were classified as noninterviews (ISR = 2).

Computer Edits

After the preliminary ISR classification, all files were submitted to a series of computer edits. These edits consisted of range checks, consistency edits, blanking edits, and logic edits.

Range Checks, First Wave

For each wave of the BTLS, the first of the computer edits were the range checks. The range checks were used to delete entries that were outside the range of acceptable values for each item set prior to the administration of each of the BTLS waves. Extreme values were set by Census Bureau analysts based upon substantive familiarity with the items and in consultation with the National Center for Education

Statistics (NCES). Extreme values were reviewed and allowed if consistent with related items on the survey and blanked if inconsistent with other items on the survey.

Consistency Edits, First Wave

Next, consistency edits—during which actual changes to the data were made—were run. The details of the consistency edits for the first wave were different as a result of the SASS data collected during the first wave.

The consistency edits identified inconsistent entries within each case and, whenever possible, corrected them. If the inconsistencies could not be corrected, the entries were deleted. The types of inconsistencies that occurred were the following:

1. within items (e.g., if the response to the “Yes/No” part of Teacher Questionnaire item 61a—whether or not the respondent had earnings from teaching summer school during the summer for 2007—was marked “No,” but the respondent entered a dollar amount in 61b, the “how much” subitem); or
2. between items (e.g., if the response to Teacher Questionnaire item 16 indicated that the respondent taught an elementary enrichment class, but the respondent indicated in item 12 that he or she taught any of grades 9–12).

In addition, the consistency edits filled in some items where data were missing or incomplete by using other information from the same data record. For example, if some parts of Teacher Questionnaire items 10a, 10b, 11b, and 11c—the number of years of experience teaching full and part time at public and private elementary or secondary schools—were unanswered and some were answered, and the sum of the answered items was at least the number of years since the respondent began teaching, then a zero entry was put in each part that was unanswered during the consistency edit.

Blanking Edits, First Wave

The blanking edits were a second consistency edit that replaced extraneous entries (e.g., in situations where skip patterns were not followed correctly) with a “valid skip” code (. for numeric items, ' ' for character items) and assigned the “not answered” code (.n for numeric items, “N” for character items) to items that should have been answered, but were not. The blanking edits removed answers that should not have been included based on an incorrect response pattern according to the skip codes, but they also included the addition of the valid skip code to facilitate identification of responses that required imputation. The blanking edit flags do not appear in the data file.

Logic Edits, First Wave

During the logic edits, data were added to the “not answered” items using assumptions about how the respondent might have answered. In this stage, data from the same record or a related school-level record (e.g., the 2007–08 SASS School Questionnaire or Principal Questionnaire) were used to fill in missing information. This stage of edit was very similar to the consistency edit, but with broader assumptions being made. Consistency edits relied on information from the same respondent; logic edits might include information from a related school record in addition to the broader assumptions.

There were three different sources of logic edits for the BTLS first wave items, and a numerical flag corresponding to the type of imputation used was assigned to each edited item. Table K-1 in appendix K shows the number of logic edits made to entries for each of the variables within the BTLS first wave data file. These changes are summarized below in table 13. The BTLS first wave file underwent consistency edits with the processing of the 2007–08 SASS. For detailed information about these edits, refer to chapter 7 of the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

Computer edit flags were created to indicate that such changes had been made and to enable analysts to keep track of how much editing was occurring. The definition of each flag used in the computer edits for the first wave is described in exhibit 9 below.

Exhibit 9. Flags used in processing BTLS first wave data (Form SASS-4A): 2007–08

Processing step	Flag variables	Flag values and definitions
Consistency edits	ef_[sourcecode] =	0 No edit performed.
		1 Item was edited during the consistency edits.
Logic edits	f_[sourcecode] =	0 Data reported. Not edited.
		2 Item was edited using data from other items within the same questionnaire.
		3 Item was edited using data from an associated SASS questionnaire (principal record, district record, or school record).
		4 Item was edited from the SASS Teacher Listing Form.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Wave,” 2007–08.

Only records that were classified as interviews in the preliminary ISR were put through these series of edits.

Table 13. Summary of changes made to variables during the logic edits in the BTLS first wave: 2007–08

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in questionnaire	Number of variables changed during logic edits by percent of records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Logic edits	1,990	339	240	99	0	0

¹ Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Wave,” 2007–08.

Consistency Edits, Second Wave

The consistency edits for the second wave followed the same procedures as the first wave edits. The second wave edits differed because there were not SASS data from other respondents associated with second wave respondents who provided supplemental information for the same collection year and TFS surveys contained different information than the related SASS surveys. Computer edit flags were created to indicate that changes had been made to the existing data and to enable analysts to keep track of how much editing was occurring overall (as well as what kinds of changes were made and at which stage of processing they occurred).

The consistency edits identified inconsistent entries within each case and, whenever possible, corrected them. Consistency edits were based upon the expected relationships of related items. If the inconsistencies could not be corrected, the entries were deleted. The types of inconsistencies that occurred were the following:

1. within questions (e.g., if the response to the “Yes/No” part of the Current Teacher Questionnaire item 34 [Former Teacher Questionnaire item 9]—whether or not the teacher is currently receiving a pension from a teacher retirement system—was not marked “Yes,” but the respondent entered a dollar amount in the “how much” subitem); or
2. between questions (e.g., if the response to item 4 on the Former Teacher Questionnaire—whether or not the respondent was currently working—was not marked “Yes,” but the respondent’s entry in any of items 5b—current job duties, 5c—job classification, 7—full-time or part-time employment status, or 8—current salary indicated that he or she was working).

Blanking Edits, Second Wave

Once the initial consistency edits were run, a second consistency edit, the blanking edits, replaced extraneous entries (e.g., in situations where skip patterns were not followed correctly) with a “valid skip” code (. for numeric items, ' for character items) and assigned the “not answered” code (.n for numeric items, “N” for character items) to items that should have been answered, but were not. The blanking edits removed answers that should not have been included based on an incorrect response pattern according to the skip codes, but also included the addition of the valid skip code to facilitate identification of responses that require imputation.

Logic Edits, Second Wave

Data were sometimes added to questionnaire records during the logic edits, which filled in some items where data were missing or incomplete using other information from the same respondent. Values filled in by the logic edits were valid responses because they were within the range of acceptable values set prior to the administration of the BTLS second wave and were consistent with the respondent’s answers to related items. Logic edits were similar to consistency edits and made assumptions that were reasonable given the responses, but were less direct than the assumptions included in the consistency edits.

Only records classified as interviews in the preliminary ISR were put through this series of computer edits. Table K-2 in appendix K shows the number of changes made to entries for each of the variables in the BTLS second wave data file. These changes are summarized in table 14 below.

Table 14. Summary of changes made to variables in the consistency and logic computer edits in the BTLS second wave: 2008–09

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS second wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	1,690	258	209	49	0	0
Logic edits	1,690	258	224	31	3	0

¹Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave,” 2008–09.

Consistency Edits, Third Through Fifth Waves

The consistency and logic edits for the third, fourth, and fifth waves included the same steps as in earlier waves, but were different as a result of these waves of BTLS being collected independently using an online instrument, as well as a result of the increasing number of respondent user types. Computer edit flags were created to indicate that changes had been made to the existing data and to enable analysts to

keep track of how much editing was occurring overall (as well as what kinds of changes were made and at which stage of processing they occurred).

The consistency edits identified inconsistent entries within each case and, whenever possible, corrected them. If the inconsistencies could not be corrected, the entries were deleted. The types of inconsistencies that occurred were the following:

- within items (e.g., if the response to the “Yes/No” part of current teacher item W3MENTR—whether or not the respondent was assigned as a mentor teacher to classroom teachers—was not marked “Yes,” but the respondent reported the number of teachers he or she was mentoring in subsequent item W3MENUM); or
- between items (e.g., if the respondent indicated that he or she taught a grade in current teacher items W3TEGPK–W3TEGUG and did not indicate that grade being offered at the school in items W3SCGPK–W3SCGUG).

Blanking Edits, Third Through Fifth Waves

Once the initial consistency edits were run, a second consistency edit, the blanking edits, replaced extraneous entries (e.g., in situations where skip patterns were not followed correctly) with a “valid skip” value (. for numeric items, ' ' for character items) and assigned the “not answered” value (.n for numeric items, “N” for character items) to items that should have been answered, but were not. The blanking edits removed answers that should not have been included based on an incorrect response pattern according to the skip codes, but they also included the addition of the valid skip code to facilitate identification of responses that required imputation.

Logic Edits, Third Through Fifth Waves

Data were sometimes added to questionnaire records during the logic edits, which filled in some items where data were missing or incomplete using related information from the respondent. Values filled in by the logic edits were valid responses because they were within the range of acceptable values set prior to the administration of the BTLS third, fourth, and fifth waves and were consistent with the respondent’s answers to related items.

Only records classified as interviews in the preliminary ISR were put through this series of computer edits. Table K-4 in appendix K shows the number of changes made to entries for each of the variables within the BTLS third through fifth wave data files. These changes are summarized in tables 15 through 20 below.

Table 15. Summary of changes made to variables in the consistency and logic computer edits in the BTLS third wave: 2009–10

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS third wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	1,720	256	235	21	0	0
Logic edits	1,720	256	125	112	18	1

¹ Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Table 16. Summary of changes made to variables in the consistency and logic computer edits in the BTLS second wave retrospective cases: 2008–09

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS retrospective second wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	140	35	35	0	0	0
Logic edits	140	35	33	2	0	0

¹Rounded to the nearest 10..

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave,” 2008–09.

Table 17. Summary of changes made to variables in the consistency and logic computer edits in the BTLS fourth wave: 2010–11

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS fourth wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	1,660	229	207	9	5	8
Logic edits	1,660	229	164	53	12	0

¹ Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fourth Wave,” 2010–11.

Table 18. Summary of changes made to variables in the consistency and logic computer edits in the BTLS third wave retrospective cases: 2009–10

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS retrospective third wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	100	29	29	0	0	0
Logic edits	100	29	27	2	0	0

¹Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Table 19. Summary of changes made to variables in the consistency and logic computer edits in the BTLS fifth wave: 2011–12

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS fifth wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	1,540	197	168	29	0	0
Logic edits	1,540	197	147	38	12	0

¹ Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave,” 2011–12.

Table 20. Summary of changes made to variables in the consistency and logic computer edits in the BTLS fourth wave retrospective cases: 2010–11

Edit stage	Total number of interviews ¹ (ISR = 1)	Total number of variables in survey	Number of variables changed during edits, by percent of all BTLS retrospective fourth wave records in which the variable was changed			
			None	1–15 percent	16–30 percent	More than 30 percent
Consistency edits	20	29	29	0	0	0
Logic edits	20	29	29	0	0	0

¹ Rounded to the nearest 10.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fourth Wave,” 2010–11.

Final Interview Status Classification

After the various computer edits were completed, a final determination was made of whether each case was eligible for the study and, if so, whether sufficient data had been collected for it to be classified as a completed interview. A final ISR value was assigned to each case as a result of this edit. The final ISR classification was dependent upon different factors and variables for each wave of BTLS. The wave-specific ISR specifications are provided in this section.

Final ISR, First Wave

A first wave BTLS case was classified as *out-of-scope* (W1ISR = 3) if any of the following conditions were met:

- The school from which the teacher was sampled was classified as out-of-scope by the Teacher Listing Form instrument.
- The teacher on the questionnaire label no longer worked at the school named on the questionnaire (e.g., had transferred to another school, left teaching, moved out of the United States, or retired or was deceased).
- The person named on the questionnaire label was a short-term substitute teacher, student teacher, or teacher’s aide.
- The person named on the questionnaire label was not a teacher.

- The person named on the questionnaire label had never worked at the school.
- The person named on the questionnaire worked at the school but did not teach any classes (e.g., was an assistant principal, counselor, or librarian).

A case was classified as an *interview* (W1ISR=1) if none of the conditions for out-of-scope cases were met and any of the following conditions were met:

- The respondent reported either his or her position at the school (W1T0025) or full- or part-time teaching status at the school (W1T0028).
- The respondent reported either the year that he or she began teaching at the school where he or she was selected for the survey sample (W1T0036) or the year he or she began full- or part-time teaching at the elementary or secondary level (W1T0037).
- At least one grade level of students taught by the respondent was reported (W1T0050–W1T0064).
- The respondent reported his or her main teaching assignment field (W1T0067 or W1T5067).
- The respondent reported whether he or she had a college degree (W1T0110 or W1T0120 or W1T0124).
- There were data in at least 29 additional items, resulting in 10 percent of the 339 items being completed. Each subitem of a question was considered an item with respect to ISR.

A case was classified as a *noninterview* (W1ISR = 2) if an eligible case did not meet the requirements to be an interview case.

Final ISR, Second Wave

A second wave BTLS case was classified as *out-of-scope* (W2ISR = 3)⁵⁰ if

- the sampled person was deceased; or
- the sampled person was permanently incapacitated.

A case was classified as an *interview* (W2ISR = 1) in the Questionnaire for Former Teachers (TFS-2L) if

- none of the conditions for out-of-scope cases were met;
- the sampled person reported that he or she did not currently teach any regularly scheduled classes in any of grades preK–12 (item 1a, W2REGCL) or reported that his or her job classification was as a short-term substitute, student teacher, or teacher aide (item 1c, W2POSSC); and
- the sampled person reported his or her main occupational status (item 3, W2OCCST).

A case was classified as an *interview* (W2ISR = 1) in the Questionnaire for Current Teachers (TFS-3L) if

- none of the conditions for out-of-scope cases was met;
- the sampled teacher indicated that he or she taught any regularly scheduled classes in any of grades preK–12 (item 1a, W2REGCL);

⁵⁰ Cases declared out-of-scope for the second and third waves were kept on the file, retained their base weight, but were not issued a final weight for any wave for which they were deemed out-of-scope.

- the sampled teacher reported that his or her job classification was not as a short-term substitute, student teacher, or teacher aide (item 1b, W2POSSC); and
- the sampled teacher indicated whether he or she was teaching in the same school as in the previous year (item 16a, W2MOVYN).

A case was classified as a *noninterview* (W2ISR = 2) if an eligible case did not meet the requirements to be an interview case.

If a case was classified as a noninterview for the second wave of BTLS, the respondent was asked a subset of retrospective second wave items during the third wave. Respondents who were noninterviews during the second wave, but provided replies to second wave items during the third wave data collection were called “retrospective respondents.” All retrospective respondents were assigned a final ISR of noninterview (W2ISR = 2) and a detailed ISR of retrospective interview (W2ISRD = 2). For further information about BTLS second wave retrospective respondents, see the “Third Through Fifth Wave, Internet Questionnaire Data” section of this chapter.

The preliminary and final ISR counts for the BTLS second wave data file and the percentage change for each ISR classification are shown below in table 21.

Table 21. Preliminary and final interview status recode (ISR) counts and percentage change in the BTLS second wave: 2008–09

Sample size	Preliminary ISR			Final ISR			Percent change in ISR ¹		
	Interviews ¹	Noninter-views	Out-of-scope	Interviews	Noninter-views	Out-of-scope	Interviews	Noninter-views	Out-of-scope
1,990	1,690	300	0	1,690	310	0	-0.41	2.35	0

¹Rounded to the nearest 10.

²The percent change for each ISR category (interviews, noninterviews, and out-of-scope) is computed by subtracting the number of cases in the preliminary ISR count from the number of cases in the final ISR count and dividing by the number of cases in the preliminary ISR count.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave, 2008–09.”

After all of the edits were run and the data were reviewed by Census Bureau analysts, the data were still split into data files by questionnaire type (i.e., Current Teacher, Former Teacher). The data from these two files, as well as the data collected from retrospective respondents in the third wave, were merged to create a single BTLS second wave final ISR data file.

Final ISR, Third Through Fifth Waves

A third through fifth wave BTLS case was classified as *out-of-scope* (W3ISR = 3) if

- the sampled person was deceased; or
- the sampled person was permanently incapacitated.

A case was classified as an *interview* (W3ISR = 1) if

- Former teachers
 - none of the conditions for out-of-scope cases were met;

- the sampled person reported that he or she did not currently teach any regularly scheduled classes in any of grades preK–12 (W3REGCL) or reported that his or her job classification was as a short-term substitute, student teacher, or teacher aide (W3POSSC); and
- the sampled person reported his or her main occupational status (W3OCCST), as long as he or she was not on leave.
- Current teachers
 - none of the conditions for out-of-scope cases was met;
 - the sampled teacher indicated that he or she taught any regularly scheduled classes in any of grades preK–12 (W3REGCL);
 - the sampled teacher reported that his or her job classification was not as a short-term substitute, student teacher, or teacher aide (W3POSSC); and
 - the sampled teacher indicated whether he or she was teaching in the same school as in the previous year (W3MOVYN for respondent type CC, NRSAS for respondent type NcC) or had returned to the 2007–08 school (W3RESAS for FC or NfC).⁵¹

A case was classified as a *noninterview* (W3ISR = 2) if an eligible case did not meet the requirements to be an interview case.

The preliminary and final ISR counts for the BTLS third through fifth wave data files and the percentage change for each ISR classification are shown below in tables 22.

⁵¹ In the second wave, for example, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). If the sampled teacher was a nonrespondent in the second wave, he or she was asked a series of second wave questions during the third wave to determine if the sampled person was a nonrespondent current teacher (denoted “Nc”) or a nonrespondent former teacher (denoted “Nf”) for the second wave. Finally, during the third wave, the sampled person was either a current teacher (denoted by a “C”) or a former teacher (denoted by an “F”). Thus, the resulting potential BTLS third wave respondent types were the following: third wave current teachers (CC, FC, NcC, and NfC) and third wave former teachers (CF, FF, NcF, and NfF). This nomenclature carries forward for each pair or triad of consecutive waves, with the “C”, “F”, “Nc”, and “Nf” conveying the current or teacher status as well as the responding status for each wave.

Table 22. Preliminary and final interview status recode (ISR) counts and percentage change in the BTLS third through fifth waves: 2009–10 through 2011–12

Sample size	Preliminary ISR			Final ISR			Percent change in ISR ²		
	Interviews ¹	Noninter-views	Out-of-scope	Interviews	Noninter-views	Out-of-scope	Interviews	Noninter-views	Out-of-scope
Third Wave									
1,990	1,720	270	0	1,720	270	0	-0.17	1.11	0
Fourth Wave									
1,990	1,660	320	2	1,660	320	2	-.042	2.20	0
Fifth Wave									
1,990	1,540	450	3	1,540	450	3	-0.26	0.89	0

¹Rounded to the nearest 10.

²The percent change for each ISR category (interviews, noninterviews, and out-of-scope) is computed by subtracting the number of cases in the preliminary ISR count from the number of cases in the final ISR count and dividing by the number of cases in the preliminary ISR count.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave, 2009–10,” “Fourth Wave, 2010–11,” and “Fifth Wave, 2011–12.”

SASS Imputation Kept for the First Wave Data

After the computer edits were run and the final interview status codes were determined, there were still cases with “not answered” values in the files for some variables. These “not answered” items were eligible for imputation after the computer edit stage of processing was complete. The first imputation method employed for the first wave of the BTLS was “hot-deck” imputation, where data were imputed from items found in other questionnaires of the same type that had certain characteristics in common.⁵² These records were called “donor records.” If the hot-deck imputation was unsuccessful in finding an appropriate donor, a second method of imputation, known as mean or mode imputation, was applied. In mean or mode imputation, data were imputed from the mean or mode of data found in questionnaires of the same type among respondents with certain characteristics in common (“donor groups”). Mean or mode imputation was implemented only as a final method of imputation and on an as-needed basis. These methods of imputation were specific to the first wave of BTLS and do not apply to the second and third waves. For further detail about SASS imputation, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

The BTLS first wave data were collected as part of the 2007–08 SASS public school teacher questionnaire. The first wave data file began as fully imputed, as a result of SASS data files being fully imputed, but was also subject to reimputation using “cross-wave imputation,” a method specific to BTLS and discussed in the next section. Prior to the administration of the BTLS third wave, several variables were identified as “key variables” and remained imputed in the BTLS first wave data file; all nonkey variables had their imputed data stripped from the data file and remained unanswered in the final data product. The hot-deck- or mean- or mode-imputed key variables were then eligible for cross-wave imputation, where data were reimputed, whenever possible, based on items from subsequent waves of BTLS. Cross-wave imputation occurred once the BTLS second and third wave files were fully edited and

⁵² Teacher experience was included as a variable to identify donors as a categorical variable. A BTLS first-year teacher may have received a hot-deck or mean/mode imputation value from another teacher with only a few years of teaching experience.

reviewed and was favored over the hot-deck or mean or mode imputation that occurred during the 2007–08 SASS data processing. For more details on imputation of key variables and the imputation methods used for BTLS, refer to the “BTLS Imputation” section.

BTLS Imputation

During the computer edit stages of data processing for each of the BTLS waves, extraneous entries were deleted (e.g., in situations where skip patterns were not followed correctly); the “not answered” code was assigned to items that should have been answered, but were not; and some data were modified based on related items in the same BTLS questionnaire or in an associated BTLS questionnaire from a previous or subsequent wave. After these stages of edits, there were still cases with “not answered” values in the second through fifth wave files for some variables. At this stage of processing, the data were still in separate data files, by BTLS wave (i.e., first wave, second wave, third wave, fourth wave, and fifth wave). The second, third, and fourth wave retrospective respondents’ data underwent imputation with the second, third, fourth wave data (respectively) rather than with the third, fourth, and fifth wave (respectively) data.

Several variables in each BTLS wave were identified as “key variables” and were imputed (or reimputed, in the case of the first wave data) once the edited second, third, fourth, and fifth wave files were created and fully reviewed. The key variables for imputation, by BTLS wave, can be found in exhibit 10.

During the imputation stage of processing, two main approaches were used to fill unanswered items with data. In one approach, called “cross-wave imputation,” data were imputed, whenever possible, from either the preceding or the subsequent BTLS wave; cross-wave imputation was used for all five waves of BTLS data. In the second method of imputation, known as “hot-deck imputation,” data were imputed from items in other cases that had certain predetermined characteristics in common. In the second through fifth waves of BTLS, the hot-deck imputation method used was weighted sequential hot-deck imputation. This method ensures that the means and distributions of the full set of data, including imputed values, are consistent with those of the unimputed respondent data. The hot-deck (donor) imputation used for SASS and retained for first wave data used donors with similar predetermined characteristics, but did not incorporate the weighted sequential aspect of the second through fifth wave imputations. In a small number of first wave cases, hot-deck donors were not found and mean or mode imputation was used with the mean or mode coming from a group of donors with similar characteristics.

Cross-Wave Imputation

During cross-wave imputation, missing (not answered) survey data were imputed with a valid response using data from a previous or subsequent BTLS wave. Unanswered items for the various waves of BTLS were filled, whenever possible, from the following sources:

BTLS first wave data were imputed from another item (or combination of items) in the related second wave questionnaire. For example, if item W1T0153, which asks if the respondent entered teaching through an alternative certification program, was imputed during SASS hot-deck or mean or mode imputation, and the same question, item W2ALTYN, was answered in the BTLS second wave, the value from W1T0153 was edited with the value from W2ALTYN.

BTLS second wave data were imputed from another item (or combination of items) in the related first wave record. For example, if item W2TCHFP, which asked whether the respondent was teaching full or part time, was unanswered, “full-time” was imputed to W2TCHFP, provided that the respondent was teaching in the same school as in the previous school year (W2MOVYN = 1), was a regular full-time teacher during the first wave (W1T0025 = 1), and was a regular teacher during the second wave (W2POSSC = 1).

BTLS third through fifth wave data were imputed from another item (or combination of items) in the related previous wave record. In the third wave, for example, if item W3TECLD, which asked how the respondent's classes were organized, was unanswered, the value from W2TECLD was imputed to W3TECLD, provided that the respondent was teaching at the same school as in the previous (second wave) school year (W3MOVYN = 1) and had the same main teaching assignment field for the second and third waves (W2TEMAC = W3TEMAC). This same process was used for waves four and five, looking back to the third and fourth waves, as appropriate.

Table 23 includes a summary of the amount of imputation performed during cross-wave imputation.

After the cross-wave imputations were run, and the review of the imputed data was complete, the BTLS first wave data file was considered to be complete and did not advance to weighted sequential hot-deck imputation along with the data files for the second through fifth waves.

Weighted Sequential Hot-deck Imputation

If cross-wave imputation was not employed or was unsuccessful at imputing a value, the BTLS second through fifth wave data were imputed using weighted sequential hot-deck imputation.⁵³ During weighted sequential hot-deck imputation, data were imputed from items in other cases found in the same questionnaire path and same wave that had certain characteristics in common; these records are called "donor records." This method of imputation keeps the means and distributions of the full set of data, including imputed values, consistent with those of the unimputed respondent data.

During weighted sequential hot-deck imputation, the respondents were partitioned into categories, or "classes." After these classes were formed, the individual data records were ordered according to important variables called "matching variables," which influence response as established by some preliminary statistical analysis.

As the data were processed, record by record, the imputation class to which each respondent belonged was determined by using respondent's data to impute missing data. If the variable undergoing imputation was answered in a respondent's questionnaire record, that response was stored in the imputation class of the hot-deck to which that respondent was assigned. When that same variable was "not answered" in another respondent's record, the last response stored in the hot-deck for the appropriate class was imputed for the missing response. This process continued in this manner until all "not answered" cases for that item were imputed with a value. This process also ensured that the means and distributions of the full set of data for an item, including imputed values, were comparable to those of respondent-reported (unimputed) data. Incorporating the sampling weights associated with respondents and nonrespondents into the imputation process ensured that the pre- and postimputation statistics matched and eliminated the potential bias in the distribution of imputed responses.

⁵³ Weighted sequential hot-deck imputation was used in the second and subsequent waves of BTLS at the request of NCES. This method differs from the hot-deck (donor) method used in SASS and wave 1 by incorporating the weighting into the imputation. The method ensures that the weighted distributions for each imputed variable are consistent preimputation and postimputation, minimizing the potential impact of disparate respondent weights impacting the postimputation variable distribution.

Exhibit 10 indicates which methods of imputation were employed for each key variable, by BTLS wave.

Exhibit 10. BTLS imputation, by wave and method employed: 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12

Key variables	Variable label	Imputation method	
		Cross-wave imputation	Hot-deck (donor) or weighted sequential hot-deck imputation
BTLS first wave¹			
W1T0028	W1 Full or part time	X	5, 7
W1T0038	W1 Yrs teaching in public school - FT	X	5, 7, 9
W1T0039	W1 Yrs teaching in public school - PT	X	5, 7
W1T0068	W1 Class organization		7
W1T0110 ²	W1 BA		
W1T0120	W1 MA		8
W1T0124	W1 Another degree		7
W1T0153	W1 Alternative certification program	X	5, 7
W1T0160	W1 Teacher state certification		7
W1T0343	W1 School year - base salary	X	5, 7
W1T0352	W1 Gender	X	5
W1T0353	W1 Hispanic		7
W1T0354	W1 Race - White		7
W1T0355	W1 Race - Black		7
W1T0356	W1 Race - Asian		7
W1T0357	W1 Race - Pacific Islander		7
W1T0358	W1 Race - Am. Indian		7
W1T0360	W1 Birth year		5, 7
BTLS second wave³			
W2TCHFP	W2 Teach FT/PT	X	X
W2OCCFP	W2 Full- or part-time employment		X
W2TECLD	W2 Class organization	X	X
W2MNTYN	W2 Mentor	X	X
W2M08YN	W2 Work with mentor		X
W2ALTYN	W2 Alternative certification program	X	X
W2MVTYP	W2 Reason for move	X	X
W2MCNRYN	W2 Contract not renewed		X
W2LCNRYN	W2 Contract not renewed		X
W2TCHSA	W2 School year - salary	X	X
W2OCCSA	W2 Earnings		X

See notes at end of table.

Exhibit 10. BTLS imputation, by wave and method employed: 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12—Continued

Key variables	Variable label	Imputation method	
		Cross-wave imputation	Weighted sequential hot-deck imputation
BTLS third wave			
W3TCHFP	W3 Teach FT/PT	X	X
W3OCCFP	W3 Full- or part-time employment		X
W3TECLD	W3 Class organization	X	X
W3M08YN	W3 Work with mentor		X
W3CERTI	W3 Cert - teacher preparation program	X	X
W3CERWN	W3 Cert - preparation after 2008	X	X
W3ALTCT	W3 Cert - preparation in alt cert program		X
W3REMT	W3 School to school change	X	X
W3MVTYP	W3 Reason for move	X	X
W3MCNRY	W3 Contract not renewed		X
W3LCNRY	W3 Contract not renewed		X
W3TCHSA	W3 School year - salary	X	X
W3OCCSA	W3 Earnings	X	X
BTLS fourth wave			
W4TCHFP	W4 Teach FT/PT	X	X
W4OCCFP	W4 Full- or part-time employment		X
W4TECLD	W4 Class organization	X	X
W4M08YN	W4 Work with mentor		X
W4CERTI	W4 Cert – teacher preparation program	X	X
W4CERWN	W4 Cert – preparation after 2008	X	X
W4ALTCT	W4 Cert – preparation in alt cert program	X	X
W4MVTYP	W4 Reason for move	X	X
W4MCINV	W4 Reason for move - involuntary		X
W4TCHSA	W4 School Year – salary	X	X
W4SALAT	W4 School Year – salary, range	X	X
W4OCCSA	W4 Earnings	X	X
W4SALAR	W4 Estimated pretax earnings		X
W4SALAR	W4 Estimated pretax earnings		X

See notes at end of table.

Exhibit 10. BTLS imputation, by wave and method employed: 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12—Continued

Key variables	Variable label	Imputation method	
		Cross-wave imputation	Weighted sequential hot-deck imputation
BTLS fifth wave			
W5TCHFP	W5 Teach FT/PT	X	X
W5OCCFP	W5 Full- or part-time employment		X
W5TECLD	W5 Class organization	X	X
W5M08YN	W5 Work with mentor		X
W5CERTI	W5 Cert – teacher preparation program	X	X
W5CERWN	W5 Cert – preparation after 2008	X	X
W5ALTCT	W5 Cert – preparation in alt cert program	X	X
W5MVTYP	W5 Reason for move	X	X
W5MCINV	W5 Reason for move – involuntary		X
W5TCHSA	W5 School year – salary	X	X
W5SALAT	W5 School Year – salary, range	X	X
W5OCCSA	W5 Earnings	X	X

The BTLS first wave data file began as fully imputed, as a result of SASS data files being fully imputed, but was also subject to reimputation using cross-wave imputation. Methods of imputation are noted in the table using the imputation flag values listed below. Imputation codes for first wave hot-deck imputation are as follows: (5) item was imputed during cross-wave imputation; (6) item was imputed during weighted sequential hot-deck imputation; (7) item was imputed during hot-deck (donor) imputation; (8) item was imputed during mean or mode imputation; and (9) data value was adjusted during analysts' review of data.

²W1T0110 was not imputed using hot-deck or weighted sequential hot-deck imputation. For more details, please refer to the SASS 2007–08 documentation (NCES 2010-332), appendix R.

³The BTLS second through fourth wave retrospective respondents underwent imputation with the BTLS second through fifth wave data. Not all key variables were asked during the retrospective portion of the BTLS third through fifth waves; however, all second wave key variables were imputed for the retrospective respondents.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "First Wave," 2007–08. Beginning Teacher Longitudinal Study (BTLS), "Second Wave," 2008–2009. Beginning Teacher Longitudinal Study (BTLS), "Third Wave," 2009–10. 2007–08. Beginning Teacher Longitudinal Study (BTLS), "Fourth Wave," 2010–2011. Beginning Teacher Longitudinal Study (BTLS), "Fifth Wave," 2011–12

A numerical flag corresponding to type of imputation was assigned to each imputed item as the surveys went through the different stages of imputation. By looking at the flag values, data users are able to identify which items were imputed and how the imputations were performed. Data users can use this imputation flag to decide whether or not to include imputed data in their analysis and which types of imputed data to employ. The imputation flags are in the format of W#F_[sourcecode] in the BTLS data file, and the definitions for each imputation flag used are as follows:

- 0 Data reported. Not imputed.
- 5 Item was imputed during cross-wave imputation.
- 6 Item was imputed during weighted sequential hot-deck imputation.
- 7 Item was imputed during hot-deck (donor) imputation.
- 8 Item was imputed during mean or mode imputation.⁵⁴
- 9 Data value was adjusted during analysts' review of data.⁵⁵

The number of specific key variables that were imputed for a given percentage of records during a given stage of processing appears for each of the five waves in table 23. Appendix M contains the total number of imputations applied to each key variable using the various imputation methods.

⁵⁴ Hot-deck and mean or mode imputation were methods of imputation specific to the BTLS first wave (in which data were collected and processed with the 2007–08 SASS Teacher Questionnaire data) and do not apply to the BTLS second through fifth waves. For further details on the imputation methods employed during SASS, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010) or the “First Wave, Paper Questionnaire” section of this chapter. Hot-deck imputation in the first wave was replaced with weighted sequential hot-deck (WSHD) imputation in subsequent waves.

⁵⁵An imputation flag value of “9” was assigned to two variables in the second and third waves of BTLS: W#TEFRPL and W#URBANS12. These are created variables that describe the percentage of students eligible for the free or reduced-price lunch program and the urbanicity, respectively, of the indicated wave’s school. These variables were not considered to be key variables for imputation; however, in some cases, analysts were able to use partial school information reported by the respondent and/or from previous administrations of the Common Core of Data (CCD) to fill in missing information. For further information about created variables, please refer to the “File Preparation and Data Products” section of this chapter or to chapter 7 of this survey documentation.

Table 23. Number of key variables imputed, by percentage of records receiving imputation and imputation type in the BTLs, first through fifth waves: 2007–08 through 2011–12

Wave and type of imputation	Not imputed for any record	Imputed for 1–15 percent of records	Imputed for more than 15 percent of records
First wave			
Cross-wave imputation	11	7	0
Hot-deck imputation	3	15	0
Mean or mode imputation	17	1	0
Second wave			
Cross-wave imputation	6	5	0
Weighted sequential hot-deck imputation	0	11	0
Third wave			
Cross-wave imputation	8	5	0
Weighted sequential hot-deck imputation	3	10	0
Fourth wave			
Cross-wave imputation	8	5	0
Weighted sequential hot-deck imputation	0	13	0
Fifth wave			
Cross-wave imputation	4	9	0
WSHD imputation	1	12	0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLs), “First Wave,” 2007–08. Beginning Teacher Longitudinal Study (BTLs), “Second Wave,” 2008–2009. Beginning Teacher Longitudinal Study (BTLs), “Third Wave,” 2009–10. Beginning Teacher Longitudinal Study (BTLs), “Fourth Wave,” 2010–2011. Beginning Teacher Longitudinal Study (BTLs), “Fifth Wave,” 2011–12.

Once the imputation stage was complete, none of the key variables remained unanswered. At this point, Census Bureau analysts performed checks on the imputed data to make sure they were consistent with other data in the same record. The nonkey variables were not imputed and remained unanswered in all final files and data products.

File Preparation and Data Products

After the imputation of the key variables was completed, the data remained in five separate files (for the first, second, third, fourth, and fifth waves) until the creation of the final data files and products. The files for the individual waves were eventually combined into one five-wave BTLS restricted-use file for release.

BTLS first wave. After imputation was completed, a final BTLS first wave data file was created. This final file included all variables associated with the BTLS first wave, including frame variables, survey variables, created variables, weighting variables, and imputation flags for the key imputation variables. This final file was used as the source file for the BTLS first wave documentation file and, eventually, the combined five-wave BTLS documentation and restricted-use files. The BTLS first wave documentation file was used to run the unit and item response rates and included the base weights and final weights.

BTLS second wave. After imputation was completed, a final BTLS second wave data file was created. This final file included all variables associated with the BTLS second wave, including frame variables, survey variables (including retrospective items), created variables, weighting variables, and imputation flags for the key imputation variables. This final file was used as the source file for the BTLS second wave documentation file and, eventually, the combined five-wave BTLS documentation and restricted-use files. The BTLS second wave documentation file was used to run the unit and item response rates and included the base weights, final weights, and retrospective weights.

BTLS third wave. After imputation was completed, a final BTLS third wave data file was created. This final file included all variables associated with the BTLS third wave, including frame variables, survey variables, created variables, weighting variables, and imputation flags for the key imputation variables. This final file was combined in a five-wave BTLS documentation and restricted-use file. The combined documentation file was used to run the unit and item response rates and included the base weights, final weights, and longitudinal weights.

BTLS fourth wave. After imputation was completed, a final BTLS fourth wave data file was created. This final file included all variables associated with the BTLS fourth wave, including frame variables, survey variables, created variables, weighting variables, and imputation flags for the key imputation variables. This final file was used as the source file for the BTLS fourth wave documentation file and, eventually, the combined five-wave BTLS documentation and restricted-use files. The BTLS fourth wave documentation file was used to run the unit and item response rates and included the base weights, final weights, and longitudinal weights.

BTLS fifth wave. After imputation was completed, a final BTLS fifth wave data file was created. This final file included all variables associated with the BTLS fifth wave, including frame variables, survey variables, created variables, weighting variables, and imputation flags for the key imputation variables. This final file was used as the source file for the BTLS fifth wave documentation file and, eventually, the combined five-wave BTLS documentation and restricted-use files. The BTLS fifth wave documentation file was used to run the unit and item response rates and included the base weights, final weights, and longitudinal weights.

Once a documentation file had been created for each of the five waves, the combined BTLS five-wave documentation file was created. This file included all variables, including frame variables, survey variables, created variables, weighting variables, edit flags, and imputation flags for all five waves. This file was used as the source file for the restricted-use file. The restricted-use file included the same number of records, but the processing variables and most sampling variables were removed. In addition, the documentation file and restricted-use file were altered to meet the requirements of data nondisclosure.

Chapter 6. Weighting and Variance Estimation

This chapter contains a discussion of the weighting and variance procedures used for the Beginning Teacher Longitudinal Study (BTLS). The chapter begins with a discussion of the weighting procedure used to compute final weights for the interviewed teachers and then moves on to a discussion of variances. Weighting is the last step in the data processing; variances, which are computed to estimate the reliability of the data, are a product of the weighting procedure.

Weighting

This section describes the weighting procedures used for the data from each teacher who responded to BTLS. The general purpose of weighting is to inflate the sample estimates to represent the target survey population. The procedures used for weighting respondents are similar to those used in the 2007–08 Schools and Staffing Survey (SASS), although Chi-Square Automatic Interaction Detector (CHAID) was used to define noninterview adjustment cells for the BTLS second through fifth wave data. Note that for the BTLS first wave data, weights were obtained directly from the 2007–08 SASS Public School Teacher data file. Since all interviewed beginning teachers in SASS were eligible for BTLS, the first wave final weight is equal to the SASS teacher final weight. The SASS weights were adjusted for nonresponse as well as ratio adjusted to the frame. For further details about SASS weighting, refer to the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010). What follows is a discussion of the weighting procedures used for the second through fifth waves of BTLS.

For the second through fifth waves of BTLS, an initial basic weight (the inverse of the sampled teacher's probability of selection in SASS) was used as the starting point. A weighting adjustment that reflects the impact of the SASS teacher weighting procedure was then applied. Next, a nonresponse adjustment factor was calculated and applied using information that was known about the respondents and nonrespondents from the sampling frame data. This calculation is similar to the calculation used in SASS, but used the BTLS responses and the BTLS nonresponse adjustment. Finally, a ratio adjustment factor was calculated and applied to adjust the second through fifth wave sample totals to the first wave totals (excluding out-of-scope cases found in the later waves) in order to reduce sampling variability. The products of these factors are the analysis weights for the second through fifth waves of BTLS. See table 24 for a distribution of the final analysis weights.

Table 24. Distribution of BTLS final weights by wave: First, second, third, fourth, and fifth waves

Data File	Weight at given percentile										Maximum	Mean
	Minimum	1st	5th	10th	25th	50th	75th	90th	95th	99th		
First wave analysis weight	2.47	5.86	8.36	11.83	19.98	41.81	85.61	178.50	266.34	695.16	1,653.60	78.40
Second wave analysis weight	3.25	6.91	9.70	13.64	22.89	47.16	99.84	202.46	329.78	742.06	1,837.89	92.67
Second wave retrospective analysis weight	2.49	6.26	9.04	12.48	21.71	44.37	94.31	193.87	296.06	703.41	1,742.02	85.47
Third wave analysis weight	2.56	6.52	9.76	12.95	23.05	46.47	101.05	202.16	337.55	746.62	1,934.04	91.00
Third wave retrospective weight	2.38	6.22	9.12	12.52	21.69	44.52	96.19	187.54	315.12	727.89	1,779.79	86.03
Third wave longitudinal weight	2.74	7.26	10.45	14.35	24.92	51.35	106.65	213.44	370.85	838.23	2,027.04	100.03
Third wave retrospective longitudinal weight	2.55	6.58	10.02	13.19	23.25	47.14	99.14	201.34	340.98	728.75	2,107.47	91.69
Fourth wave analysis weight	2.88	6.74	10.05	13.61	23.64	47.67	104.79	200.41	319.19	819.97	1,854.13	93.69
Fourth wave retrospective weight	2.41	6.33	9.48	13.35	23.23	47.45	100.09	199.90	337.30	837.97	2,018.51	92.42
Fourth wave longitudinal weight	3.35	7.45	11.23	15.18	26.72	54.39	117.25	229.66	397.34	913.06	1,891.19	107.46
Fourth wave retrospective longitudinal weight	3.14	6.93	10.19	14.49	24.87	50.09	109.54	211.42	347.62	785.08	1,967.23	97.02
Fifth wave analysis weight	2.68	7.16	10.76	14.77	24.71	52.94	115.64	228.09	361.11	771.97	1,871.34	101.32
Fifth wave longitudinal weight	4.07	7.81	12.36	17.38	28.51	59.30	130.92	253.28	413.33	914.28	2,031.58	117.46
Fifth wave retrospective longitudinal weight	2.81	7.14	11.12	15.56	27.04	56.93	122.97	237.33	385.51	849.29	1,919.28	108.23

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Beginning Teacher Longitudinal Study First Through Fifth Wave Documentation Data File," 2007–12.

Most of the steps in the weighting procedure described above employed weighting classes in the calculation of the weighting adjustments. Weighting classes partition the sample by key variables (such as race or age categories) and allow for differential adjustment factors to be computed for each step in the procedure. This technique is especially useful when the computed factors are presumed to differ substantially, such as when patterns of nonresponse vary across subpopulations (such as by age or race). The noninterview adjustment weighting classes are derived through CHAID analysis procedure, which is described later in the chapter. A description of how the final weight is computed, as well as a brief description of each step in the weighting procedure, is presented below. When computations such as nonresponse adjustments were done within weighting classes, or cells, the cells are described. Sometimes a ratio adjustment cell did not have enough data to produce a reliable estimate; in such cases, cells were collapsed. The most important variables were always collapsed last. The final analysis weight for the BTLS second, third, fourth, fifth, and all waves longitudinally was calculated as follows:

$$\text{BTLS initial basic weight} \times \text{BTLS-to-SASS weighting adjustment factor} \times \text{BTLS noninterview adjustment} \times \text{BTLS ratio adjustment}$$

where

The *BTLS initial basic weight* is the inverse of the teacher's probability of selection for BTLS, that is, the probability of being selected from all first-year teachers, including adjustments for SASS nonresponse. This weight is the SASS teacher preliminary final weight. This weight was used because the BTLS initial weight was needed before the SASS teacher file processing was complete. Since all teachers who began teaching in 2007 or 2008 from SASS were included in BTLS, no additional stage is reflected in the sample selection probability. Thus, this initial basic weight reflects the BTLS probability of selection from both stages of selection (i.e., SASS school sampling and SASS teacher sampling within schools as well as any other adjustments in SASS weighting).

The *BTLS-to-SASS weighting adjustment factor* is used to adjust for the fact that the SASS teacher final weights based on preliminary data were used in selecting the BTLS sample, whereas the actual SASS teacher final weights are more reflective of the teacher population.⁷⁰ This occurred because BTLS collection began prior to the calculation of the final SASS weights. The weighting adjustment factor adjusts for any changes to the weighting procedure that occurred between the initial and final weighting procedures. For more information about the SASS teacher weighting procedure, see the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

The *BTLS noninterview adjustment* is the factor used to adjust for teachers who participated in SASS and were selected and determined to be eligible for BTLS, but did not participate in one or more waves of BTLS. There is a separate adjustment for each wave of BTLS as well as for the longitudinal weighting, since a respondent could respond to one wave, but not the others. Note that a respondent needed to respond to each wave to be counted as an interview for the three-, four-, and five-wave longitudinal weighting. A respondent needed to respond to each wave or

⁷⁰ The SASS teacher weighting was not completed in time to use the actual teacher final weights in the BTLS sample selection, necessitating the use of the preliminary version of the SASS teacher final weights. The weighting adjustment factor adjusts for any changes to the weights that occurred between the preliminary and final runs of the weighting procedure. For more information about the SASS teacher weighting procedure, see the *Documentation for the 2007–08 Schools and Staffing Survey* (Tourkin et al. 2010).

have responded to the retrospective items for any wave for which he or she was a nonrespondent to be counted as an interview for the retrospective longitudinal file weighting. The BTLS noninterview adjustment is the weighted (product of the initial basic weight and BTLS-to-SASS weighting adjustment factor) ratio of the total eligible in-scope teachers (i.e., interviewed teachers plus noninterviewed teachers) to the total responding in-scope teachers (i.e., interviewed teachers) within cells.

The *BTLS ratio adjustment* is the factor used to adjust the BTLS sample totals to the SASS sample totals reviewed for inclusion in the BTLS first wave. This adjustment ensures that the weighted number of BTLS teachers (including interviews, noninterviews, and out-of-scope cases) will be consistent with the weighted number of teachers from the 2007–08 SASS. Since the teachers who are out-of-scope for BTLS are excluded from the SASS numerators, they are also, for consistency, excluded from the denominators. The BTLS estimates resulting from this step will not be precisely equal to SASS estimates as a result of the small loss of SASS teachers from eligibility for BTLS due to permanent incapacitation or death. By excluding legitimate out-of-scope teachers, the BTLS total will not equal the SASS total. The BTLS ratio adjustment is equal to the ratio of the total number of SASS teachers who began teaching in 2007 or 2008 to the weighted BTLS sample estimate of the total number of teachers within each weighting class, or cell, defined for this step in the weighting procedure.

The final analysis weights for the cross-sectional analysis are W1TFNLWGT for the first wave, W2AFWT for the second wave, W3AFWT for the third wave, W4AFWT for the fourth wave, and W5AFWT for the fifth wave. The cross-sectional analysis weights for the second, third, and fourth waves including the retrospective respondents are W2RAFWT, W3RAFWT, and W4RAFWT. For longitudinal analysis over the 5-year collection period, the longitudinal final weights are W3LWGT and W3RLWGT (R in the weight name indicates that the weight should be applied when using information from retrospective respondents for waves 2 through 4), W4LWGT and W4RLWGT, and W5LWGT and W5RLWGT. Variables used to define cells for the second through fifth waves are presented in exhibits 11 through 23. In the exhibits, “Leaver” refers to former teachers, or teachers who have left the preK–12 teaching profession. “Mover” refers to teachers who are teaching in a different school than in the previous school year. “Stayer” refers to teachers who are still teaching in the same school as in the previous school year.

To determine nonresponse patterns, a CHAID statistical algorithm was utilized to calculate weighting classes in BTLS. The CHAID algorithm successively breaks data into groups based on chi-square tests of association (see Kass 1980) and partitions data to maximize within-group similarity and between-group dissimilarity—a desirable characteristic for nonresponse weighting classes. Using a dependent variable that identifies survey respondents and a series of predictor variables taken from the sampling frame (including some SASS survey responses based upon an initial analysis that included all SASS survey variables), the algorithm temporarily divides the data into two groups based on a predictor variable and runs a chi-square test on the grouped independent variable and dependent variable. This process is repeated for each possible combination of the predictor variables. The dichotomized predictor variable with the highest level of significant association with the dependent variable is selected as the first level. This process is then repeated within the first-level subgroups. The algorithm continues to partition the data at subsequent levels until either no remaining significant chi-square test is found or the predefined minimum cell size ($N = 50$) has been reached. The final partitions define the nonresponse weighting cells used to group respondents and nonrespondents to calculate the noninterview adjustment factor. For more information on the CHAID procedure, please see the *Documentation for the 2008–09 Teacher Follow-up Survey* (Graham et al. 2011). No collapsing was performed for the noninterview adjustment cells, as the CHAID analysis ensured that the cells were of sufficient size.

Exhibit 11. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Second wave analysis final weight (W2AFWT)

Cell definitions
Age 40 or over, not Black, does not use e-mail to correspond with parents
Age 39 or under, not Black, does not use e-mail to correspond with parents, main subject taught—math or science
Age 39 or under, not Black, does not use e-mail to correspond with parents, main subject taught—special education, social sciences, or vocational/career education
Age 39 or under, not Black, does not use e-mail to correspond with parents, main subject taught—English as a second language (ESL)/bilingual, foreign language, health/physical education, other
Age 39 or under, not Black, teaches primarily high school, does not use e-mail to correspond with parents, main subject taught—elementary/general education, art, music, or English/language arts
Age 39 or under, not Black, teaches primarily elementary school, does not use e-mail to correspond with parents, main subject taught—elementary/general education, art, music, or English/language arts
Age 39 or under, not Black, teaches primarily middle or combined school, does not use e-mail to correspond with parents, main subject taught—elementary/general education, art, music, or English/language arts
Any age, not Black, uses e-mail to correspond with parents, located in suburbs or towns
Any age, not Black, uses e-mail to correspond with parents, located in cities or rural areas, union member
Any age, not Black, uses e-mail to correspond with parents, located in cities or rural areas, not a union member
Any age, Black, union member
Any age, Black, not a union member

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave Intermediate File,” 2008–09.

Exhibit 12. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Second wave retrospective analysis final weight (W2RAFWT)

Cell definitions
Current teacher, moved to another school
Left the teaching profession
Currently teaching at the same school, Black
Currently teaching at the same school, not Black, main subject taught—English/language arts, ESL/bilingual, social science, vocational/career education, or other
Currently teaching at the same school, not Black, main subject taught—special education, art, or music, uses e-mail to correspond with parents
Currently teaching at the same school, not Black, main subject taught—special education, art, or music, does not use e-mail to correspond with parents
Currently teaching at the same school, not Black, main subject taught—elementary/general education or unknown, practice taught
Currently teaching at the same school, not Black, main subject taught—elementary/general education or unknown, did not practice teach or unknown

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave Retrospective Intermediate File,” 2008–09.

Exhibit 13. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Third wave analysis final weight (W3AFWT)

Cell definitions
Stayer, not Black, strongly agrees student misbehavior is a problem or did not respond
Stayer, not Black, does not strongly agree student misbehavior is a problem, practice taught 11 weeks or less
Stayer, not Black, does not strongly agree student misbehavior is a problem, practice taught 12 weeks or more, no common planning time with other teachers
Stayer, not Black, does not strongly agree student misbehavior is a problem, practice taught 12 weeks or more, common planning time with other teachers or did not respond
Stayer, Black or race not reported, age 29 or less
Stayer, Black or race not reported, age 30 or over
Mover, no control over instructional materials or did not respond
Mover, minor control over instructional materials
Mover, moderate or more control over instructional materials
Leaver

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave Intermediate File,” 2009–10.

Exhibit 14. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Third wave retrospective analysis final weight (W3RAFWT)

Cell definitions
Stayer, less than 12 weeks of practice teaching, midwest or west, no control/minor control/moderate control over amount of homework to be assigned
Stayer, less than 12 weeks of practice teaching, midwest or west, teacher reported a great deal of control over amount of homework to be assigned, less than 1,000 students
Stayer, less than 12 weeks of practice teaching, midwest or west, a great deal of control over amount of homework to be assigned, 1,000 or more students
Stayer, less than 12 weeks of practice teaching, northeast or south, not White
Stayer, less than 12 weeks of practice teaching, northeast or south, White, does not use e-mail or list-serve to communicate with parents, survey completed in January or February
Stayer, less than 12 weeks of practice teaching, northeast or south, White, does not use e-mail or list-serve to communicate with parents, survey completed in March/April/May/October/November/or December
Stayer, less than 12 weeks of practice teaching, northeast or south, White, uses e-mail or list-serve to communicate with parents, participated in professional development in last 12 months
Stayer, less than 12 weeks of practice teaching, northeast or south, White, uses e-mail or list-serve to communicate with parents, has not participated in professional development in last 12 months
Stayer, 12 weeks or more of practice teaching, does not strongly agree that student misbehavior interferes with teaching
Stayer, 12 weeks or more of practice teaching, strongly agrees that student misbehavior interferes with teaching
Mover, no control selecting textbooks and instructional materials, union member
Mover, no control selecting textbooks and instructional materials, not a union member
Mover, minor/moderate/or great deal of control selecting textbooks and instructional materials, union member
Leaver, suburb/town/or rural
Leaver, city

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Third Wave Retrospective Intermediate File," 2009–10.

Exhibit 15. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through third wave longitudinal final weight (W3LWGT)

Cell definitions
Stayer, not Black, did not correspond with parents via e-mail or did not respond
Stayer, not Black, corresponded with parents via e-mail, practice taught 7 weeks or less or did not respond
Stayer, not Black, corresponded with parents via e-mail, practice taught 8 weeks or more, somewhat or less well prepared to teach subject matter or did not respond
Stayer, not Black, corresponded with parents via e-mail, practice taught 8 weeks or more, well or very well prepared to teach subject matter
Stayer, Black or race not reported, age 29 or under
Stayer, Black or race not reported, age 30 or above
Mover, no control over instructional materials or not reported
Mover, minor or moderate control over instructional materials
Mover, a great deal of control over instructional materials
Leaver

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "First Through Third Wave Longitudinal Intermediate File," 2009–10.

Exhibit 16. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through third wave retrospective longitudinal final weight (W3RLWGT)

Cell definitions
Stayer, not Hispanic or Black, professional development not useful or did not participate or did not report, strongly agrees student misbehavior interferes with teaching or did not report
Stayer, not Hispanic or Black, professional development not useful or did not participate or did not report, does not strongly agree student misbehavior interferes with teaching, 7 or fewer limited-English-proficient (LEP) students taught, practice taught 11 weeks or less
Stayer, not Hispanic or Black, professional development not useful or did not participate or did not report, does not strongly agree student misbehavior interferes with teaching, 7 or fewer LEP students taught, practice taught 12 weeks or more
Stayer, not Hispanic or Black, professional development not useful or did not participate or did not report, does not strongly agree student misbehavior interferes with teaching, 8 or more LEP students taught
Stayer, not Hispanic or Black, professional development somewhat useful
Stayer, not Hispanic or Black, professional development useful or very useful
Stayer, Black or Hispanic, e-mail not used to correspond with parents
Stayer, Black or Hispanic, e-mail used to correspond with parents
Mover, no control over instructional materials or not reported
Mover, minor control over instructional materials
Mover, moderate or a great deal of control over instructional materials
Leaver

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "First Through Third Wave Retrospective Longitudinal Intermediate File," 2009–10.

Exhibit 17. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fourth wave analysis final weight (W4AFWT)

Cell definitions
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in January, no control or minor control over selecting content topics and skills in classroom, taken and passed Praxis 1: Writing
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in January, no control or minor control over selecting content topics and skills in classroom, has not taken and passed Praxis 1: Writing
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in January, moderate or a great deal of control over selecting content topics and skills in classroom, strongly agrees or somewhat agrees about thinking about transferring to another school
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in January, moderate or a great deal of control over selecting content topics and skills in classroom, somewhat disagrees or strongly disagrees about thinking about transferring to another school, does not use e-mail or list-serve to communicate with parents
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in January, moderate or a great deal of control over selecting content topics and skills in classroom, somewhat disagrees or strongly disagrees about thinking about transferring to another school, uses e-mail or list-serve to communicate with parents
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in February, salary of \$43,000 or more
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in February, salary less than \$43,000
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in March/April/May/October/November/or December, somewhat disagrees or strongly disagrees that if they could get a higher paying job they would leave teaching as soon as possible, strongly agrees or somewhat agrees that teachers at the school like being there
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in March/April/May/October/November/or December, somewhat disagrees or strongly disagrees that if they could get a higher paying job they would leave teaching as soon as possible, strongly disagrees or somewhat disagrees that teachers at the school like being there, 185 or less contract days
Not Black, mover or leaver, no reduced teaching schedule or preps in first year, survey completed in March/April/May/October/November/or December, somewhat disagrees or strongly disagrees that if they could get a higher paying job they would leave teaching as soon as possible, strongly disagrees or somewhat disagrees that teachers at the school like being there, more than 185 contract days
Not Black, mover or leaver, no reduced teaching schedule or preps in first year of teaching

See notes at end of table.

Exhibit 17. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fourth wave analysis weight (W4AFWT)—Continued

Cell definitions
Not Black, mover or leaver, reduced teaching schedule or preps in first year of teaching, professional development in past 12 months on how to teach students with disabilities
Not Black, mover or leaver, reduced teaching schedule or preps in first year of teaching, no professional development in past 12 months on how to teach students with disabilities, professional development focused on student discipline useful or very useful
Not Black, mover or leaver, reduced teaching schedule or preps in first year of teaching, no professional development in past 12 months on how to teach students with disabilities, student absenteeism is a minor or not a problem in school
Not Black, mover or leaver, reduced teaching schedule or preps in first year of teaching, no professional development in past 12 months on how to teach students with disabilities, student discipline professional development not or somewhat useful, student absenteeism is a serious or moderate problem in school
Not Black, stayer
Black, less than 30 years old, union member
Black, less than 30 years old, not a union member
Black, 30 years old or older

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Fourth Wave Intermediate File," 2010–11.

Exhibit 18. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fourth wave retrospective analysis final weight (W4RAFWT)

Cell definitions
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary less than \$30,000, somewhat agrees/somewhat disagrees/strongly disagrees about being generally satisfied being a teacher at this school
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary less than \$30,000, strongly agrees about being generally satisfied being a teacher at this school
Rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$30,000–\$32,999, rural, strongly disagrees with the way things are run at this school
Rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$30,000–\$32,999, rural, somewhat disagrees with the way things are run at this school
Suburb, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$30,000–\$32,999, rural
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$33,000–\$37,999, main assignment general elementary or early childhood/preK, mathematics or computer science or natural sciences, percentage of students receiving free or reduced-price lunch less than 21.9 percent
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$33,000–\$37,999, main assignment general elementary or early childhood/preK, mathematics or computer science or natural sciences, percentage of students receiving free or reduced-price lunch between 21.9 percent and 44.75 percent
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$33,000–\$37,999, main assignment general elementary or early childhood/preK, mathematics or computer science or natural sciences, percentage of students receiving free or reduced-price lunch greater than 44.75 percent
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$33,000–\$37,999, main assignment NOT general elementary or early childhood/preK, mathematics or computer science or natural sciences, high school or combined
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$33,000–\$37,999, main assignment NOT general elementary or early childhood/preK, mathematics or computer science or natural sciences, elementary school
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$38,000 or greater
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$38,000 or greater, contract days of 185 days or less, does not somewhat disagree with the way things are run at school
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$38,000 or greater, contract days of 185 days or less, somewhat disagrees with the way things are run at school
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$38,000 or greater, more than 185 contract days, elementary school
Suburb or rural, did not receive reduced teaching schedule or number of preps during first year of teaching, salary \$38,000 or greater, more than 185 contract days, secondary or combined school
Suburb or rural, received reduced teaching schedule or number of preps during first year of teaching, somewhat agrees/somewhat disagrees/strongly disagrees about being generally satisfied being a teacher at this school
Suburb or rural, received reduced teaching schedule or number of preps during first year of teaching, strongly agrees about being generally satisfied being a teacher at this school, percentage of students receiving free or reduced-price lunch less than 21.9 percent

See notes at end of table.

Exhibit 18. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fourth wave retrospective analysis final weight (W4RAFWT)—Continued

Cell definitions
Suburb or rural, received reduced teaching schedule or number of preps during first year of teaching, strongly agrees about being generally satisfied being a teacher at this school, percentage of students receiving free or reduced-price lunch greater than 21.9 percent
Town, does not somewhat disagree with the way things are run at school, does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching, 185 or fewer days in contract
Town, does not somewhat disagree with the way things are run at school, does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching, more than 185 days in contract
Town, does not somewhat disagree with the way things are run at school, strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
Town, somewhat disagrees with the way things are run at school, percentage of students receiving free or reduced-price lunch less than 44.75 percent
Town, somewhat disagrees with the way things are run at school, percentage of students receiving free or reduced-price lunch 44.75 percent or greater
City, does not somewhat disagree with the way things are run at school, main assignment of special education
City, does not somewhat disagree with the way things are run at school, main assignment of mathematics or computer science or natural sciences
City, does not somewhat disagree with the way things are run at school, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, received one kind or no support during first year of teaching
City, does not somewhat disagree with the way things are run at school, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, received multiple kinds of support during first year of teaching
City, does not somewhat disagree with the way things are run at school, main assignment general elementary or early childhood/preK, does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching
City, does not somewhat disagree with the way things are run at school, main assignment general elementary or early childhood/preK, strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
City, somewhat disagrees with the way things are run at school, main assignment general elementary or early childhood/preK
City, somewhat disagrees with the way things are run at school, main assignment mathematics and computer science or natural sciences
City, somewhat disagrees with the way things are run at school, main assignment of special education or not general elementary or early childhood/preK/or mathematics and computer science or natural sciences, secondary or combined school
City, somewhat disagrees with the way things are run at school, main assignment of special education or not general elementary or early childhood/preK/or mathematics and computer science or natural sciences, elementary school

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Fourth Wave Intermediate File," 2010–11.

Exhibit 19. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fourth wave longitudinal final weight (W4LWGT)

Cell definitions
Leaver, not Black, enrollment less than 1,500, minority enrollment less than 5 percent
Leaver, not Black, enrollment less than 1,500, minority enrollment greater than 5 percent, salary less than \$43,000, not city, survey completed in January
Leaver, not Black, enrollment less than 1,500, minority enrollment greater than 5 percent, salary less than \$43,000, not city, survey completed in February
Leaver, not Black, enrollment less than 1,500, minority enrollment greater than 5 percent, salary less than \$43,000, not city, survey completed in March or April or May or October or November or December
Leaver, not Black, enrollment less than 1,500, minority enrollment greater than 5 percent, salary less than \$43,000, city, union member
Leaver, not Black, enrollment less than 1,500, minority enrollment greater than 5 percent, salary less than \$43,000, city, not a union member
Leaver, not Black, enrollment of less than 1,500 students, minority enrollment greater than 5 percent, salary of \$46,000 or greater
Leaver, not Black, enrollment of 1,500 or more students, did not participate in professional development focused on discipline and classroom management in last 12 months
Leaver, not Black, enrollment of 1,500 or more students, participated in professional development focused on discipline and classroom management in last 12 months
Leaver, Black, union member
Leaver, Black, not a union member
Stayer, not White
Mover, White, served on a schoolwide or districtwide committee or task force
Mover, White, did not serve on a schoolwide or districtwide committee or task force, strongly agrees that does not seem to have as much enthusiasm now as when began teaching
Mover, White, did not serve on a schoolwide or districtwide committee or task force, does not strongly agree that does not seem to have as much enthusiasm now as when began teaching
Stayer, no control or minor control over selecting content, topics, and skills to be taught in classroom
Stayer, moderate control or a great deal of control over selecting content, topics, and skills to be taught in classroom

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Fourth Wave Intermediate Longitudinal File," 2010–11.

Exhibit 20. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fourth wave retrospective longitudinal final weight (W4RLWGT)

Cell definitions
Leaver, not Black, did not use e-mail or list-serve to communicate with parents or students, used e-mail to address individual questions or concerns with parents or students
Leaver, not Black, did not use e-mail or list-serve to communicate with parents or students, used e-mail to address individual questions or concerns with parents or students
Leaver, not Black, used e-mail or list-serve to send group updates to parents or students, eight or more LEP students
Leaver, not Black, used e-mail or list-serve to send group updates to parents or students, seven or fewer LEP students, reported not a great deal of control over determining the amount of homework to be assigned, strongly agree that does not seem to have as much enthusiasm now as when began teaching
Leaver, not Black, used e-mail or list-serve to send group updates to parents or students, seven or fewer LEP students, reported not a great deal of control over determining the amount of homework to be assigned, does not strongly agree that does not seem to have as much enthusiasm now as when began teaching
Leaver, not Black, used e-mail or list-serve to send group updates to parents or students, seven or fewer LEP students, reported a great deal of control over determining the amount of homework to be assigned, city
Leaver, not Black, used e-mail or list-serve to send group updates to parents or students, seven or fewer LEP students, reported a great deal of control over determining the amount of homework to be assigned, suburb or town or rural
Leaver, Black, age less than 30 years
Leaver, Black, age of 30 years and up
Mover, served on schoolwide or districtwide committee or task force
Mover, did not serve on schoolwide or districtwide committee or task force
Stayer

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Fourth Wave Intermediate Longitudinal File," 2010–11.

Exhibit 21. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fifth wave analysis final weight (W5AFWT)

Cell definitions
Main assignment special education, salary less than \$33,000
Main assignment special education, salary \$33,000–\$37,999
Main assignment special education, salary \$38,000 or more, suburb or town
Main assignment special education, salary \$38,000 or more, city or rural
Main assignment mathematics and computer science or natural sciences, 185 or less contract days, received less than two types of listed support during first year of teaching
Main assignment mathematics and computer science or natural sciences, 185 or less contract days, received more than one type of listed support during first year of teaching
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, suburb
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, city
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, town or rural
Main assignment general elementary or early childhood/preK, union member, salary less than \$33,000, and strongly disagrees with how things are run at school
Main assignment general elementary or early childhood/preK, union member, salary less than \$33,000, and does not strongly disagree with how things are run at school
Main assignment general elementary or early childhood/preK, union member, salary \$33,000–\$37,999, and does not strongly disagree that does not seem to have as much enthusiasm now as when began
Main assignment general elementary or early childhood/preK, union member, salary \$33,000–\$37,999, and strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
Main assignment general elementary or early childhood/preK, union member, salary \$38,000 or more, and contract days not greater than 185
Main assignment general elementary or early childhood/preK, union member, salary \$38,000 or more, and contract days greater than 185
Main assignment general elementary or early childhood/preK, not a union member, rural, does not strongly agree with being generally satisfied with being a teacher
Main assignment general elementary or early childhood/preK, not a union member, rural, strongly agrees with being generally satisfied with being a teacher
Main assignment general elementary or early childhood/preK, not a union member, suburb
Main assignment general elementary or early childhood/preK, not a union member, city or town, salary less than \$33,000
Main assignment general elementary or early childhood/preK, not a union member, city or town, salary \$33,000 or more
Main assignment not special education or general elementary or early childhood/preK/mathematics and computer science or natural sciences, town or rural

See notes at end of table.

Exhibit 21. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: Fifth wave analysis final weight (W5AFWT)—Continued

Cell definitions
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, more than 185 contract days, and salary less than \$33,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, more than 185 contract days, salary \$33,000 or more
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, more than 185 contract days, elementary school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, 185 or more contract days, secondary or combined school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received less than two types of listed support during first year of teaching, and salary less than \$33,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received less than two types of listed support during first year of teaching, salary \$33,000–\$37,999
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received less than two types of listed support during first year of teaching, salary greater than \$38,000, strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, salary greater than \$38,000, does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined, did not receive reduced teaching schedule or number of preparations during first year of teaching, does not strongly disagree with statement like the way things are run at this school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined, did not receive reduced teaching schedule or number of preparations during first year of teaching, strongly disagrees with statement like the way things are run at this school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received multiple kinds of support during first year of teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, elementary school, salary less than \$38,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined school, salary greater than \$38,000

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave Intermediate File,” 2011–12.

Exhibit 22. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fifth wave longitudinal final weight (W5LWGT)

Cell definitions
Union member, main assignment special ed, percentage of students receiving free or reduced-price lunch less than 21.9 percent
Union member, main assignment special ed, percentage of students receiving free or reduced-price lunch 21.9 percent or greater, salary less than \$38,000
Union member, main assignment special ed, percentage of students receiving free or reduced-price lunch 21.9 percent or greater, salary \$38,000 or more
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, city or town, served on a schoolwide or districtwide committee, and percentage of students receiving free or reduced-price lunch less than 67.4 percent
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, city or town, served on a schoolwide or districtwide committee, and percentage of students receiving free or reduced-price lunch greater than 67.4 percent
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, city or town, did not serve on a schoolwide or districtwide committee, does not strongly agree that does not seem to have as much enthusiasm now as when began teaching
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, city or town, did serve on a schoolwide or districtwide committee, strongly agrees that does not seem to have as much enthusiasm now as when began teaching
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, required 185 contract days or less, town or rural
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, suburb, number of contract days greater than 185, does not strongly agree that does not seem to have as much enthusiasm now as when began teaching
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, suburb, number of contract days greater than 185, does not strongly agree that does not seem to have as much enthusiasm now as when began teaching
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, rural, required to work more than 40 hours for base pay
Union member, main assignment general elementary or early childhood/preK or mathematics or computer science or natural sciences, rural, required to work 40 hours or less for base pay
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), rural, salary of less than \$38,000
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), rural, salary of \$38,000 or more
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), town
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), suburb, required contract days greater than 185
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), suburb, required 185 contract days or less
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), suburb, required contract days greater than 185
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), city, required to work less than 40 hours for base pay

See notes at end of table.

Exhibit 22. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fifth wave longitudinal final weight (W5LWGT)—Continued

Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE in (2, 3, 4, 5, 6), city, required to work 40 hours or more for base pay
Union member, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, RACE = 1
Not a union member, RACE in (5, 6), salary less than \$33,000, percentage of students receiving free or reduced-price lunch less than 44.7 percent
Not a union member, RACE in (5, 6), salary less than \$33,000, percentage of students receiving free or reduced-price lunch greater than 44.7 percent
Not a union member, RACE in (5, 6), salary \$30,000–\$32,999, reported no control/minor control/or moderate control over selecting teaching techniques in classroom
Not a union member, RACE in (5, 6), salary \$30,000–\$32,999, reported a great deal of control over selecting teaching techniques in classroom, did not use e-mail or list-serve to communicate with parents
Not a union member, RACE in (5, 6), salary \$30,000–\$32,999, reported a great deal of control over selecting teaching techniques in classroom, use e-mail or list-serve to communicate with parents
Not a union member, RACE in (5, 6), salary \$33,000–\$37,999, rural
Not a union member, RACE in (5, 6), salary \$33,000–\$37,999, city or town
Not a union member, RACE in (5, 6), salary \$33,000–\$37,999, suburb
Not a union member, RACE in (5, 6), salary \$38,000 or more,
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, elementary school, salary less than \$38,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined school, salary greater than \$38,000
Not a union member, RACE in (1 2 4), reported no control/minor control/or moderate control over selecting teaching techniques in classroom
Not a union member, RACE in (1 2 4), reported a great deal of control over selecting teaching techniques in classroom
Not a union member, RACE = 3

NOTE: RACE is coded as follows for the cell definition using RACETH_T: 1 (Hispanic, Hawaiian Native; Hispanic, Asian; Hispanic, Asian, Hawaiian Native; Hispanic, Black; Hispanic, White; Hispanic, White, American Indian; Hispanic, White Asian; Hispanic, White, Black, Asian), 2 (non-Hispanic, Asian), 3 (non-Hispanic, Black), 4 (non-Hispanic, American Indian, non-Hispanic, Hawaiian Native), 5 (non-Hispanic, White) 6 (all Raceth_T categories not listed).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave Longitudinal Intermediate File,” 2011–12.

Exhibit 23. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fifth wave retrospective longitudinal final weight (W5RLWGT)

Cell definitions
Main assignment special ed, salary less than \$33,000
Main assignment special ed, salary \$33,000–\$37,999
Main assignment special ed, salary \$38,000 or more, suburb or town
Main assignment special ed, salary \$38,000 or more, city or rural
Main assignment mathematics and computer science or natural sciences, 185 or less contract days, received fewer than two types of listed support during first year of teaching
Main assignment mathematics and computer science or natural sciences, 185 or less contract days, received more than one type of listed support during first year of teaching
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, suburb
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, city
Main assignment mathematics and computer science or natural sciences, more than 185 contract days, town or rural
Main assignment general elementary or early childhood/preK, union member, salary less than \$33,000, and strongly disagrees with how things are run at school
Main assignment general elementary or early childhood/preK, union member, salary less than \$33,000, and strongly disagrees with how things are run at school
Main assignment general elementary or early childhood/preK, union member, salary \$33,000–\$37,999, and does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching
Main assignment general elementary or early childhood/preK, union member, salary \$33,000–\$37,999, and strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
Main assignment general elementary or early childhood/preK, union member, salary \$38,000 or more, and contract days not greater than 185
Main assignment general elementary or early childhood/preK, union member, salary \$38,000 or more, and contract days greater than 185
Main assignment general elementary or early childhood/preK, not a union member, rural, does not strongly agree with being generally satisfied with being a teacher
Main assignment general elementary or early childhood/preK, not a union member, rural, strongly agrees with being generally satisfied with being a teacher
Main assignment general elementary or early childhood/preK, not a union member, suburb
Main assignment general elementary or early childhood/preK, not a union member, city or town, salary less than \$33,000
Main assignment general elementary or early childhood/preK, not a union member, city or town, salary \$33,000 or more
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, more than 185 contract days, and salary less than \$33,000

See notes at end of table.

Exhibit 23. Cell definitions for the noninterview adjustment factor as applied to BTLS weights: First through fifth wave retrospective longitudinal final weight (W5RLWGT)—Continued

Cell definitions
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, more than 185 contract days, elementary school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, town or rural, 185 or more contract days, secondary or combined school
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, and salary less than \$33,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, salary \$33,000–\$37,999
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, salary greater than \$38,000, strongly disagrees that does not seem to have as much enthusiasm now as when began teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, salary greater than \$38,000, does not strongly disagree that does not seem to have as much enthusiasm now as when began teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined
City, does not somewhat disagree with the way things are run at school, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, received one kind or no support during first year of teaching
City, does not somewhat disagree with the way things are run at school, main assignment not special education or general elementary or early childhood/preK/ mathematics or computer science or natural sciences, received multiple kinds of support during first year of teaching
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, elementary school, salary less than \$38,000
Main assignment not special education or general elementary or early childhood/preK/ mathematics and computer science or natural sciences, city or suburb, received fewer than two types of listed support during first year of teaching, secondary or combined school, salary greater than \$38,000

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave Retrospective Longitudinal Intermediate File,” 2011–12.

Exhibit 24 presents the weighting cells for the ratio adjustment factor, the collapsing criterion, and the collapsing order of variables. Ratio adjustment cells that do not meet the collapsing criterion are collapsed with other cells according to the collapsing order. The collapsing criterion is a ratio adjustment factor of between .667 and 1.5, with more than 25 cases. Thus, cells needing collapsing are initially collapsed with cells that have all other variables in common, but that are in an adjacent age category.

Exhibit 24. Ratio adjustment factor and collapsing criterion as applied to BTLS weights: Second through fifth waves

Collapsing criterion		Collapsing order
Ratio adjustment factor	$\geq .667$ and ≤ 1.5	Age: under 23, 23–25, 26–32, 33 or more; race/ethnicity: White non-Hispanic, all other non-Hispanic races, or Hispanic; sex: male, female
Interviews	≥ 25	

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Weighting Specifications,” 2007–12.

Variance Estimation

Overview

In surveys with complex sample designs, such as SASS or BTLS, direct estimates of sampling errors that assume a simple random sample will typically underestimate the variability in the estimates. The SASS and BTLS sampling design and estimation included procedures that deviate from the assumption of simple random sampling, such as stratifying the school sample, oversampling new school teachers, and sampling with differential probabilities.

The preferred method of calculating sampling errors to reflect these aspects of the complex sample design of SASS and BTLS is replication. Replication methods involve constructing a number of subsamples (i.e., replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. The replicate weights are used to compute the variance of a statistic, Y , as given below:

$$\text{Variance}(Y) = \left(\frac{1}{n} \right) \sum_r (Y_r - Y)^2$$

Where Y_r = the estimate of Y using the r^{th} set of replicate weights and

n = the number of replicates

SASS does not use balanced repeated replication (BRR) as many surveys do, because SASS selects a very high proportion of schools in some strata. Due to the probability proportionate to size (PPS) methodology used in SASS, it becomes impossible to compute a simple finite population correction factor. To overcome this limitation, a bootstrap variance estimator, which estimates the variance by simulating the sampling procedure (see Kaufman 2001), was implemented for the 1993–94 SASS, and its role was expanded in 1999–2000 and even more so in the 2003–04 SASS to make it more stable (see chapter 9 in the *Documentation for the 2007–08 Schools and Staffing Survey* [Tourkin et al. 2010]). The bootstrap variance estimator is used for public schools, most private schools, and public school districts. The

bootstrap variance reflects the increase in precision due to large sampling rates because the bootstrap sampling is done systematically, without replacement, as was the original sampling. In 2003–04, the new bootstrap estimator for both public and private school teachers was included. The 2007–08 SASS used the same bootstrap variance estimation procedure as the 2003–04 SASS.

Weights for public schools and public school teachers were calculated using the newest bootstrap system. This system is based on two assumptions about the sampling design: (1) the traditional systematic PPS first-stage sample can be approximated using a randomized systematic sample; and (2) the stratified equal probability systematic sample can be approximated by a stratified, without replacement, simple random sample. Using these assumptions, the bootstrap replicate weights are computed from a single sample. Again, the appropriate bootstrap replicate base weights (the inverse of the probability of selection) generated for the sample were subsequently reweighted by processing each set of replicate basic weights through the weighting procedure.

Since the number of certainty schools (i.e., schools that are guaranteed selection) is substantial, it was desirable to address the variance that results from nonresponse. Therefore, it was decided to treat nonresponse as a stage of sample selection. For certainty schools, this allowed for the reflection of a variance component that otherwise would be regarded as a bias.

The nonresponse sampling model is as follows:

For noncertainty schools, nonresponse is considered a nested random process within selected primary sampling units. That is, school nonresponse is assumed to be a random process within the random sample. Within appropriately defined cells, it is assumed nonresponse follows a “missing-at-random process.”

For certainty schools, nonresponse is considered the first stage of selection. It is assumed that this process follows a simple “random sample without replacement” model within appropriately defined cells. The frame size for this selection is assumed to be the number of selected certainty schools in the cell, and the sample size is the number of responding certainty schools in the cell.

This procedure also allows for correctly estimating variances for school-based estimates that use school teacher averages generated from the 2007–08 SASS teacher data files.

To be consistent with the bootstrap procedures described above, the nonresponse modeling of certainty schools was reflected through an appropriately defined bootstrap procedure. For more details on the bootstrap methodology and how it applies to SASS, see Efron (1982), Kaufman (1992, 1993, 1994, 1998, and 2001), and Sitter (1990).

The newest version of the bootstrap procedure made it possible to compute teacher bootstrap replicate weights at the same time as the school weights, considerably reducing the processing time to form the replicates.

Each SASS data file includes a set of 88 replicate weights designed to produce variance estimates. Replicate weights were created for each of the 88 samples using the same estimation procedures used for the full sample and are included in the data files. All of the replicate weights were produced using a bootstrap procedure.

As described above, the replicate weights are used to compute the variance of a statistic, Y , as given below.

$$\text{Variance}(Y) = \left(\frac{1}{88} \right) \sum_{r=1}^{88} (Y_r - Y)^2$$

Where Y_r = the estimate of Y using the r^{th} set of replicate weights, and the number of replicate weights is 88.

Analysis of the bootstrap replicate weights revealed that approximately 3 percent of the school (public and private) and teacher (public and private) weights fell outside a 95 percent confidence interval. These are nearly the expected 5 percent, indicating that the bootstrap replicate weights are close to being normally distributed.

Variance Estimation for BTLS Teachers

The SASS teacher replicate weights were generated at the same time as the school replicate weights as part of the 2007–08 bootstrap system. Teacher records were assigned replicate weights by multiplying the school replicate weight by the teacher's conditional probability of selection given the school's selection into the SASS school sample. Since the BTLS sample was a subset of the SASS teacher sample, the SASS teacher replicates were used for the BTLS sample. The BTLS base weight for each BTLS teacher was multiplied by each of the 88 SASS replicate weights divided by the SASS teacher full-sample base weight for that teacher. To calculate 88 replicate weights, which should be used for variance calculations, these BTLS replicate basic weights were processed through the remainder of the BTLS weighting system. The replicate weights for cross-sectional analysis are TREPWT1–TREPWT88 for the first wave, W2ARWT1–W2ARWT88 and W2RARWT1–W2RARWT88 (including retrospective respondents) for the second wave, W3ARWT1–W3ARWT88 for the third wave, W4ARWT1–W4ARWT88 for the fourth wave, and W5ARWT1–W5ARWT88 for the fifth wave. For longitudinal analysis over the 5-year collection period, the replicate weights for the different waves are W3LRWGT1–W3LRWGT88 and W3RLRWGT1–W3RLRWGT88 (including retrospective respondents), W4LRWGT1–W4LRWGT88, and W5RLRWGT1–W5RLRWGT88.

A variance estimate is obtained by first calculating the estimate for each replicate, then summing the squared deviations of the replicate estimates from the full-sample estimate, and, finally, dividing by the number of replicates:

$$\sum_{k=1}^{88} (\hat{y}_k - \hat{y})^2 / 88$$

where $k = 1, 2, \dots, 88$,

$y_k = k^{\text{th}}$ replicate estimate

and y = full sample estimate.

When calculating variance estimates for some small subdomains of interest (e.g., vocational education teachers), the sparseness of the data may result in there being no data for some replicates. This can result in either an extremely large variance estimate or a failure of the software used to calculate the variance, possibly with a warning message.

The computation of sampling errors for either BTLS or SASS data using these replicate weights can be done easily with one of the following software programs: WesVar Complex Sample Software, SUDAAN, AM Statistical Software, Stata 9, or SAS 9.2.

WesVar—The user needs to create a new WesVar data file by specifying the full sample weight variable and the replicate weight variables (as defined above) as well as the replication method (BRR). The replicate weights and the full sample weight can be highlighted and dragged to their appropriate place in the “New WesVar Data File” window. For more information, visit <https://www.westat.com/our-work/information-systems/wesvar-support>

SUDAAN—The user needs to specify both the sample design (BRR) and the replicate weight variables. Specifying the sample design (DESIGN = BRR) is done in the procedure call statement (i.e., PROC DESCRIPT DESIGN = BRR). Specifying the replicate weights is done with the REPWGT statement. For more information, visit www.rti.org/sudaan/.

AM—The user needs to set the replicate weights along with the replication method using the right-click context menu in the variable list window. Once the “Set Replicate Weights” window is displayed, the replicate weights as identified above can be highlighted and dragged into the window. At the bottom of the window are four options for replication method; BRR should be selected. For more information, visit <http://am.air.org>.

Stata—The use of replicate weights for the generation of standard errors is a feature that was new to Stata 9, but has been included and expanded in all subsequent versions. First, the user needs to survey set the data (SVY SET) by defining the probability weight ([pw =]), BRR weights (brrweight[varlist]), and variance estimation type (vce[brr]) and turning on the mse formula (mse). Once these parameters are set, users are able to call up the survey settings and tell Stata which type of standard errors to produce using the SVY BRR command. SVY BRR also allows users to specify the statistics to be collected (exp_list) and the command to perform (e.g., mean or tab). For more information, visit <http://www.Stata.com>.

SAS—The use of replicate weights is a feature new to SAS 9.2. In the WEIGHT statement, users should specify the name of the final weight that matches the unit of analysis. Users should also include the REPWEIGHTS statement and specify the full set of replicate weights that match the unit of analysis (e.g., W1TREPWT1–W1TREPWT88). For more information, visit <http://support.sas.com>.

Chapter 7. Structure of the BTLS Data File

The first through fifth wave preliminary data of the 2007–08 Beginning Teacher Longitudinal Study (BTLS) were collected using six survey questionnaires. The first wave data were collected using the 2007–08 Schools and Staffing Survey (SASS) Teacher Questionnaire; the second wave data were collected using the beginning teacher versions of the Questionnaire for Current Teachers and the Questionnaire for Former Teachers of the 2008–09 Teacher Follow-up Survey (TFS); the third wave data were collected using the 2009–10 BTLS Questionnaire; the fourth wave data were collected using the 2010–11 BTLS Questionnaire; and the fifth wave data were collected using the 2011–12 BTLS Questionnaire. Responses to the six surveys were combined into one data file, with each wave corresponding to one of the 5 data collection years.

Availability of Data

BTLS data are released as restricted-use data files and are available only to restricted-use SASS license holders. The data are formatted as a SAS data file (value labels are included in the format catalog) and ASCII data file. The ASCII data file can be read into SPSS and Stata with input code available with the data product. An electronic codebook, offering a searchable codebook (or data dictionary), is also available.

The BTLS data are released in accordance with the provisions of the amended National Education Statistics Act of 1994 (20 U.S.C. 9017), the Privacy Act of 1974, the Computer Security Act of 1987, and the U.S. Patriot Act of 2001. Under the provisions of Section 183 of the Education Sciences Reform Act of 2002, P.L. 107-279 (20 U.S.C. 9873), the National Center for Education Statistics (NCES) is responsible for protecting the confidentiality of individual respondents and releases data (on CD-ROMs) for statistical purposes only. Record matching or deductive disclosure by any user is prohibited by federal law.

Access to BTLS restricted-use data files is limited to individuals associated with organizations that have received a license to use SASS data. Instructions on how to obtain a restricted-use license are presented below. Data are restricted-use files because they contain individually identifiable information, which is confidential and protected by law. While direct identifiers, such as the respondent's name, are not included in the data files, the restricted-use files do feature other variables that can indirectly identify a respondent or that can be used to link BTLS and SASS with the Common Core of Data (CCD) or other NCES data files, which could provide the name of the school and lead to the identification of individual respondents.

How to Obtain Restricted-Use Data Files

Researchers may request access to restricted-use datasets for statistical research purposes, provided that they follow computer security requirements and fill out an Affidavit of Nondisclosure.

Researchers requesting access to restricted-use datasets must obtain a license to use those data by providing the following information:

- the title of the survey(s) to which access is desired;
- a detailed discussion of the statistical research project that necessitates accessing the NCES survey;

- the name of the principal project officer at the institution who will be heading up the research effort and who will be enforcing the legal provisions of the license agreement;
- the number, name(s), and job title(s) of professional and technical staff, including graduate students, who will be accessing the survey dataset;
- the estimated loan period necessary for accessing the NCES survey dataset; and
- a security plan for using and storing the data.

Applications for restricted-use licenses are accepted only through the NCES Electronic Application System, which is accessible at <http://nces.ed.gov/statprog/instruct.asp>. All of the procedures are detailed in the *Restricted-Use Data Procedures Manual*, available online at <http://nces.ed.gov/statprog/rudman/toc.asp>. After the access request has been reviewed, the requestor will be informed whether a license to use the restricted data has been approved.

Requestors and/or institutions that violate the agreement are subject to a fine of not more than \$250,000 (under the provisions of 18 U.S.C. 3559 and 3571) or imprisonment for not more than 5 years, or both. The confidentiality provisions that NCES must follow by law can be found at <http://nces.ed.gov/statprog>.

Understanding the Restricted-Use Data Files

Confidentiality Edits to the Data

The restricted-use data files have been altered according to NCES standards. Known as confidentiality edits, “noise” was added to the data in order to make the identification of respondents in published data less certain. These edits directly alter some data for individual respondents, but preserve the overall distributions and level of detail in all variables included in the data file. There are several ways in which the data can be altered, including blanking and imputing for randomly selected records; blurring (e.g., combining multiple records through some averaging process into a single record); adding random noise; and data swapping or switching (e.g., switching the variable for age from a predetermined pair of individuals). While the restricted-use BTLS data files were altered through one or more of these methods, careful attention was given to preserving the overall distributions and detail of the reported data.

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Appendix A. BTLS Justifications

The Importance of a Longitudinal Teacher Follow-up Survey¹

The cross-sectional Schools and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) have been two of the primary tools available to researchers who wish to study the elementary and secondary teaching profession, including attrition and mobility rates. Beginning in the 2008–09 school year, SASS and TFS expanded their role by launching the first national longitudinal survey of new teachers in the United States. The longitudinal Beginning Teacher Longitudinal Study (BTLS) offers much-needed data on various issues related to teacher turnover rates and patterns as well as career trajectories and concerns facing new K–12 teachers.

Since the inception of SASS in the 1987–88 school year, TFS had been conducted in the following school year on a sample of teachers who responded to SASS. SASS and TFS have been conducted six times: during the 1987–88/1988–89, 1990–91/1991–92, 1993–94/1994–95, 1999–2000/2000–01, 2003–04/2004–05, and 2007–08/2008–09 school years. The purpose of TFS is to estimate attrition and mobility rates at the national level as well as to gain insight into the reasons why teachers stay in the same school, move to a new school or district, or leave the teaching profession.

As the first national longitudinal survey of teachers to be conducted in the United States, BTLS is expected to make an important contribution to the field. BTLS will follow all teachers from the 2007–08 SASS who reported being in their first year of teaching. These teachers can be followed from the beginning of their teaching career for 5 years. The purpose is multifaceted: (1) to provide insight into the career paths of K–12 teachers, (2) to identify the main reasons for continuing to teach in the same school, moving to a new school or district, leaving the teaching profession, or returning to teaching, (3) to examine the impact of various issues (e.g., workplace conditions, certification route, and mentoring) on teacher satisfaction and retention over time, and (4) to identify policy-amenable changes that could improve teacher satisfaction and retention.

This discussion begins with a brief literature review of the issues surrounding teacher attrition, retention, and the reserve pool.² The discussion is meant to highlight why these issues are important with regard to K–12 education and where a general consensus in the literature has been built. The final section considers the ways in which BTLS will benefit the research field and fill existing gaps in our knowledge.

Teacher Attrition and Mobility

The attrition and turnover of teachers, particularly new teachers, is an ongoing concern in the field of education because research suggests that these changes can be disruptive, impacting teacher quality and student learning and exacerbating school staffing problems (Guarino, Santibanez, and Daley 2006; Harris and Adams 2007). There is disagreement over whether or not the attrition rate of elementary and secondary school teachers is higher or lower than in similar types of occupations (Harris and Adams 2007; Ingersoll 2001; Stinebrickner 2002). Nevertheless, high attrition from specific schools or districts and types of schools is accepted as being highly disruptive to the school environment.

Attrition is highest among new teachers—namely, those in their first 3 years of teaching—and older teachers reaching retirement (Ingersoll 2001; Kelly 2004; Marvel et al. 2006). Because retirement is an

¹ This appendix was prepared in 2008.

² Teachers who have left the profession and can potentially return to teaching later.

expected part of a career trajectory, attention has focused on the high attrition rate among new teachers. As these teachers gain 4 or 5 years of teaching experience, the likelihood that they will leave the profession decreases (Boe et al. 1997; Hanushek, Kain, and Rivkin 2004; Kirby, Berends, and Naftel 1999; Singer and Willett 1988). Undoubtedly, some of this attrition is due to teachers deciding that the profession is not a good fit for them, which is a desirable outcome. However, good quality teachers may also be leaving because they lack the needed support to excel or because of frustrations with the school, district, or general teaching environment. While distinguishing between leavers based on teacher quality is difficult, research suggests that many good teachers are lost unnecessarily. Teachers who graduated from selective undergraduate schools, who scored high in college entry exams, or who were more likely to have passed their certification exams were more likely to leave teaching and to change schools than their counterparts who graduated from less selective institutions, did not perform as well in college entry exams, or were less likely to pass the certification exams (Henke, Zahn, and Carroll 2001; Lankford, Loeb, and Wyckoff 2002; Murnane and Olsen 1990).

Teachers leave teaching or move to a new school for many reasons, including job dissatisfaction, a better job opportunity, and personal reasons. Job dissatisfaction is the most important reason for teacher turnover, and the most important causes of job dissatisfaction are a lack of supportive and effective school administrators, student discipline problems, low salaries, and a lack of decision-making power in the school (Ingersoll 2001; Stockard and Lehman 2004). In schools where teachers feel supported by their principal and school administration, the turnover is lower than in schools where teachers do not feel they receive such support from their administrators (Ingersoll 2001). Schools that have fewer student disciplinary problems also experience lower teacher turnover (Ingersoll 2001; Kelly 2004). Similarly, schools that allow teachers to have more influence on such matters as selecting teaching materials and techniques, classroom discipline, and homework assignments have lower teacher turnover than schools where teachers have less influence on these matters (Ingersoll 2001).

While salary is an important component in understanding the attrition and migration of teachers, its impact is mitigated by other factors. Some research indicates that working conditions, such as the school's facilities, safety, and quality of leadership (Hanushek and Rivkin 2007), as well as student characteristics (Hanushek, Kain, and Rivkin 2004), are important factors in teachers' transition patterns and may be more important than salary. However, studies that focus on movement between school districts within specific states have indicated that the impact of salary should not be completely discounted. For example, among public school teachers in Texas, salary was inversely related to both changing school districts and exiting the state public school system (Hanushek, Kain, and Rivkin 2004). A study examining teacher transfers between districts in the 1990s in the state of New York found that teachers' salaries jumped as much as 15 percent when they moved from one district to another (Lankford, Loeb, and Wyckoff 2002). Another study examining White teachers in the state of Washington found that salary differences between districts influenced female teachers' mobility, whereas male teachers were more influenced by the district's salary level relative to salary levels in other occupations (Gritz and Theobald 1996). Nevertheless, teachers appear to be more likely to move to a new district for a higher salary rather than leave the profession (Hanushek, Kain, and Rivkin 2004). While the impact of salary on teacher retention may be filtered through teachers' working conditions, it is an important factor influencing their decisions to move to another school or district or leave the profession (Rinke 2008).

Not surprisingly, the characteristics of schools and districts contribute to teacher turnover levels. Teachers are more likely to leave schools that have a higher minority enrollment (Hanushek, Kain, and Rivkin 2004; Loeb, Darling-Hammond, and Luczak 2005) and a higher percentage of students from low-income families (Loeb, Darling-Hammond, and Luczak 2005; Smith and Ingersoll 2004). Teachers are less likely to leave larger than smaller schools (Ingersoll 2001; Kelly 2004). Some studies have shown that teachers in rural schools have lower turnover rates than teachers in nonrural areas, while other studies have not found such an association (Kelly 2004; Smith and Ingersoll 2004). In the state of New York, teacher

turnover rates are higher in urban schools, especially in large urban areas (Lankford, Loeb, and Wyckoff 2002). Other factors that create a less-than-ideal teaching environment and increase the likelihood of turnover include large class sizes (Loeb, Darling-Hammond, and Luczak 2005) and school facilities that are in poor condition (Buckley, Schneider, and Shang 2005; Loeb, Darling-Hammond, and Luczak 2005).

Attrition and migration rates may also differ by grade level and main teaching assignment. High school and middle school teachers have been found to be more likely to leave than elementary school teachers (Kirby, Berends, and Naftel 1999; Murnane and Olsen 1989). Similarly, some studies find that teachers teaching secondary-level students are more likely to move to another school or exit teaching (Kelly 2004; Smith and Ingersoll 2004), while other studies find no difference in teacher turnover between secondary and elementary levels (Ingersoll 2001). Secondary-level science, math, and engineering teachers also may be more likely to leave teaching than secondary-level teachers in other subject areas (Henke, Zahn, and Carroll 2001; Ingersoll 2001; Kirby, Berends, and Naftel 1999). Changing main assignments, in and of itself, is a source of teacher turnover that may or may not be desired by a particular school or school district. Recent research indicates that shortages in various teaching areas, such as special education, are exacerbated by teachers who move out of those teaching fields and into other fields (Boe, Cook, and Sunderland 2008). Consequently, teachers could remain within a school or district and still contribute to staffing problems. In addition, research indicates that job options outside of the classroom that are available within public schools and in other organizations and fields (e.g., science teachers whose skills are desired by nonschool organizations) impact whether teachers leave the profession as well as whether potential teachers enter teaching (Dolton and van der Klaauw 1995, 1999; Murnane and Olsen 1989, 1990).

Finally, support programs have been developed and implemented by districts for new teachers to help beginning teachers make the transition to the classroom and to retain them. These programs are commonly known as mentoring or induction programs. The content of these programs varies widely, but they include such activities as orientation seminars, mentoring by a more experienced colleague, and regular supportive communication with the principal. The results from a study by Smith and Ingersoll (2004) indicate that induction programs do deter teachers from switching schools and leaving teaching all together. However, a randomized experiment that was conducted in approximately 400 elementary schools in 17 states during the 2005–06 school year did not detect any differences in the impact of an intensive, structured induction program on teacher attrition. The percentage of teachers who had either left teaching, moved within a district, or moved to another school district in the fall of 2006 did not differ between teachers in the study and the control groups (Glazerman et al. 2008). While the study found no differences in attrition rates approximately a year after the beginning of the program, a longer longitudinal study would be needed to establish whether the induction program might make a difference in the following years.

Reserve Pool

As discussed above, the concern over teacher attrition in the research field has historically focused on the rate at which teachers leave the profession (e.g., Ingersoll 2001; Lankford, Loeb, and Wyckoff 2002; Marvel et. al. 2006). However, attrition and the entrance of new teachers provide only a partial picture of the teacher supply pool. Far less attention has been given to issues related to the “reserve pool” created by teachers who have left the profession and later return to teaching. Focusing on attrition without adequately accounting for former teachers who return can overstate the loss of teachers in the supply pool and distort the progression of teaching careers.

Only very few studies have examined the return of teachers to teaching using longitudinal data. Using data from Michigan, Murnane, Singer, and Willett (1988) found that between one-quarter and one-third of teachers who left teaching within 8 years of beginning to teach returned to teaching after a career interruption. Whether teachers return to teaching after leaving the profession for at least a year depends upon how many years of experience they acquired before leaving as well as their subject area specialty, education level, and age at the time of leaving (Beaudin 1993). Teachers who leave teaching at an older age (i.e., from age 25 to 40) and who have more experience are more likely to return to teaching (Beaudin 1993; Heyns 1988). Years of experience and level of education are also correlated; teachers with a master's degree and 1 or 2 years of experience are less likely to return to teaching than those with a master's degree and several years of experience (Beaudin 1993). Teachers with specialties that offer more lucrative professional opportunities outside of teaching, such as science and math, are less likely to return to teaching in public schools (Beaudin 1993).

Research indicates that young women exit teaching sooner than men and older women, but also have the highest return rate following their first career interruption (Murnane, Singer, and Willett 1988). This pattern suggests that marriage and childrearing are important factors shaping the early career patterns of female teachers.

Because the above information is outdated, it is impossible to know how the findings apply to today's teachers. In addition, the data used by Murnane, Singer, and Willett (1988) and Beaudin (1993) are state specific. New longitudinal national-level data are needed in order to gauge the current flow of teachers in and out of the profession and in order to understand why they return to teaching after leaving the profession.

Benefits of a Longitudinal Survey

Current research on teacher attrition and mobility relies primarily on state or district databases, household surveys, and the SASS and TFS. Each of these sources has limitations in revealing the impact of the reserve pool on teacher supply and career patterns of teachers. State and district databases are not able to track teachers who leave the state and/or district, and the comparability and breadth of data across states or districts vary. Household surveys do not specifically target K–12 teachers, which may result in low sample sizes, and do not ask specific questions about why teachers have moved to a new school or left the teaching profession. SASS is cross-sectional, which limits its ability to track career patterns. In addition, while TFS tracks 1-year attrition and mobility rates and examines reasons for moving, staying, or leaving the profession, it is not able to adequately capture teachers who return to the teaching workforce after a break in service.

The BTLS addresses many of these limitations. Using a single instrument nationally permits uniformity in measures and definitions, regardless of the state or district in which the teacher first enters K–12 teaching. Multiple forms of mobility and attrition, both voluntary/involuntary and temporary/permanent, can be identified through the survey and analyzed by researchers. In addition, as teachers move in and out of states, they can be tracked with this type of survey. Similarly, as teachers leave the profession, either temporarily or permanently, they will continue to be contacted throughout the life of the survey to determine their occupation or main activity and what their reasons are for deciding whether or not to return to teaching. Examining teachers at the start of their teaching career will allow researchers to better understand how certain factors impact teaching career paths. Because new teachers have a high rate of attrition, capturing them in their first year of teaching and tracking them for 5 years may reveal motivations and career patterns that are not easily identified with cross-sectional data.

BTLS data will address many of the questions surrounding the reserve pool, which is an important element in understanding the supply of teachers to the profession. While it is recognized that teachers

temporarily leave the profession to care for family members, for example, it is difficult to determine how many and which teachers return to the teaching profession after leaving. Consequently, attrition rates overstate the actual loss to the profession. BTLS will permit researchers to more accurately determine the rate at which teachers return across the nation.

BTLS will also permit greater exploration into specific issues that are still unresolved. BTLS will provide more insight into how long teachers of different characteristics are likely to stay in the profession, where they go after leaving, and whether they are more or less likely to return. Other questions that BTLS will address include the following:

- Are teachers more likely to move to schools with lower percentages of disadvantaged students as they gain experience?
- Are teachers who received longer mentoring in their early years of teaching more likely to stay in the profession over time?
- Are teachers who entered teaching through alternative certification programs more or less likely to remain in teaching over time compared to those who entered teaching through a traditional route?
- Are teachers who enter the profession later in life and after having had a previous career more likely to remain in teaching, as research currently suggests?

Increasing our understanding of the motivations behind decisions to stay, move, leave, or return to teaching; of sources of satisfaction and dissatisfaction; and of the changing motivations and needs of teachers as they progress in their careers improves the ability of schools and districts to identify changes that can be implemented effectively. In the hands of researchers and administrators, knowledge drawn from this tool could increase the retention of desirable teachers and help to alleviate staffing problems. No single survey can resolve all of the remaining questions and issues facing elementary and secondary public schools, but a national longitudinal survey of new teachers will be a much-needed step toward more accurately defining the problems and spawning solutions.

Sample Composition: First-, Second-, and/or Third-Year Teachers³

When determining the survey population of interest, a number of factors must be considered, including ease of questionnaire development, burden on the respondent, and sample size.

Ease of Questionnaire Development

Table A-1 displays estimates of the number of teachers in the 2003–04 SASS who were teaching in the same school as the school in which they first began teaching. Overall, 81.5 percent of sampled first-, second-, and third-year teachers were teaching in the same school where they first began teaching. This percentage varies a great deal by the number of years teaching, with virtually all first-year teachers teaching in the same school (99.8 percent), slightly over three-quarters of second-year teachers teaching in the same school (78.6 percent), and about two-thirds (65.9 percent) of third-year teachers teaching in the same school.

If the survey population of the 2008–09 BTLS is limited to first-year SASS teachers, then we have complete information on the teaching careers of sampled respondents. If the survey population is

³ The number of years teaching was based on item T0035 (“In what year did you begin teaching at the elementary or secondary level?”).

expanded to teachers in their second or third year in SASS, then data are lacking on their first year or first and second years of teaching, respectively. In order to fill in the gap, retrospective data would need to be collected about the teachers' activities, school information, and motivations for moving to a new school (if applicable) during the 2005–06 and 2006–07 school years. Additional items concerning these previous 2 school years would need to be designed and added to the survey for second- and third-year SASS teachers. While it is likely that the programming costs of adding these items to the web collection instrument would be marginal, it would increase the length of the paper (mail) survey and increase printing and mailing costs.

Table A-1. Percentage of public school teachers teaching in the same school where they first began teaching, by number of years teaching: 2003–04

Number of years teaching	Percent teaching in the same school where they first began teaching
Total	81.5
1 year	99.8
2 years	78.6
3 years	65.9

NOTE: The data are unweighted.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher File," 2003–04.

Burden on the Respondent/Accuracy of Reports

A natural extension to the reasoning listed above is that increasing the number of questions asked of a respondent increases the overall burden on the respondent both cognitively and in the amount of time it would take to complete the questionnaire, which is likely to decrease overall response rates. Moreover, it is uncertain whether respondents who are asked about their former *two* teaching positions will be able to accurately recall emotional questions (e.g., "Indicate the level of importance each of the following played in your decision to leave the school") or even factual questions (e.g., "Was there a change in the principal/school head?") for their earliest teaching position(s). This increased cognitive complexity may therefore lead to an increase in the number of "don't know" and refusal responses. Alternatively, those respondents who do respond to these questions may not report accurate information as memory degrades. In addition, responses to emotional questions may not be an accurate reflection of what was thought at the time because emotions evolve over time and are impacted by subsequent events and experiences. That is, with time, teachers may feel more positively or negatively toward their earliest school(s), leading to bias in their reports of why they left. Responses to factual questions may be inaccurate due to increased recall error (e.g., forward telescoping) as the recall period increases.

Sample Size

Table A-2 contains the breakdown of first-, second-, and third-year teachers in the 2003–04 SASS. While the U.S. Census Bureau has been commissioned to perform a detailed analysis of the number of sampled teachers needed to obtain stable BTLS estimates over time, it would be ideal to sample all 2007–08 SASS first-year respondents based on the reasoning outlined above. Based on the 2003–04 SASS data, however, the number of first-year teachers may be too small to produce stable subgroup estimates when nonresponse and long-term attrition are taken into consideration.

Table A-2. Number of public school teachers, by number of years teaching: 2003–04

Number of years teaching	Number of public school teachers
Total	5,990
1 year	2,010
2 years	2,010
3 years	1,970

NOTE: The data are unweighted. Detail may not sum to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Teacher File,” 2003–04.

Sample Composition: Public vs. Private School Teachers

Based on similar reasoning as to why second- and third-year teachers should be excluded from the target population, private school teachers should be excluded, as well. Including private school teachers increases the complexity of the questionnaire development with regard to terminology used and the comparability of issues and policies concerning private and public school teachers. Sample size is also a concern.

Insofar as questionnaire development is concerned, adding private school teachers would mean that two more questionnaires would need to be created (i.e., former private school teacher and current private school teacher). Historically, the TFS has collected data on public and private school teachers with the same current or former teacher questionnaire, and embedded skip patterns were used to route teachers past items that were not applicable for their school sector. However, in BTLS, the in-depth focus on teachers’ experiences, certification, and training makes it likely that separate questionnaires would be needed to adequately capture and reflect the different school environments. A single survey for both sectors would likely become too large and contain skip patterns too unwieldy to be feasible. Creating separate surveys means that new topics relevant to private school teachers would need to be researched and added to have the same depth of information as that gathered from public school teachers. Doing so would increase design costs as well as the overall administrative costs of collecting data from two separate groups of teachers.

Finally, while the U.S. Census Bureau is researching sample sizes in detail, we believe that there would be too few private school teachers to make valid subgroup comparisons when they are examined by stayer/mover/leaver status and subgroups (see table A-3). While there are 1,860 total first-, second-, and third-year private school teachers, it is likely that all three groups of teachers would be sampled for this survey based on the reasons outlined in the sections above. If the decision were made to sample only first-year teachers, it is unlikely that a sample of 640 private school teachers would be sufficient to create stable estimates by important stratifying variables (e.g., school level and school size). Attrition would only aggravate this problem over time.

Table A-3. Number of private school teachers, by number of years teaching: 2003–04

Number of years teaching	Number of private school teachers
Total	1,860
1 year	640
2 years	670
3 years	550

NOTE: The data are unweighted. Detail may not sum to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Private School Teacher File,” 2003–04.

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Arguments Supporting Inclusion of Only First-Year Public School Teachers in BTLS

The purpose of this appendix is to lend support to the argument that the BTLS should collect data from first-year teachers in public schools rather than from first-, second-, and third-year teachers in public and private schools.

Sample Composition: First-, Second-, and/or Third-Year Teachers⁴

When determining the survey population of interest, a number of factors must be considered, including ease of questionnaire development, burden on the respondent, and sample size.

Ease of Questionnaire Development

Table A-4 displays estimates of the number of teachers in the 2003–04 SASS who were teaching in the same school as the school in which they first began teaching. Overall, 81.5 percent of sampled first-, second-, and third-year teachers were teaching in the same school where they first began teaching. This percentage varies a great deal by the number of years teaching, with virtually all first-year teachers teaching in the same school (99.8 percent), slightly over three-quarters of second-year teachers teaching in the same school (78.6 percent), and about two-thirds (65.9 percent) of third-year teachers teaching in the same school.

If the survey population of the 2008–09 BTLS is limited to first-year SASS teachers, then we have complete information on the teaching careers of sampled respondents. If the survey population is expanded to teachers in their second or third year in SASS, then data are lacking on their first year or first and second years of teaching, respectively. In order to fill in the gap, retrospective data would need to be collected about the teachers' activities, school information, and motivations for moving to a new school (if applicable) during the 2005–06 and 2006–07 school years. Additional items concerning these previous 2 school years would need to be designed and added to the survey for second- and third-year SASS teachers. While it is likely that the programming costs of adding these items to the web collection instrument would be marginal, it would increase the length of the paper (mail) survey and increase printing and mailing costs.

Table A-4. Percentage of public school teachers teaching in the same school where they first began teaching, by number of years teaching: 2003–04

Number of years teaching	Percent teaching in the same school where they first began teaching
Total	81.5
1 year	99.8
2 years	78.6
3 years	65.9

NOTE: The data are unweighted.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher File," 2003–04.

⁴ The number of years teaching was based on item T0035 ("In what year did you begin teaching at the elementary or secondary level?").

Burden on the Respondent/Accuracy of Reports

A natural extension to the reasoning listed above is that increasing the number of questions asked of a respondent increases the overall burden on the respondent both cognitively and in the amount of time it would take to complete the questionnaire, which is likely to decrease overall response rates. Moreover, it is uncertain whether respondents who are asked about their former *two* teaching positions will be able to accurately recall emotional questions (e.g., “Indicate the level of importance each of the following played in your decision to leave the school”) or even factual questions (e.g., “Was there a change in the principal/school head?”) for their earliest teaching position(s). This increased cognitive complexity may therefore lead to an increase in the number of “don’t know” and refusal responses. Alternatively, those respondents who do respond to these questions may not report accurate information as memory degrades. In addition, responses to emotional questions may not be an accurate reflection of what was thought at the time because emotions evolve over time and are impacted by subsequent events and experiences. That is, with time, teachers may feel more positively or negatively toward their earliest school(s), leading to bias in their reports of why they left. Responses to factual questions may be inaccurate due to increased recall error (e.g., forward telescoping) as the recall period increases.

Sample Size

Table A-5 contains the breakdown of first-, second-, and third-year teachers in the 2003–04 SASS. While the U.S. Census Bureau has been commissioned to perform a detailed analysis of the number of sampled teachers needed to obtain stable BTLS estimates over time, it would be ideal to sample all 2007–08 SASS first-year respondents based on the reasoning outlined above. Based on the 2003–04 SASS data, however, the number of first-year teachers may be too small to produce stable subgroup estimates when nonresponse and long-term attrition are taken into consideration.

Table A-5. Number of public school teachers, by number of years teaching: 2003–04

Number of years teaching	Number of public school teachers
Total	5,990
1 year	2,010
2 years	2,010
3 years	1,970

NOTE: The data are unweighted. Detail may not sum to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Teacher File,” 2003–04.

Sample Composition: Public vs. Private School Teachers

Based on similar reasoning as to why second- and third-year teachers should be excluded from the target population, private school teachers should be excluded, as well. Including private school teachers increases the complexity of the questionnaire development with regard to terminology used and the comparability of issues and policies concerning private and public school teachers. Sample size is also a concern.

Insofar as questionnaire development is concerned, adding private school teachers would mean that two more questionnaires would need to be created (i.e., former private school teacher and current private school teacher). Historically, the TFS has collected data on public and private school teachers with the

same current or former teacher questionnaire, and embedded skip patterns were used to route teachers past items that were not applicable for their school sector. However, in BTLS, the in-depth focus on teachers' experiences, certification, and training makes it likely that separate questionnaires would be needed to adequately capture and reflect the different school environments. A single survey for both sectors would likely become too large and contain skip patterns too unwieldy to be feasible. Creating separate surveys means that new topics relevant to private school teachers would need to be researched and added to have the same depth of information as that gathered from public school teachers. Doing so would increase design costs as well as the overall administrative costs of collecting data from two separate groups of teachers.

Finally, while the U.S. Census Bureau is researching sample sizes in detail, we believe that there would be too few private school teachers to make valid subgroup comparisons when they are examined by stayer/mover/leaver status and subgroups (see table A-6). While there are 1,860 total first-, second-, and third-year private school teachers, it is likely that all three groups of teachers would be sampled for this survey based on the reasons outlined in the sections above. If the decision were made to sample only first-year teachers, it is unlikely that a sample of 640 private school teachers would be sufficient to create stable estimates by important stratifying variables (e.g., school level and school size). Attrition would only aggravate this problem over time.

Table A-6. Number of private school teachers, by number of years teaching: 2003–04

Number of years teaching	Number of private school teachers
Total	1,860
1 year	640
2 years	670
3 years	550

NOTE: The data are unweighted. Detail may not sum to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Private School Teacher File," 2003–04.

Appendix B. Glossary of Key Terms for BTLS

The following terms are defined as they apply to the Beginning Teacher Longitudinal Study (BTLS).

Base weight. Base weight is the inverse of the probability of selection including all sampling, the inverse of the initial probability of selection (termed the initial basic weight), or adjustments to the probability of selection due to schools determined to be splits or mergers during data collection operations. These adjustments to the initial probability of selection are called the sampling adjustment factor. The base weight is defined as the product of the initial basic weight and the sampling adjustment factor.

Beginning public school teacher. Beginning public school teachers are teachers who began teaching in 2007 or 2008 in a traditional public or public charter school that offered any of grades K–12 or comparable ungraded levels. These teachers include regular full- and part-time teachers, itinerant teachers, and long-term substitutes as well as any administrators, support staff, librarians, or other professional staff who taught at least one regularly scheduled class in the 2007–08 school year (excluding library skills classes).

Charter school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school; meets all school criteria; receives public funding as primary support; provides free public elementary and/or secondary instruction to eligible students. See also “School.”

Combined school. A school is classified as combined if it has one or more of grades K–6 and one or more of grades 9–12; for example, schools with grades K–12, 6–12, 6–9, or 1–12 are classified as having combined grades. Schools in which all students are ungraded (i.e., not classified by standard grade levels) are also classified as combined.

Common Core of Data (CCD). The CCD is the U.S. Department of Education’s primary database on public elementary and secondary education in the United States. The CCD is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts and contains data that are designed to be comparable across all states. The objectives of the CCD are twofold: first, to provide an official listing of public elementary and secondary schools and school districts in the nation, which can be used to select samples for other National Center for Education Statistics surveys; and second, to provide basic information and descriptive statistics on public elementary and secondary schools and schooling in general.

Current teachers. A current teacher refers to teachers who continued to teach any of grades preK–12 during the survey school year. Current teachers include those who remained at the same school as in the previous year, moved to a different school, or returned to teaching after leaving for a period of time. All respondents are current teachers during the first wave. See also “Movers,” and “Returners.”

District. A local education agency (LEA), or public school district, is defined as a government agency that employs elementary- or secondary-level teachers and is administratively responsible for providing public elementary and/or secondary instruction and educational support services. Districts that do not operate schools but do employ teachers are included; for example, some states have special education cooperatives that employ special education teachers who teach in schools in more than one school district. Supervisory unions are also included.

Elementary school. A school is classified as elementary if it has one or more of grades K–6 and does not have any grades higher than grade 8. For example, schools with grades K–6, 1–3, or 5–8 are classified as elementary.

Final weights. Final weights are the product of the initial basic weight, sampling adjustment factor, separate adjustments for nonresponse at each stage of selection, and one or more stages of ratio adjustment to the frame or to independent sources. The final weights are used to produce weighted estimates from the survey data. See chapter 6 for details on the weighting procedure.

FIPS. FIPS stands for Federal Information Processing Standards and refers to a variety of codes for standardized reference. FIPS county and state codes were developed by the National Institute for Standards and Technology (NIST) as numeric identifiers for each county and state in the United States. They are currently in the process of being re-issued by the American National Standards Institute (ANSI). FIPS 5-2, which identifies state codes, is being renamed INCITS 38. FIPS 6-4, which identifies counties, is being renamed INCITS 31. More information on the state and county codes can be found at <http://www.census.gov/geo/www/ansi/ansi.html>.

Former teachers. A former teacher refers to teachers who left the teaching profession or teachers who were no longer teaching in any of grades preK–12 during the current survey year (includes teachers whose status changed to short-term substitute, student teacher, or teacher aide). No respondents were former teachers during the first wave. See also “Leavers.”

Full-time equivalent. Full-time equivalent is a method of counting teachers based on the percentage of time each teacher works as a proportion of the number of hours worked by a full-time teacher. For example, a full-time teacher would be counted as 1.0, a teacher working half time would be counted as .5, and a teacher working in a quarter-time position would be counted as .25, resulting in a total teacher count of 1.75.

Initial basic weight. Initial basic weight is the inverse of the probability of selection from the initial sampling procedure. In contrast, the “base weight” is the inverse of the probability of selection covering all sampling, including any adjustments to the probability of selection due to schools determined to be splits or mergers during field operations.

Itinerant teacher. A teacher with an assignment that requires the teacher to provide instruction at more than one school.

Leavers. Teachers who left the teaching profession or teachers who were no longer teaching in any of grades preK–12 during the current survey year (includes teachers whose status changed to short-term substitute, student teacher, or teacher aide). No respondents were leavers during the first wave.

Missing data. BTLS is not a fully imputed dataset. Some survey items lack responses due to respondents not answering an item that was not required and is not considered a key item for imputation. In these instances, a value of -9, indicating missing data, is provided for that variable. Some survey items lack responses due to being a part of a skip pattern and should not have been answered by a particular respondent or write-in responses, which are considered a “valid skip.” See also “Valid skip.”

Movers. A mover includes teachers who are still teaching any of grades preK–12 during the current survey year, but have moved to a different school than in the previous survey year. No respondents were movers during the first wave.

Private school. A private school meets all school criteria; does not receive public funding as primary support; does not operate within the public school system. See also “School.”

Public school. A public school is defined as an institution that provides educational services for at least one of grades 1–12 (or comparable ungraded levels), has one or more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education agency. Includes public charter schools, schools in juvenile detention centers, and schools located on domestic military bases and operated by the Department of Defense. See also “School.”

Public charter school. See “Charter school.”

Retrospective respondent. Starting from the second wave, single-wave nonrespondents were asked a subset of survey items retrospectively during the next wave.

Returners. A returner includes teachers who are teaching any of grades preK–12 during the current survey year, but were not teaching in the previous survey year. No respondents were returners during the first or second waves.

Sampling adjustment factor. In the weighting process for each respondent, the sampling adjustment factor is applied to the initial basic weight to account for any additional circumstances affecting the probability of selection. The product of the initial basic weight and the sampling adjustment factor is the base weight. See also “Base weight” and “Initial basic weight.”

School. An institution or part of an institution that has one or more teachers who provide instruction to students, has students in one or more of grades 1–12 (or the ungraded equivalent), has its own principal/administrator if it shares a building with another school or institution, is in operation during the survey years, and is *not* primarily a postsecondary or adult basic education institution. The following are *not* considered a school: schools located exclusively in a private home, Department of Defense schools located outside of the United States, offices of special education in a local education agency, tutoring services, homeschool clearinghouses, and adult learning facilities.

Secondary school. A school is classified as secondary if it has any of grades 7–12 and none of K–6: for example, schools with grades 9–12, 10–12, or 7–8 are classified as secondary.

Stayers. A stayer includes teachers who were still teaching any of grades preK–12 and who remained in the same school as in the previous year.

Teachers. A teacher is defined as a full-time or part-time teacher who teaches any regularly scheduled classes in any of grades preK–12. This includes administrators, librarians, and other professional or support staff who teach regularly scheduled classes on a part-time basis. Itinerant teachers are included, as well as long-term substitutes who are filling the role of a regular teacher on a long-term basis. An itinerant teacher is defined as a teacher who teaches at more than one school (e.g., a music teacher who teaches 3 days per week at one school and 2 days per week at another). A regular full-time teacher is any teacher whose primary position in a school is not as an itinerant teacher, a long-term substitute, a short-term substitute, a student teacher, a teacher aide, an administrator, a library media specialist or librarian, another type of professional staff (e.g., counselor, curriculum coordinator, social worker) or support staff (e.g., secretary), or a part-time teacher. Short-term substitute teachers, student teachers, and teacher aides do not meet the definition of a teacher in BTLS and are considered former teachers in the second and third waves.

Teacher status. Teacher status is the respondent's status as a stayer, mover, leaver, or returner in the current survey year. See also "Stayer," "Mover," "Leaver," and "Returner."

Traditional public school. Traditional public schools are publicly funded schools other than public charter schools. They include regular, special education, vocational/technical, and alternative schools. They also include schools in juvenile detention centers and domestic schools located on military bases and operated by the Department of Defense. See also "Public school" and "Charter school."

Ungraded. Ungraded refers to schools that have an alternative means of classifying students, other than by grade level.

Ungraded students. Ungraded students are those who are not assigned to a particular grade level (kindergarten, first grade, second grade, etc.); for example, special education centers and alternative schools often classify their students as ungraded. Students in Montessori schools are also considered ungraded if the school assigns them to "primary" and "intermediate" levels instead of specific grades.

Valid skip. An item that was not applicable due to a response to a previous item in the same questionnaire and was provided with a value of -8, indicating a valid skip. Certain survey items direct respondents to skip subsequent items based on their answers to the original item, or stem. For instance, if a respondent answered "Yes, fully certified" to item 32a in the 2007–08 Schools and Staffing Survey (SASS) Teacher Questionnaire ("Are you certified by the National Board for Professional Teaching Standards in at least one content area?"), he or she was directed to skip item 32b ("Are you working toward National Board Certification?") and to "GO TO item 33a on page 19." Because the respondent answered that he or she is fully certified, the subsequent question about working toward certification was not applicable. In instances when an item should not have been answered by the respondent, a value of -8, which designates a valid skip, is applied to that variable.

Appendix C. Questionnaire Availability

Online, Downloadable PDF and Excel

Questionnaires for each wave of the Beginning Teacher Longitudinal Study (BTLS) are available online, as downloadable PDF files for the first and second waves and as an Excel file for the third, fourth, and fifth waves, at <http://nces.ed.gov/surveys/btls/questionnaires.asp>. Select the wave of interest, and then proceed to select the specific questionnaire to browse or download.

The first wave questionnaire is the same form as the 2007–08 Schools and Staffing Survey (SASS) Teacher Questionnaire and went to only current teachers. The second wave questionnaires comprise two forms: one for current and one for former teachers. The Current Teacher Questionnaire also contains paths for stayers and movers. The third through fifth wave questionnaires are one instrument with paths for current teachers (or stayers, movers, and returners) and former teachers (also known as leavers). In order to view the questionnaire by teacher status, select the teacher status type in the first eight column headers to filter the items by user type.

All of the BTLS questionnaires are in the public domain, and all survey items may be copied by anyone who wishes to use them in another survey, without any restrictions.

Appendix D. First Cognitive Testing of TFS Items: Summary of Findings and Recommendations

This appendix contains a report prepared by Michael Long of Macro International, Inc., and delivered to the National Center for Education Statistics on November 5, 2007. The contents are listed below.

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Attachment D-1. Interview Protocol	D-27

Background

In the summer of 2007, the Census Bureau contracted with Macro International (Macro), a research and evaluation company in Calverton, Maryland, to plan and carry out a series of cognitive interviews with current and former teachers. The purpose of these interviews was to gather feedback on a number of proposed questions for the Teacher Follow-up Survey (TFS), which is a national survey administered by the National Center for Education Statistics (NCES) and the Census Bureau.

This report is a summary of the methodology that Macro used in these interviews, as well as the feedback that it received from interview participants. The report also provides Macro's recommendations for revisions to the proposed TFS questions.

Summary of Methodology

Description of Participants

Macro conducted interviews with 25 current and former teachers in the categories shown in table D-1 below. In addition to those shown in table D-1, Macro also conducted one additional interview with a current teacher who did not fit into any of these categories.

Table D-1. Description of interview participants

	Participants in each category
Group A: Former teachers who left the field in the past 2 years	9
Group B: Current teachers who switched schools in the past 2 years	9
Group C: Current teachers who previously retired from teaching and have since returned to the classroom	6

SOURCE: U.S. Department of Education, National Center for Education Statistics, First Cognitive Testing of TFS Items: Summary of Findings and Recommendations.

Teachers were recruited through an e-mail invitation sent to a list of teachers from across the country. The participants represented all three school levels (elementary, junior high/middle, and high school). Macro also purposefully recruited teachers from a range of states because some of the proposed survey items deal with retirement and health insurance, two topics that vary dramatically across the country. Each interview participant was provided with an honorarium of \$75.

Interview Protocol

Each interview was approximately 60 minutes long and was conducted by phone. Prior to each interview, the participant was e-mailed a copy of the proposed items and told to print them out but not read them carefully. During the interview, participants were asked to answer the proposed TFS questions as they normally would if they were answering a survey. As they answered each item, they were asked to "think aloud"—that is, to describe aloud what they were thinking as they read and answered the question. After the respondent had answered each item, the interviewer would then ask appropriate follow-up questions or probes.

A copy of the original protocol is included with this report as attachment D-1. This version of the protocol contains interview questions for all TFS questions that we were studying. However, not all items were shown to every participant. Each participant was only shown items that they would normally have been asked to answer—for example, Question 1 ("Do you currently plan to return to the position of a K-12 teacher?") was only asked of former teachers, not those that were currently teaching.

Summary of Participant Feedback and Recommendations

The following section of this report summarizes the results from our research. For each item we provide the wording of the question being tested, a list of relevant findings, and then our recommendations for how that item could be improved.

#1) a. Do you currently plan to return to the position of a K-12 teacher?

- ☐ Yes
☐ No → Go to item 2.

b. When do you plan to return to the position of a K-12 teacher?

**Mark (X) only one box.*

- ☐ Later this school year (2008-09)
☐ Next school year (2009-10)
☐ After the 2009-10 school year but before the 2013-14 school year
☐ During the 2013-14 school year or later
☐ Timing unknown

Findings:

- Of the nine people who saw this question, six indicated that they did not have specific plans to return to teaching but had not ruled it out. The ways that they chose to answer this question were inconsistent—three responded “No,” two said “Yes,” and one left it blank.
- One participant answered “No” to Question 1a but indicated that they might return to teaching part-time.
- Three participants commented that Question 1b would be easier to answer if the options referred to ranges of years (e.g., 3 to 5 years) rather than specific school years.

Recommendations:

- Rephrase Question 1a as “At this time, do you have specific plans to return to the position of a K-12 teacher in the future?” or “At this time, would you say that it is very likely you will return to the position of a K-12 teacher in the future?”
- Locate this question immediately after the item on the TFS that asks whether respondents would consider ever returning to teaching (currently item 23). Putting these questions in close proximity will make the distinction between them clearer. A skip pattern could also be used—respondents who answer “No” to the question about whether they would ever consider returning to teaching could be skipped out of the question asking about “specific plans.”
- Rephrase the options for Question 1b as:
 - Later this school year (2008-09)
 - Next school year (2009-10)
 - In 2 to 5 years
 - In more than 5 years
 - Timing unknown
- Depending on the intent of the question, it may be necessary to clarify that only full-time teaching is to be considered.

#2) Do you consider yourself to be retired from the position of a K-12 teacher?

☐ Yes
☐ No

Findings:

- Of three participants who had technically retired from teaching and had not returned to the classroom, all answered “No” to this question.
- Of six participants who had technically retired from teaching and had since returned to the classroom, four answered “Yes” and two said “No”. The two people that answered “No” indicated that they did not consider themselves to be retired because they were still teaching.
- Of six participants who had left teaching for reasons other than retirement, four responded “No” to this question because they associated “retirement” with such factors as “being older”, “reaching a certain age,” or “receiving a pension.” However, two of the six responded “Yes.” One of these two based her answer on the fact that she looked up the word “retire” in a dictionary, and found that it was simply defined as “leaving a position.”

Recommendations:

- Because response data from this item will not have any clear, interpretable meaning, NCES should remove it from the survey.

#x) Are you currently receiving any Social Security payments?

**Report annual amounts in whole dollars.*

**Record amount, then GO TO item 3 below.*

☐ **Yes** → If “Yes,” How much? \$, . 00 per year

☐ **No**

Findings:

- Only four participants were shown this question; all answered “No”.
- None of the participants who saw this question expressed any confusion or identified any other issues.

Recommendations:

- This question should ask for a monthly amount rather than an annual amount, since most respondents will probably be able to recall or find the monthly amount more easily and accurately.

#3) a. Are you currently collecting a pension from a teacher retirement system or drawing money from a school/system sponsored 401(k) or 403(b) or similar type of retirement savings plan which includes funds you contributed as a teacher?

(401(k) and 403(b) plans are retirement plans in which employees authorize their employers to deduct money from their paycheck before taxes are calculated and invest it in various investment and savings options that become available to employees without penalty upon retirement and/or at a specified age.)

☐ Yes

☐ No → **Go to item 4.**

Findings:

- Two current teachers mistakenly answered “Yes” to this question because they thought they were being asked whether they are currently contributing to a pension.
- All other participants answered the question without difficulty; none expressed any confusion or identified any other issues.
- When specifically asked to read the information in italics, all participants felt that this description was clear and matched their previous understanding of 401(k) and 403(b) plans. Most originally answered the question without reading this information.
- All participants who had officially “retired” previously responded “Yes” to this question.

Recommendations:

- Change the wording of the item from “collecting a pension” to “receiving a pension.” This will decrease the possibility of someone confusing this phrase with “contributing to a pension.”
- Because several participants indicated that their 403(b) was sponsored by their state or teachers union (see Question 3c below), change the wording of the question from “... a school/system sponsored 401(k) or 403(b)...” to “... a sponsored 401(k) or 403(b)...”
- The question appears to work well as a screener to filter respondents to other questions about retirement, since almost all participants’ responses correlated with whether or not they had officially “retired.” If there are instances in which retired teachers do not receive funds through a pension or savings plan (e.g., because they deferred them somehow) they did not appear in this research.

#3) b. How much do you receive BEFORE TAXES from this teacher retirement system pension or 401(k)/403(b) or similar type of plan that was funded while you were a teacher?

b.1. Pension \$, . 00 Per year → Year began drawing pension

☐ None, I do not receive a pension

b.2. 401(k)/403(b) \$, . 00 Per year → Year began drawing money

☐ None, I do not draw money from a 401(k)/403(b) at this time

Findings:

- Of nine participants who had officially retired, six were able to answer this question easily, giving exact numbers for their annual pension. Two others provided estimates that they said were fairly close (i.e., within one or two thousand dollars). One of the two said that she might have looked the correct answer up if she were completing the survey on her own. All said that their answers were annual before-tax amounts, as the question instructed.
- One participant indicated that she would not answer this question for reasons of privacy.
- All respondents who answered this question were receiving a pension; none was receiving a 401(k) or 403(b).
- No respondents appeared to have any difficulty providing the year when they began drawing their pension.

Recommendations:

- No changes are necessary; this question appears to work well. However, our findings showed that there may be some small percentage of participants that do not want to provide this information.

#3) c. From where is the teacher retirement system pension or school/system sponsored 401(k)/403(b) being drawn?

- ☐ The district or school system in which I taught last year (2006-07 school year)
- ☐ A district or school system other than the one in which I taught during the 2006-07 school year
- ☐ Other, please specify _____

Findings:

- Several participants noted that their pension comes from a state plan; they provided this response in the “Other” category.
- In some cases there appeared to be confusion on this question; at least two participants initially checked that their pension is being drawn from their district, but later commented that the check comes “from the state.” This potential misunderstanding was mentioned by other retired teachers, who noted that teachers in their districts do not always understand where the money is actually coming from.
- One participant indicated that while teacher pensions for her district are funded by the state, 403(b) plans are sponsored by a “supervisory union” instead. No other participants commented that their pension and 403(b) plans are sponsored by two different organizations.
- One current teacher said that she assumed that 403(b) funds would come from “the investment company.”
- Several current teachers commented that they would not know the answer to this question. These were all teachers who were not close to retirement, however, so they would not be answering this question.

Recommendations:

- Add the word “state” into the answer options (i.e., “The state, district or school system in which I taught last year” and “The state, district or school system other than the one in which I taught...”)
- For simplicity, change the ending of the second answer option from “...other than the one in which I taught in during the 2006-07 school year” to “...other than the one in which I taught last year”.
- Only one person in our research indicated that their pension and 403(b) would come from two different organizations. However, before using this question NCES should check to make sure this is not a common practice now that 403(b)s are becoming more prevalent for teachers.

#4) a. Are you currently collecting a pension from a **ANOTHER retirement system or drawing money from a sponsored 401(k) or 403(b) plan which includes funds you contributed from a position **OTHER** than a K-12 teacher?**

☐ Yes
☐ No

Findings:

- As in Question 3a, one person incorrectly responded “Yes” because they confused the phrase “collecting a pension” with “contributing to a pension.”
- One participant incorrectly thought that this item was referring to pensions or 401(k)/403(b)s that came from previous teaching in a different state or district.
- One former teacher responded “Yes” to this question, but upon further questioning it became clear that they were actually withdrawing money from a post-tax investment account that they had set up while working in a previous position—not a 401(k) or 403(b).
- One person noticed the word “includes,” and wondered whether a person should answer “Yes” if they have a retirement account that includes both money from teaching and from a previous position.

Recommendations:

- As in Question 3a, change “Are you currently *collecting* a pension...” to “Are you currently *receiving* a pension...”
- Add a note indicating that the question is only referring to pensions and pre-tax retirement plans such as 401(k) and 403(b) accounts, *not* other types of savings or investment accounts.
- According to the current directions of the questions, respondents who are collecting from a 403(b) that includes funds from both a previous position and K-12 teaching should answer “Yes” to both Question 3a and Question 4a (and provide the amounts in both Question 3b and Question 4b). While this is probably an unlikely scenario, NCES should consider whether they want to clarify this.

#5) a. Does your previous employment as a teacher qualify you for coverage by a state, district, or school-sponsored health insurance plan?

(The sponsor of health insurance plans is different in different districts)

___ Yes

___ No → **Go to item 6.**

b. Who is sponsoring your health insurance plan?

___ A state in which you taught

___ A school district in which you taught

___ A school in which you taught

___ Other: _____

Findings:

- When answering Question 5b, one person said that their county sponsors their plan. Another that works in New York City said that their plan is sponsored by the city itself. Two said that their teachers' union sponsors their insurance. In all cases, these respondents wrote their answer under the "Other" response option.
- Two participants questioned whether Question 5a was asking whether the previous employment *qualified* you for coverage, or whether it provided you with *paid* coverage. For example, one pointed out that after leaving a teaching position a person would be "qualified" for COBRA coverage at a discounted rate for a limited time.
- One person commented that the additional text below the question ("The sponsor of health...") was not helpful.

Recommendations:

- Move the words "health insurance" to before the word "coverage," so that the topic of the question is apparent earlier (i.e., "Does your previous employment as a teacher qualify you for health insurance coverage...")
- Change the wording from "coverage by a state, district, or school-sponsored plan" to "coverage through a state, district, or school-sponsored plan."
- Remove the additional text from the question ("The sponsor of health insurance plans..."), because it was distracting for at least one respondent and did not seem to be helpful.
- At a debriefing meeting NCES indicated that this item was meant to refer to situations in which a respondent's health insurance was at least partially paid by their former employer. Given this intent the item should be rephrased as:

Based on your previous employment as a teacher, are you currently qualified to receive health insurance coverage that is at least partially paid for by a state, district, union or other educational entity?

However, it is not necessarily clear that people whose coverage is discounted (as opposed to "partially paid") due to their previous employment as a teacher would answer 'No' to this question.

#6) a. Did you receive an early retirement incentive to leave the position of a K-12 teacher at your previous school?

(An early retirement incentive is a monetary bonus or reward used to encourage teachers to retire.)

☐ Yes

☐ No → **Go to item 7.**

b. Would you have remained in teaching if you had not received an early retirement incentive?

☐ Yes

☐ No

Findings:

- About half of the respondents commented that they have never heard of an early retirement incentive being offered to K-12 teachers. However, all understood what was meant by the phrase, and none had any difficulty answering the question.
- When asked to read the description provided in italics, all respondents said that it was clear and matched their own understanding of what was meant by an “early retirement incentive.”
- None of the participants responded “Yes” to Question 5a; as a result, none answered Question 5b. When respondents were directed to read over this question, all found it very clear.

Recommendation:

- This question appears to work well; no changes are necessary.

#7) Indicate the level of importance EACH of the following played in your decision to leave the position of a K-12 teacher.

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. This year's job is closer to my home.
- b. I (or my partner) was pregnant or needed more time for childrearing.
- c. My health or the health of a loved one required that I leave the profession.
- d. I decided to retire.
- e. I was laid off, involuntarily transferred, or my contract was not renewed.
- f. My previous school was reorganized or closed.
- g. I was dissatisfied with changes in my job description or responsibilities at my previous school.
- h. I wanted better salary or benefits than what I received at my previous school.
- i. I decided to pursue a position other than that of a K-12 teacher.
- j. I decided to take courses to improve career opportunities WITHIN the field of education.
- k. I decided to take courses to improve career opportunities OUTSIDE the field of education.
- l. I was dissatisfied with teaching as a career.
- m. I was dissatisfied with workplace conditions (e.g. facilities, classroom resources, school safety) at my previous school.
- n. I was dissatisfied with the administrator(s) at my previous school (e.g., lack of: communicating respect, encouragement to change teaching methods, working with staff to meet curriculum standards, encouragement of professional collaboration).
- o. I did not have enough autonomy over my classroom at my previous school.
- p. I was dissatisfied with opportunities for professional development at my previous school.
- q. I felt job security would be higher at this year's job.
- r. I had an opportunity for a better work assignment at this year's job.
- s. I was dissatisfied with how student assessments, school accountability, or teacher quality measures impacted my teaching at my previous school.
- t. I was dissatisfied with the large number of students I taught in my previous school.
- u. I was dissatisfied with having my compensation, benefits, or rewards tied to the performance of my students in my previous school.
- v. I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes at my previous school.
- w. I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at my previous school.
- x. Student discipline problems were an issue at my previous school.
- y. I decided to leave teaching for other family or personal reasons.
- z. I was dissatisfied with my previous school for other reasons not included above.

Findings for Question 7:

- There appeared to be some participants who were answering based on whether they thought statements were true, rather than whether they impacted their decision to leave. For example, one person answered ‘3’ to (j) and (k), because she is now able to take courses since she is not working. However, she later indicated that a desire to take courses was not a factor in her decision to leave. Another participant who retired answered ‘3’ to (a) because she is currently working part-time from home. Again, she indicated that this was not a factor at all in her decision to leave teaching.
- ¹
- Item (b): One teacher gave this item a ‘1’ because she misread the word “childrearing” as “childbearing.”
- Item (d): Three participants specifically commented that (d) seemed out of place on this list, because retiring is something that you do—not a reason that you would leave a school. As one put it, “your decision to retire might be based on one of the other things on this list.”
- Item (d): One person who left a school through retirement responded ‘1’ to this item, because she had retired involuntarily due to health issues.
- Item (n): Several participants found the wording of (n) to be confusing and awkward.
- Item (t): One participant was unsure whether the “large number of students” mentioned in (t) was meant to refer to students in one class, or students in all classes combined.
- Items (y), (z): Two participants commented that the scale seemed strange for this item, since they were asked to identify how important this “other” reason was but not to identify the reason itself.
- Items (y), (z): One person had left teaching because she felt she did not have the time to devote to it. This participant felt that this reason did not fit within either (y) or (z), and that as a result a more general “other” option was needed.
- Some participants specifically commented that a large number of items “did not apply” to them; most responded ‘1’ to these items, but two left them blank.

Recommendations (Note: Many of these also apply to Question 14):

- Add a note after the question that emphasizes the purpose of the question: “Please answer based on how important these factors were in your decision to leave, not the extent to which you agree with them.”
- Add a note after the question that states: “If any of the following items do not apply to your situation, select ‘1’ (Not at all important).”
- Rephrase item (a) as “I wanted to take a job that was closer to my home.” This will emphasize that people should answer based on whether proximity was a factor in their decision to leave, rather than a coincidence.
- In item (b), replace the word “childrearing” with “child care.”
- Rather than including (d) as an item in this question, include a separate question in the survey that asks whether or not the respondent officially retired in the last year. Then, make sure that question 7 includes the most likely *reasons* that a teacher might retire.
- Rephrase item (n) so that the parenthetical examples of why teachers might be dissatisfied with administrators are easier to understand.
- Rephrase item (z) as “I left the position of a K-12 teacher for other reasons not described above.” This is more inclusive than the current wording, which assumes that respondents were dissatisfied with their school.

¹ At a debriefing meeting NCES asked Macro to reanalyze these results looking only at respondents who gave an answer of 4 (“very important”) or 5 (“extremely important”). Our analysis showed that focusing on responses of 4 and 5 significantly decreased—but did not eliminate—the instances in which teachers seemed to be falsely identifying reasons that they left teaching.

#8) Of the items above, which do you consider the most important reason in your decision to leave the position of a K-12 teacher?

**Enter the letter from item 10 above.*

☐ Most important reason in my decision

Findings:

- Participants did not have trouble answering this question. In all cases, teachers' responses to this question seemed to match their previous comments about their reasons for leaving.

Recommendation:

- This question works well as currently written; no changes are necessary.

#9) Indicate how important each factor would be in influencing your decision to return to the position of a K-12 teacher.

(The items below use the following scale: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. **Ability to maintain your teacher retirement benefits**
- b. **State certification reciprocity (a state's acceptance of teacher certifications from other states)**
- c. **Availability of part-time teaching assignments**
- d. **Forgiveness of your student loans**
- e. **Housing incentives (e.g., subsidies, rent assistance, low interest loans, relocation assistance)**
- f. **An increase in salary**
- g. **Availability of suitable childcare options**
- h. **Ability to enroll own children in your school/system at no or reduced tuition**
- i. **Better benefits package**
- j. **Financial support for certification/recertification/continuing education requirements**
- k. **Availability of teaching assignments in a particular grade or subject field**
- l. **Effective disciplining of students by the principal or school head**
- m. **A better school support network to help me develop or polish my teaching skills**

Findings:

- Item (a): Participants interpreted (a) in different ways. Most thought that it meant that your previous years of teaching would count toward retirement. One retired teacher thought it meant he would be able to continue receiving a pension after returning to teaching. One thought that “maintaining retirement benefits” simply meant that she would be able to continue to contribute to a retirement plan.
- Item (h): Two teachers who worked at public schools thought that the reference to “no or reduced tuition” was strange, but this did not affect their answers (both answered ‘1’).
- Several participants provided suggestions for other items that could be included in this question; these included “smaller class sizes,” “adequate school supplies and resources,” “a position at a school closer to home,” and “availability of suitable eldercare options.”
- Several participants that had no intention of returning to teaching (e.g., those that were retired) were frustrated at having to answer the question, since they felt it did not apply to them.

Recommendations:

- Delete the word “influencing” from the question, since it seems redundant.
- At a debriefing meeting, NCES indicated that item (a) referred to teachers’ ability to continue receiving a pension/403(b) while also getting a salary from teaching (i.e., “double-dipping”). If this is the intent, the item should be moved to the end of the list and should include a modifier at the beginning of the item, as follows:
n. [IF YOU HAVE RETIRED FROM TEACHING] Ability to continue to receive funds from a pension or 401(k)/403(b) while collecting a salary for teaching

However, some people who are not retired would still answer the question, so if this item is retained NCES should have a plan for how response data can be cleaned.

- Consider adding an item relating to class size, and perhaps other aspects of teaching that may have originally encouraged teachers to leave the profession.
- Currently, some items are worded in terms of improvement (e.g., “*better* school support network,” “*better* benefits package”) and others are not (e.g., “effective disciplining of students,” “financial support”). None of the participants commented on this difference, but NCES should review the items to determine whether this inconsistency was intentional.

#10) What is the LOWEST teaching salary, not including benefits, you would accept to return to the position of a K-12 teacher?

**Report in whole dollars.*

\$, . 00

Findings:

- In several cases, it was clear that people actually would not return to teaching for the salary they indicated. For example, one person who had retired for health reasons provided an answer of \$65K, but said that it would actually be impossible for her to return for any amount. Another gave an answer of \$80K, but later said that she would not return even if offered this salary.
- One person provided a dollar figure even though she had no intention of returning to teaching for at least 10 years.
- Five of the seven responses to this question ranged from \$40K to \$60K. One participant answered \$65K, and another provided a response of \$80K.

Recommendations:

- Currently, responses to this question should be interpreted cautiously. Participants in this research appeared to be providing salary “floors” below which they would not consider returning to teaching. However, because of other factors (such as their current situation, or other aspects of teaching with which they were dissatisfied) it is not necessarily the case that they would actually return for this amount.
- Add another question before Question 10: “Would you return to the position of a K-12 teacher if you were offered a higher salary than you received last year?” Only respondents who answer “Yes” to this question would then be asked for a specific dollar figure. Forcing respondents to indicate that they *would* return for a higher salary will make them more realistic in their answers to Question 10.
- Depending on the intent of the question, the words “next year” could be added to Question 10 (and to the lead-in question suggested above). Again, adding a specific time frame would make the question more concrete and would lead to more realistic answers.

#11) a. Assuming the same salary schedule you were under last year, would you return to the position of a K-12 teacher if you received a one-time bonus?

☐ Yes

☐ No → Go to item 12.

b. What is the lowest amount that you would accept as a one-time bonus to return to the position of a K-12 teacher?

**Report in whole dollars.*

\$, . 00

Findings:

- Two participants questioned the time frame of the question; both said that they might accept a bonus to return in the future, but not at the current time. One of these two responded “Yes” to this question; the other answered “No.”
- One teacher who had been forced to retire for health reasons provided an answer of \$10K, but later indicated that if she were able, she would return to teaching for no bonus.
- Two participants noted that their answer to this question would depend on how long they were required to teach after receiving the bonus.
- Most of the responses to this question ranged from \$5K to \$10K, but one provided a response of \$100K.

Recommendations:

- Depending on the intent of the question, add the words “next year” to the question (i.e., “...would you return to the position of a K-12 teacher *next year* if you received a one-time bonus”). As in Question 10 above, making the question more concrete in this way would likely make responses more realistic.
- Depending on the intent of the question, NCES may want to specify that the question is referring to *full time* teaching.
- NCES should be aware that some participants will be basing their answer on how long they have to stay in order to receive the bonus (just as they would be if offered a bonus in real life). This could be defined in the question, but doing so might make the question longer and more difficult to understand.

#12) a. Would you return as a K-12 classroom teacher in the same school where you previously taught if you received a one-time bonus?

**In instances where returning to your previous school is impossible, please mark “No, not feasible to return to the same school”—for example, if you relocated a great distance from your previous school or if this school closed.*

☐ **Yes**

☐ **No, not feasible to return to the same school → Go to item 13.**

☐ **No, would not return to that school for a bonus → Go to item 13.**

b. What is the lowest amount that you would accept as a bonus to return to teaching at that school?

**Report in whole dollars.*

\$, . 00

Findings:

- All three participants whose schools had closed or whose programs had been cut selected “No, not feasible.”
- Four people who answered this question had moved to a different state since teaching at their last school. Their interpretation of the answer choices was inconsistent; two indicated that they would not return because it was “not feasible,” while the other two simply said that they “would not return.”
- Two participants had been involuntarily transferred from their previous school. One indicated that it was “not feasible” to return; the other said that he would return for a bonus of \$0K.
- One person said that none of the options applied for them, because their school had closed but they would not have chosen to return to it even if it had remained open. This person left the question blank.
- One person selected “No, would not return” because she assumed that the question was asking about the present time, and she will not return for at least 10 years. Notably, this same participant answered “Yes” to Question 11, so her interpretation of these questions was not consistent.

Recommendations:

- While respondents’ decisions whether to answer “Yes” or “No” seem clear, the distinction between “No, not feasible” and “No, would not return” is less clear. Currently, differences in interpretation among respondents will make these answers very difficult to analyze meaningfully. It seems unlikely that the distinction between “unfeasible” and “not desirable” could be sufficiently explained to lead to consistent response data.
- If this question is used, change the wording of the question from “*in* the same school” to “*to* the same school.” Also, depending on the intent of the question it may be appropriate to add the words “next year” (as in questions 10 and 11).

#13) a. This school year, are you a Highly Qualified Teacher (HQT) according to your state's requirements?

(Generally, to be Highly Qualified, teachers must meet requirements related to 1) a bachelor's degree, 2) full state certification, and 3) demonstrated competency in the subject area(s) taught. The HQT requirement is a provision under No Child Left Behind (NCLB).)

- ☐ Yes → **Go to item 14.**
☐ No

b. Do you meet your state's requirements for a Highly Qualified Teacher in at least one subject that you teach?

- ☐ Yes
☐ No

Findings:

- All participants seemed very familiar with the concept of a Highly Qualified Teacher.
- When asked to read the description in italics, most participants said that it was clear. Two participants commented that the description in italics didn't seem to match their state requirements, but this discrepancy did not affect their ability to answer the question. Very few of the participants, if any, read this description when answering the question on their own.
- One person taught two grades and indicated that they were only Highly Qualified in one of the two. They answered "Yes" to Question 13a because they taught more classes of the grade in which they are Highly Qualified. However, they indicated that even if the breakdown of their classes was even they would still respond "Yes."
- One person commented that teachers might be unwilling to indicate that they are not Highly Qualified, "for fear of repercussions" from their district. However, other participants did not agree that teachers would feel this way.

Recommendations:

- Rephrase Question 6a as "This school year, *do you meet your state's requirements for a Highly Qualified Teacher (HQT) in ALL grades and/or subjects that you teach?*"
- Reword Question 6b as "...in at least one subject *or grade* that you teach?"

#14) Indicate the level of importance EACH of the following played in your decision to leave your previous school.

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. This year's school is closer to my home.
- b. My health or the health of a loved one required that I change schools.
- c. I was laid off, involuntarily transferred, or my contract was not renewed.
- d. My previous school was reorganized or closed.
- e. I was dissatisfied with changes in my job description or responsibilities at my previous school.
- f. I wanted better salary or benefits than what I received at my previous school.
- g. I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at my previous school.
- h. I was dissatisfied with administrator(s) at my previous school (e.g., lack of communicating respect, encouragement to change teaching methods, working with staff to meet curriculum standards, encouragement of professional collaboration).
- i. I did not have enough autonomy over my classroom at my previous school.
- j. I was dissatisfied with opportunities for professional development at my previous school.
- k. I decided to leave my previous school for other personal or family reasons.
- l. I was dissatisfied with my previous school for other reasons not included above.
- m. I felt job security would be higher at this year's school.
- n. I had an opportunity for a better teaching assignment (subject area or grade level) at this year's school.
- o. I was dissatisfied with how student assessments, school accountability, or teacher quality measures impacted my teaching at my previous school.
- p. I was dissatisfied with the large number of students I taught in my previous school.
- q. I was dissatisfied with having my compensation, benefits, or rewards tied to the performance of my students in my previous school.
- r. I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes at my previous school.
- s. I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at my previous school.
- t. Student discipline problems were an issue at my previous school.

Findings:

- Two people said that for items like (c) and (d) it seemed strange to use a five-point scale because Yes/No response options seemed more appropriate. Others commented that most of the reasons provided in this list did not apply to them at all. One became so frustrated that the question did not apply to her that she indicated that she would stop the survey at this point rather than complete the question.
- As in Question 7, there appeared to be some participants who were answering based on whether they thought statements were true, rather than whether they impacted their decision to leave. For example,

one person who switched schools because her husband was transferred to a different state gave a 3 to (t) even though she said that student discipline had no impact on her decision. Several other respondents gave non-1 answers to (a), (o), (p), (r), (s), and (t) that seemed unrelated to their decisions to leave.²

- One participant whose school was closed noted that the reasons that she “decided to leave her previous school” were different from the factors that she considered when choosing her new school. Her responses reflected a mix of the two sets of reasons; for example, she gave a 5 to (d), but a 3 to (a).
- Item (h): Several participants found the wording of (h) confusing and awkward.

Recommendations (Note: Many of these also apply to Question 7):

- Add a note after the question that emphasizes the purpose of the question: “Please answer based on how important these factors were in your decision to leave, not the extent to which you agree with them.”
- Add a note after the question that reads “If any of the following items do not apply to your situation, select 1 (Not at all important).” This may alleviate people’s concern that a five-point scale is not appropriate for this question.
- Rephrase item (a) as “I wanted to work at a school that was closer to my home.” This will emphasize that people should answer based on whether proximity was a factor in their decision to leave, rather than a coincidence.
- Rephrase (h) so that the parenthetical examples of why teachers might be dissatisfied with administrators are easier to understand.
- Move items (k) and (l) to the end of the list.

² As for question 7, NCES asked Macro to re-analyze these results focusing solely on responses of 4 (“very important”) and 5 (“extremely important”). Again, doing so significantly decreased—but did not eliminate—the instances in which respondents seemed to falsely identify reasons that they switched schools.

#15) From the items above, which do you consider the most important reason in your decision to leave my previous school?

**Enter the letter from item 14 above.*

|__| Most important reason in my decision to leave

Findings:

- Participants did not have trouble answering this question. In all cases, teachers' responses to this question seemed to match their previous comments about their reasons for leaving.

Recommendations:

- This question works well as currently written; no changes are necessary.

#16) Indicate how effectively your principal or school head performed each of the following at LAST YEAR'S SCHOOL.

**If you are teaching in the same school as you were last year, then report on how effective your principal or school head was last year.*

(The following scale is used for the items below: 1) Not at all effectively, 2) Slightly effectively, 3) Somewhat effectively, 4) Very effectively, 5) Extremely effectively)

- a. Communicated respect for and value of teachers**
- b. Encouraged teachers to change teaching methods to improve student performance/achievement**
- c. Encouraged professional collaboration among teachers**
- d. Worked with teaching staff to solve school or department problems**
- e. Encouraged the use of student assessment results in planning curriculum and instruction**
- f. Worked to develop broad agreement among the teaching staff about the school's mission**
- g. Knew what kind of school he or she wanted and communicated it to the staff**
- h. Counseled-out or dismissed teachers who were not performing at a satisfactory level**

Findings:

- Participants had no difficulty understanding or answering (a) through (g).
- Item (h): About a third of the participants who saw this question expressed some difficulty in answering (h). Most indicated said that they didn't know how the principal handled these kinds of personnel issues; one, for example, noted that the principal could be trying very hard to remove teachers but being prevented from doing so by the school board. Another said that how these personnel issues were handled was "none of her business." Of those who had difficulty with (h), most did provide an answer; two left the question blank.
- Item (h): At least six of the 19 teachers who were shown this question were not sure what the phrase "counseled-out" meant. When asked what they thought it meant, three were able to describe it fairly accurately while three thought it specifically related to counseling. In any case, participants' lack of familiarity with this term did not seem to impact their responses to this question.

Recommendations:

- Items (a) through (g) work well as written.
- Item (h) is also clear as written. However, NCES should note that a large number of teachers indicated that they are not necessarily aware of all of the factors that go into counseling-out or dismissing teachers, and thus are not perfect evaluators of their principals.

#17) To what extent do you agree or disagree with each of the following statements about the state assessment program used for measuring Adequate Yearly Progress at LAST YEAR'S SCHOOL?

(The following scale is used for the items below: 1) Strongly agree, 2) Somewhat agree, 3) Somewhat disagree, 4) Strongly disagree)

- a. I did not receive adequate support to prepare my students for the assessments.**
- b. I believe that my students were capable of performing well on the assessments.**
- c. The assessment program influenced the curriculum I taught.**
- d. My students' knowledge and abilities were reflected accurately through their performance on assessments.**
- e. My students' results allowed me to target appropriate professional development for myself.**
- f. My students' results allowed me to identify their specific needs.**
- g. Overall, I was satisfied with the assessment program.**

Findings:

- Participants in early interviews were asked a version of this question that asked more generally about “the school, state, or district assessment program” at their school. Several commented that their students participate in more than one assessment program. Participants who saw the revised version of the question (which refers to “the state assessment program used for measuring AYP”) was much clearer.
- Several teachers commented that some or all of the questions did not apply to them, either because they teach an early grade that is not included in the state assessment program or because they teach a subject (e.g., art or music) that is not assessed. About half of these participants skipped one or more of the questions—most often (d) and (f).
- Item (a): Three teachers questioned why this item was phrased negatively, while all other items were phrased positively.
- Item (e): One person commented that while the student assessment data could be used to choose professional development, he is not allowed to do so because those decisions are made by his principal or district. Another person agreed with this item because the assessment program did “allow” her to target professional development. However, she admitted that she did not do so.
- When asked what other items might be included in this question, participants suggested “The assessment program helps student learning,” “The assessment program is a good use of students’ time,” and “The assessment program is beneficial to my school.”

Recommendations:

- Retain the wording of the question that specifically refers to the state assessment program associated with AYP.
- Change the wording of item (a) from “I did not receive adequate support...” to “I received adequate support.”

Attachment D-1. Interview Protocol

Note: The question numbers used in this protocol do not match the numbers used in the body of Macro's report of findings.

NCES Teacher Follow-up Survey Interview Protocol

I. Introduction

“Thank you for agreeing to be interviewed for this project. My name is _____, and I work for Macro International, an independent company that has been hired by the U.S. Department of Education to conduct this study. We will be asking you to help revise and improve a questionnaire called the Teacher Follow-Up Survey. This is a survey that the Department of Education administers to teachers and former teachers every four years.

“During this interview I am going to ask you to read and answer a number of questionnaire items, one at a time. As you go through the questions, I would like you to explain what you are thinking out loud, so I can get a sense of your thought process as you answer each item. For example, if you are trying to decide what your answer is, please explain why you are unsure. If you have trouble understanding a question, or are confused by it, please be sure to explain that to us as well.

“The feedback you provide in this interview will be completely anonymous. In our report to the Department of Education, we will not connect anyone’s comments with their name. The feedback that we collect will have a direct impact on the design of next year’s survey, so please open and honest in your comments.

“Do you have any questions before we begin?”

Before you begin, ask them the screening question for their group just to confirm that they are qualified for the interview:

Group A:

1. Were you a K-12 classroom teacher for at least one of the past three years? (Yes)
2. Are you currently a K-12 classroom teacher? (NO)

Group B:

1. Are you currently a K-12 classroom teacher? (Yes)
2. In the past two years, have you switched schools? (Yes)

Group C:

1. Are you currently a K-12 classroom teacher? (Yes)
2. Are you currently receiving a pension from a teacher retirement system? (Yes)

Group D:

1. Are you currently a K-12 classroom teacher? (Yes)

II. Questionnaire Items

Go through the appropriate questionnaire items with the participant. As the participant answers each item, record their answer on the sheet. If they hesitate while answering or reading a question at any point, ask them to explain why.

In each case, allow them to complete the entire question series before asking any follow-up or probe questions, or providing any clues as to the purpose or meaning of the question. After the series is completed, then go back and ask any follow-ups that are necessary for each of the individual items.

1. Do you consider yourself to be retired from the position of a K-12 teacher?

☐ Yes
☐ No

Interviewer Notes:

Probes:

1. Please explain in your own words what you think this question is asking. When you first encountered this question, how did you interpret the word “retired” in this item?

2. Did your interpretation of this question change at all after reading the subsequent questions?

2. Are you currently receiving any Social Security payments?

**Report annual amounts in whole dollars.*

**Record amount, then GO TO item 3 below.*

☐ Yes → If “Yes,” How much? \$, . 00 per year
☐ No

Interviewer Notes:

Probes:

1. Is there anything about this item that was confusing or unclear to you?

2. Is the dollar amount that you provided exact, or is it an estimate? If it is an estimate, how accurate do you think it is?

3. Is the dollar amount that you provided a “per year” amount? If not, what is it?
 - a. Would it be easier for you to provide a monthly amount instead of an annual amount?

3. **a. Are you currently collecting a pension from a teacher retirement system or drawing money from a school/system sponsored 401(k) or 403(b) or similar type of retirement savings plan which includes funds you contributed as a teacher?**

(401(k) and 403(b) plans are retirement plans in which employees authorize their employers to deduct money from their paycheck before taxes are calculated and invest it in various investment and savings options that become available to employees without penalty upon retirement and/or at a specified age.)

☐ Yes

☐ No → **Go to item 3.**

Interviewer Notes:

- *Was there any indication that the participant was thrown by this question, or thought it was strange?*
- *Was there any indication that the participant confused “collecting a pension” with “contributing to a pension”?*

Probes:

1. Is there anything about this item that was confusing or unclear to you?
2. Please re-read the description of 401(k) and 403(b) plans in italics. Do you think that description accurately describes these plans?
3. [If participant responded “No” to item 2a] What kinds of teachers do you think would respond “Yes” to this question?

3. **b. How much do you receive BEFORE TAXES from this teacher retirement system pension or 401(k)/403(b) or similar type of plan that was funded while you were a teacher?**

b.1. Pension \$, . 00 Per year → Year began drawing pension

☐ None, I do not receive a pension

b.2. 401(k)/403(b) \$, . 00 Per year → Year began drawing money

☐ None, I do not draw money from a 401(k)/403(b) at this time

Interviewer Notes:

- *Was there any indication that the participant had difficulty distinguishing a “pension” from a “401(k)/403(b)”?*

Probes:

1. *[Confirm with the participant that their response was put in the right place (pension vs. 401(k)).]*
2. Is the dollar amount that you provided exact, or is it an estimate? If it is an estimate, how accurate do you think it is?
3. Is the dollar amount that you provided a “per year” amount? If not, what is it?
 - a. Would it be easier for you to provide a monthly amount instead of an annual amount?
4. Is the dollar amount that you provided a before tax amount, as was asked in the question? If not, would you be able to provide a before tax amount?

3. c. From where is your teacher retirement system pension or school/system sponsored 401(k)/403(b) being drawn?

- ☐ The district or school system in which I taught last year (2006-07 school year)
- ☐ A district or school system other than the one in which I taught last year
- ☐ Other, please specify _____

Interviewer Notes:

Probes:

1. Is there anything about this item that was confusing or unclear to you?

2. What “other” responses do you think teachers might provide to this question?

4. a. Are you currently collecting a pension from a **ANOTHER** retirement system or drawing money from a sponsored 401(k) or 403(b) plan which includes funds you contributed from a position **OTHER** than a K-12 teacher?

☐ Yes
☐ No

Interviewer Notes:

- *Does participant understand that this is asking about pensions or 401(k)/403(b)s from a job other than teaching?*

Probes:

1. Is there anything about this item that was confusing or unclear to you?

4. **b. How much do you receive BEFORE TAXES from this OTHER retirement system pension or 401(k)/403(b) or similar type of plan that was funded from a position OTHER than a K-12 teacher?**

b.1. Pension \$, . 00 Per year → Year began drawing pension

☐ None, I do not receive a pension

b.2. 401(k)/403(b) \$, . 00 Per year → Year began drawing money

☐ None, I do not draw money from a 401(k)/403(b) at this time

Interviewer Notes:

- *Was there any indication that the participant had difficulty distinguishing a “pension” from a “401(k)/403(b)”?*

Probes:

1. *[Confirm with the participant that their response was put in the right place (pension vs. 401(k)).]*
2. Is the dollar amount that you provided exact, or is it an estimate? If it is an estimate, how accurate do you think it is?
3. Is the dollar amount that you provided a “per year” amount? If not, what is it?
 - a. Would it be easier for you to provide a monthly amount instead of an annual amount?
4. Is the dollar amount that you provided a before tax amount, as was asked in the question? If not, would you be able to provide a before tax amount?

4. **a. Does your previous employment as a teacher qualify you for health insurance coverage through a state, district, or school-sponsored plan?**

(The sponsor of health insurance plans is different in different districts)

___ Yes

___ No → Go to item 5.

b. Who is sponsoring your health insurance plan?

___ A state

___ A school district

___ A school

___ Other: _____

Interviewer Notes:

- Do participants understand that item 4a is asking if they are currently qualified for coverage?

Probes:

1. Is there anything about either of these items that was confusing or unclear to you?
2. [If participant responded “No” to item 4a] Why are not you qualified for coverage through your previous employment as a teacher?
3. [Ask this probe of everyone, even if they answered “No” to item 4a] Do the response options in 4b make sense? Are there any other options that should be provided?

5. **a. Did you receive an early retirement incentive to leave the position of a K-12 teacher at your previous school?**

(An early retirement incentive is a monetary bonus or reward used to encourage teachers to retire.)

☐ Yes
☐ No → **Skip item 5b.**

- b. Would you have remained in teaching if you had not received an early retirement incentive?**

☐ Yes
☐ No

Interviewer Notes:

Probes:

1. Is it clear what is meant by an “early retirement incentive” in this question?

2. Is there anything about this item that was confusing or unclear to you?

6a. This school year, are you a Highly Qualified Teacher (HQT) according to your state's requirements?

(Generally, to be Highly Qualified, teachers must meet requirements related to 1) a bachelor's degree, 2) full state certification, and 3) demonstrated competency in the subject area(s) taught. The HQT requirement is a provision under No Child Left Behind (NCLB).)

- ☐ Yes → Skip item 6b.
☐ No

b. Do you meet your state's requirements for a Highly Qualified Teacher in at least one subject that you teach?

- ☐ Yes
☐ No

Interviewer Notes:

- *To what extent is the participant very familiar with the meaning of the term HQT, and to what extent do they have to "figure it out" for this question?*
- *Do participants who respond "Yes" to item 6a realize that they should skip item 6b? If not, how do they answer 6b?*

Probes:

1. Is it clear what is meant by "Highly Qualified Teacher" in this question?
2. Does the description in italics in item 6a seem to accurately describe the HQT requirement in your state?
3. Is there anything about either of these items that was confusing or unclear to you?

Item 7: *Before the participant begins reading item 7, ask the following question:*

1. What were the reasons that you decided to leave your last school? (*Record all reasons, in approximate order of importance.*)

Then ask them to complete question 7.

7. Indicate the level of importance EACH of the following played in your decision to leave your previous school.

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. This year's school is closer to my home.
- b. My health or the health of a loved one required that I change schools.
- c. I was laid off, involuntarily transferred, or my contract was not renewed.
- d. My previous school was reorganized or closed.
- e. I was dissatisfied with changes in my job description or responsibilities at my previous school.
- f. I wanted better salary or benefits than what I received at my previous school.
- g. I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at my previous school.
- h. I was dissatisfied with administrator(s) at my previous school (e.g., lack of communicating respect, encouragement to change teaching methods, working with staff to meet curriculum standards, encouragement of professional collaboration).
- i. I did not have enough autonomy over my classroom at my previous school.
- j. I was dissatisfied with my previous school for other reasons not included above.
- k. I felt job security would be higher at this year's school.
- l. I had an opportunity for a better teaching assignment (subject area or grade level) at this year's school.
- m. I was dissatisfied with how student assessments, school accountability, or teacher quality measures impacted my teaching at my previous school.
- n. I was dissatisfied with the large number of students I taught in my previous school.
- o. I was dissatisfied with having my compensation, benefits, or rewards tied to the performance of my students in my previous school.
- p. I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes at my previous school.
- q. I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at my previous school.
- r. Student discipline problems were an issue at my previous school.
- s. I was dissatisfied with opportunities for professional development at my previous school.
- t. I decided to leave my previous school for other personal or family reasons.

Item 7 (continued)

Interviewer Notes:

- *Note any issues that the participant has with any of the items.*

Probes:

1. Is there anything about any of these items that was confusing or unclear to you?
2. Do any of the items in this question seem redundant or unnecessary?

8. From the items above, which do you consider the most important reason in your decision to leave my previous school?

**Enter the letter from item 7 above.*

Most important reason in my decision to leave

Interviewer Notes:

- *Is there any problem here? Is there any reason that researchers might misinterpret the answer to this question?*

Probes:

1. What would have been your second and third most important reasons, if you had been asked?
[Do these reasons seem comparatively minor, or almost equal in importance to their answer to item 8?]
2. Did the most important reason in your decision to leave appear in the list in item 7? If not, should it have appeared on the list? How should it have been worded?

9. Indicate how effectively your principal or school head performed each of the following at LAST YEAR'S SCHOOL.

**If you are teaching in the same school as you were last year, then report on how effective your principal or school head was last year.*

(The following scale is used for the items below: 1) Not at all effectively, 2) Slightly effectively, 3) Somewhat effectively, 4) Very effectively, 5) Extremely effectively)

- a. Communicated respect for and value of teachers**
- b. Encouraged teachers to change teaching methods to improve student performance/achievement**
- c. Encouraged professional collaboration among teachers**
- d. Worked with teaching staff to solve school or department problems**
- e. Encouraged the use of student assessment results in planning curriculum and instruction**
- f. Worked to develop broad agreement among the teaching staff about the school's mission**
- g. Knew what kind of school he or she wanted and communicated it to the staff**
- h. Counseled-out or dismissed teachers who were not performing at a satisfactory level**

Interviewer Notes:

- *Note the person that the participant is considering to be their "principal or school head"..*

Probes:

1. What does the phrase "not performing at a satisfactory level" in item 9h mean to you? Please explain it in your own words.
2. Is there anything about any of these items that was confusing or unclear to you?
3. Did you have difficulty answering any of these items? If so, why?
4. In your opinion, should the wording of any of these items be changed?

Item 10: Before the participant begins reading item 10, ask the following question:

1. What were the reasons that you decided to leave the field of teaching? (*Record all reasons, in approximate order of importance.*)

Then ask them to complete question 10.

10. Indicate the level of importance EACH of the following played in your decision to leave the position of a K-12 teacher.

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. This year's job is closer to my home.
- b. I (or my partner) was pregnant or needed more time for childrearing.
- c. My health or the health of a loved one required that I leave the profession.
- d. I decided to retire.
- e. I was laid off, involuntarily transferred, or my contract was not renewed.
- f. My previous school was reorganized or closed.
- g. I was dissatisfied with changes in my job description or responsibilities at my previous school.
- h. I wanted better salary or benefits than what I received at my previous school.
- i. I decided to pursue a position other than that of a K-12 teacher.
- j. I decided to take courses to improve career opportunities WITHIN the field of education.
- k. I decided to take courses to improve career opportunities OUTSIDE the field of education.
- l. I was dissatisfied with teaching as a career.
- m. I was dissatisfied with workplace conditions (e.g. facilities, classroom resources, school safety) at my previous school.
- n. I was dissatisfied with the administrator(s) at my previous school (e.g., lack of: communicating respect, encouragement to change teaching methods, working with staff to meet curriculum standards, encouragement professional collaboration).
- o. I did not have enough autonomy over my classroom at my previous school.
- p. I was dissatisfied with opportunities for professional development at my previous school.
- q. I felt job security would be higher at this year's job.
- r. I had an opportunity for a better work assignment at this year's job.
- s. I was dissatisfied with how student assessments, school accountability, or teacher quality measures impacted my teaching at my previous school.
- t. I was dissatisfied with the large number of students I taught in my previous school.

- u. I was dissatisfied with having my compensation, benefits, or rewards tied to the performance of my students in my previous school.**
- v. I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes at my previous school.**
- w. I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at my previous school.**
- x. Student discipline problems were an issue at my previous school.**
- y. I decided to leave teaching for other family or personal reasons.**
- z. I was dissatisfied with my previous school for other reasons not included above.**

Interviewer Notes:

- *Note any issues that the participant has with any of the items.*

Probes:

1. Is there anything about any of these items that was confusing or unclear to you?

2. Do any of the items in this question seem redundant or unnecessary?

11. Of the items above, which do you consider the most important reason in your decision to leave the position of a K-12 teacher?

**Enter the letter from item 10 above.*

☐ Most important reason in my decision

Interviewer Notes:

- *Is there any problem here? Is there any reason that researchers might misinterpret the answer to this question?*

Probes:

1. What would have been your second and third most important reasons, if you had been asked?
[Do these reasons seem comparatively minor, or almost equal in importance to their answer to item 11?]
2. Did the most important reason in your decision to leave appear in the list in item 10? If not, should it have appeared on the list? How should it have been worded?

12a. Do you plan to return to the position of a K-12 teacher at some point in the future?

☐ Yes

☐ No → Go to item 13.

b. When do you plan to return to the position of a K-12 teacher?

**Mark (X) only one box.*

☐ Later this school year (2007-08)

☐ Next school year (2008-09)

☐ After the 2008-09 school year but before the 2012-13 school year

☐ During the 2012-13 school year or later

☐ Timing unknown

Interviewer Notes:

- *Would it be better if 12b listed time periods (“3 to 5 years from now”) rather than specific school years?*
- ***STOP PARTICIPANT FROM CONTINUING TO ITEM 13 (SEE NEXT PAGE)..***

Probes:

1. Is there anything about either of these items that was confusing or unclear to you?

2. *[For those that gave an answer other than “timing unknown” to item 12b]* How sure are you of the timing of your return to teaching?

3. *[For those that answered “Yes” to 2a]* What factors would impact when you decided to return to teaching?

Item 13: *Before the participant begins reading item 13, ask the following question:*

1. What are factors that might influence your decision whether or not to return to the position of a K-12 teacher? (*Record all reasons, in approximate order of importance.*)

Then ask them to complete question 13.

13. Indicate how important each factor would be in influencing your decision to return to the position of a K-12 teacher.

(The items below use the following scale: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

- a. **Ability to maintain your teacher retirement benefits**
- b. **State certification reciprocity (a state's acceptance of teacher certifications from other states)**
- c. **Availability of part-time teaching assignments**
- d. **Forgiveness of your student loans**
- e. **Housing incentives (e.g., subsidies, rent assistance, low interest loans, relocation assistance)**
- f. **An increase in salary**
- g. **Availability of suitable childcare options**
- h. **Ability to enroll own children in your school/system at no or reduced tuition**
- i. **Better benefits package**
- j. **Financial support for certification/recertification/continuing education requirements**
- k. **Availability of teaching assignments in a particular grade or subject field**
- l. **Effective disciplining of students by the principal or school head**
- m. **A better school support network to help me develop or polish my teaching skills**

Interviewer Notes:

Probes:

1. Are there any factors that you would consider to be important that do not appear on this list?

2. Are there any items listed that you believe do not belong on this list?

3. Are there any items that you believe should be reworded?

4. Are there any items that you find confusing or unclear?

14. a. Assuming the same salary schedule you were under when you last taught, would you return to the position of a K-12 teacher if you received a one-time bonus?

☐ Yes

☐ No → Skip item 14b.

- b. What is the lowest amount that you would accept as a one-time bonus to return to the position of a K-12 teacher?

**Report in whole dollars.*

\$, . 00

Interviewer Notes:

- *How thoughtful does participant appear to be when answering item 14b—in other words, how meaningful is their response?*

Probes:

1. Is there anything about either of these items that you found confusing or unclear?
2. [If response to 15a was “Yes”] How did you determine your answer to 14b?
3. [If response to 14a was “Yes”] When answering this question, were you assuming that you would be returning to teaching in your past school, or were you answering for teaching in general? Would that distinction make any difference in your answer? [*In other words, how important was the distinction between this and the following question (item 15)?*]

15. **a. Would you return as a K-12 classroom teacher to the same school where you previously taught if you received a one-time bonus?**

**In instances where returning to your previous school is impossible, please mark “No, not feasible to return to the same school”—for example, if you relocated a great distance from your previous school or if this school closed.*

☐ **Yes**

☐ **No, not feasible to return to the same school → Skip item 15b.**

☐ **No, would not return for to that school for a bonus → Skip item 15b.**

- b. What is the lowest amount that you would accept as a bonus to return to teaching at that school?**

**Report in whole dollars.*

\$, . 00

Interviewer Notes:

- *How thoughtful does participant appear to be when answering Q15b—in other words, how meaningful is their response?*

Probes:

1. Is there anything about either of these items that you found confusing or unclear?
2. *[If response to 15a was “Yes”]* How did you determine your answer to 15b?
3. *[If response to 15a was “Yes”]* In what situations do you think someone might respond in item 16a that returning to their previous school was “not feasible”?
4. *[If response to 15a was either of the “No” options]* Did you have any difficulty determining which of the two “No” options was more appropriate for you?
 - a. If you selected “not feasible,” why is returning to teaching at that school not feasible? Would you have returned for a one-time bonus if it were feasible?

16. What is the LOWEST teaching salary, not including benefits, you would accept to return to the position of a K-12 teacher?

**Report in whole dollars.*

\$, . 00

Interviewer Notes:

- *How thoughtful does participant appear to be when answering—in other words, how meaningful is their response?*
- *What response do participants give if they have no intention of returning to teaching?*

Probes:

1. Is there anything about this item that you found confusing or unclear?
2. How did you determine this answer? (e.g., comparing to salaries in other fields, comparing to your own previous salary as teacher, etc.)
3. When answering this question, were you imagining that you would be returning to teaching in your previous school specifically, or to teaching in general? Would that distinction make any difference in your answer?

17. To what extent do you agree or disagree with each of the following statements about the state assessment program used for measuring Adequate Yearly Progress at LAST YEAR'S SCHOOL?

(The following scale is used for the items below: 1) Strongly agree, 2) Somewhat agree, 3) Somewhat disagree, 4) Strongly disagree)

- a. I did not receive adequate support to prepare my students for the assessments.**
- b. I believe that my students were capable of performing well on the assessments.**
- c. The assessment program influenced the curriculum I taught.**
- d. My students' knowledge and abilities were reflected accurately through their performance on assessments.**
- e. My students' results allowed me to target appropriate professional development for myself.**
- f. My students' results allowed me to identify their specific needs.**
- g. Overall, I was satisfied with the assessment program.**

Interviewer Notes:

Probes:

1. In your own words, can you tell me what item "a" in question 17 is asking?

2. In your own words, can you tell me what item "e" in question 17 is asking?

3. Is there anything about either of these items that you found confusing or unclear?

4. The purpose of question 17 is to get a complete picture of the attitudes of teachers toward state and district assessment programs. With that in mind, are there other items that should be included in question 17?

III. Closing

At the conclusion of the interview, thank the respondent. Confirm their mailing address, so that we can send their stipend. Tell them that they should receive their stipend in 2–3 weeks; if they have not by that time, they should call Shauna Clarke at 301-572-0522 (NOT the 1-866 number, because it will not necessarily still be in service at that time).

Also, ask if we can keep their contact information on file in order to contact them for participation in similar projects in the future.

Appendix E. Second Cognitive Testing of TFS Items: Summary of Findings and Recommendations

This appendix contains a report prepared by Macro International, Inc., and delivered to the U.S. Census Bureau in June 2008. The contents are listed below.

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Summary of Participant Feedback and Recommendations	E-3
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Background

In the spring of 2008, the Census Bureau contracted with Macro International, a research and evaluation company in Calverton, MD, to plan and carry out a series of cognitive interviews with current and former teachers. The purpose of these interviews was to gather feedback on a number of proposed questions for the Teacher Follow-Up Survey (TFS), which is a national survey administered by the National Center for Education Statistics (NCES) and the Census Bureau.

This report is a summary of the feedback that Macro International received from participants, as well as the methodology that was used in conducting the interviews. The report also provides Macro's recommendations for revisions to the proposed TFS items.

Summary of Methodology

Description of Participants

Macro conducted 24 interviews with current and former teachers in the categories shown in table E-1 below.

Table E-1. Description of interview participants

Group	Number of participants
Group 1: Current teachers who are still teaching in the same school they were in last year	6
Group 2: Current teachers who changed schools in the past 2 years	10
Group 3: Former teachers who left the field in the past 2 years	8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Second Cognitive Testing of TFS Items: Summary of Findings and Recommendations.

Within each group, Macro also specifically recruited teachers who had earned their teaching certification through an alternative teacher preparation program. In all, 10 teachers who fit this category were interviewed.

To facilitate recruitment of participants, the Census Bureau provided Macro with a list of teachers randomly selected from the national sample for the 2007–08 Schools and Staffing Survey. Macro then recruited participants by both telephone and e-mail. All participants had been teaching for fewer than five years and represented all school levels (elementary, junior high/middle, and high school). Macro also purposefully recruited teachers from a range of states. Current and former teachers were interviewed from the following states: California, Colorado, the District of Columbia, Florida, Idaho, Maryland, Michigan, New Jersey, Utah, and Virginia.

Interview Protocol

Each interview was 45 to 60 minutes long and was conducted by phone. Prior to each interview, the participant was e-mailed a copy of the proposed items and told to print them out but not to read them. During the interview, participants were asked to answer the proposed TFS questions as they normally would if they answering a survey. As they answered each item, they were asked to “think aloud”—that is, to describe out loud what they were thinking as they read and answered the question. After the respondent had answered an item, the interviewer would then ask appropriate follow-up questions or probes.

A copy of the original protocol is included as an attachment to this report. This version of the protocol contains interview questions for all the items tested. However, not all items were shown to every participant. Each participant was only shown items that they would normally have been asked to answer—for example, item 2 (“How well did your alternative certification program prepare you to be teacher?”) was asked only of respondents who obtained their certification through an alternative certification program.

Summary of Participant Feedback and Recommendations

The following section of this report summarizes the results of this study. For each item, we provide the wording of the question being tested, a list of relevant findings, and then our recommendations for how the item could be improved.

ITEM 1

Last school year (2007–08), how frequently did your master or mentor teacher work with you in the following areas? To what extent did your work in this area improve your teaching?

	Last school year (2007–08), how frequently did your master or mentor teacher work with you in the following areas? <i>*Mark (X) one box on each line. * If you mark “never” in the first column, leave the second column blank.</i>				To what extent did your work in this area improve your teaching? <i>*Mark (X) one box on each line.</i>			
	Never	A few times a year	Once or twice a month	At least once a week	Not at all	To a small extent	To a moderate extent	To a great extent
a. Selecting and adapting curriculum, instructional materials, and/or writing lesson plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Classroom management and discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Using or incorporating a variety of instruction methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Using technology in your classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Assessing students and interpreting assessment data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Teaching your subject matter or grade level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Interacting with parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Reflecting on your teaching practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ITEM 2

How well did your alternative certification program prepare you to be teacher?

** Mark (X) only one box.*

- ☐ Did not prepare me at all
- ☐ Somewhat prepared me
- ☐ Prepared me well
- ☐ Prepared me very well

ITEM 3

For the alternative certification program in which you were enrolled, what was –

a. The length of the training portion provided BEFORE entering the classroom

**Report BOTH months and weeks, e.g., 00 months and 03 weeks, 01 month and 02 weeks, etc.*

**If your alternative certification program required no training before entering the classroom, please mark (X) the box.*

- Months AND Weeks
- ☐ No training before entering the classroom

b. The length of the program

** Do not include any required commitment period to teaching.*

** Report BOTH years and months, e.g., 03 years and 00 months, 01 year and 10 months, etc.*

Years AND Months

c. The length of time required to commit to teaching

** Report the total length of time required.*

** Report BOTH school years and months, e.g., 03 years and 00 months, 01 year and 10 months, etc.*

Years AND Months

☐ No teaching commitment

ITEM 4

a. Did you change schools¹ because your contract was NOT renewed at last year's school?

- ☐ Yes
- ☐ No → GO TO item x below.

b. Which of the following best describes the reason why your contract was NOT renewed?

- ☐ I was laid off as part of a reduction in force
- ☐ I did not meet Highly Qualified Teacher (HQT) requirements
- ☐ My contract was not renewed for other reason(s)

¹ For former teachers, this question was worded, "Did you leave teaching because your contract was NOT renewed...."

ITEM 5

Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR'S SCHOOL.

**Mark (X) one box on each line.*

** If any of the reasons for leaving last year's school do not apply to you, mark 1 for 'Not at all important.'*

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

I left last year's school –

Personal Life Factors

- a. Because I wanted to work in a school more convenient to my home.
- b. Because my health or the health of a loved one required that I change schools.

Assignment and Credential Factors

- c. Because I have not taken or could not pass the required test(s).
- d. Because I was being involuntarily transferred and did not want the offered assignment.
- e. Because I was dissatisfied with changes in my job description or responsibilities at last year's school.
- f. Because I was dissatisfied with the grade or subject I taught in last year's school.

Salary and Other Job Benefits

- g. Because my salary did not allow me to meet my financial obligations (e.g., rent, loans, credit card payments)
- h. Because I needed better benefits than what I received at last year's school.
- i. Because I wanted a higher standard of living than what my salary provided.
- j. Because I was concerned about job security at last year's school.

Classroom Factors

- k. Because I did not have enough autonomy over my classroom at last year's school.
- l. Because I was dissatisfied with the large number of students I taught in last year's school.
- m. Because I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes in last year's school.
- n. Because I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at last year's school.

School Factors

- o. Because I was dissatisfied with opportunities for professional development at last year's school

ITEM 5 (continued)

- p.** Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.
- q.** Because student discipline problems were an issue at last year's school.
- r.** Because I was dissatisfied with administrator(s) at last year's school
- s.** Because I was dissatisfied with the lack of recognition or support I received from the administration.
- t.** Because I was dissatisfied with the lack of influence I had over school policies and practices.

Student Performance Factors

- u.** Because I was dissatisfied with how student assessments and school accountability measures impacted my teaching at last year's school.
- v.** Because I was dissatisfied with having some of my compensation, benefits, or rewards tied to the performance of my students in last year's school.
- w.** Because I was dissatisfied with support received for preparing my students for student assessments.
- x.** Because I was dissatisfied with the influence student assessments had on the curriculum at my school.
- y.** Because I was dissatisfied with other aspects of accountability measures not included above.
- z.** Because I decided to leave last year's school for other reasons not included above. → *Specify*

ITEM 6

Has there been a change in the principal/school head in your school since the 2007–08 school year?

- ☐ Yes
☐ No

ITEM 7

In general, how satisfied are you as a teacher?

**Mark (X) only one box.*

- ☐ Very satisfied
☐ Somewhat satisfied
☐ Somewhat dissatisfied
☐ Very dissatisfied

ITEM 8

Overall, to what extent has the mentor program improved your current teaching experience during the current school year?

**Mark (X) only one box.*

- ☐ Not at all
☐ To a small extent
☐ To a moderate extent
☐ To a great extent

ITEM 9

- a. Which of the following best describes the majority of your work history prior to becoming a K-12 teacher?

- ☐ Never worked → GO TO item x below.
- ☐ Worked as a homemaker/parent → GO TO item x below.
- ☐ Part-time/temporary jobs while going to school and/or looking for work → GO TO item x below.
- ☐ Job(s) or career(s) in a field(s) related to teaching
- ☐ Job(s) or career(s) in a field(s) not related to teaching

- b. In your primary job or career prior to becoming a K-12 teacher, what kind of work did you do, that is, what was your occupation?

**Please record your most recent job title; for example, plumber, typist, or farmer.*

- c. What were your most important activities or duties at this job?

**For example, typing, keeping account books, filing, selling cars, operating printing press, laying brick*

- d. How many years did you spend in this occupational field?

**Please round to the nearest year*

Years

ITEM 10

- a. Including yourself, how many people did you (and your spouse/partner) support between July 1, 2008 and June 30, 2009?

**Please include yourself, your spouse/partner, and your spouse/partner's children who received more than half of their support from you.*

**Also include any other people, including your parents, who received more than half of their support from you.*

/ / / People

- b. How many of these dependents are-

- ☐ yourself?
- ☐ your spouse/partner?
- ☐ your parents?
- ☐ less than 5 years old?
- ☐ at least 5 years old but less than 18 years old?
- ☐ 18 years of age or older (excluding yourself, spouse/partner, and parents)?

ITEM 11

What is your current MAIN occupational status?

**Mark (X) only one box.*

- ☐ Working in a position in the field of K-12 education, but not as a K-12 classroom teacher → GO TO item 1 below.
- ☐ Working in a position in the field of preK or postsecondary education → GO TO item x below.
- ☐ Working in an occupation outside the field of education, including military service → GO TO item x below.
- ☐ Student at a college or university
- ☐ Caring for family members
- ☐ Retired
- ☐ Disabled
- ☐ Unemployed and seeking work → GO TO item x on page x.
- ☐ Other – Specify → _____

1a. Is your current main occupation a –

** Mark (X) only one box.*

** If you have more than one position, mark the position for which you spend the most time.*

- ☐ Principal/school head/dean
- ☐ Assistant principal
- ☐ School district administrator
- ☐ Librarian
- ☐ Library technician
- ☐ Audio-visual collections specialist
- ☐ Instructional coordinator
- ☐ Teacher assistant
- ☐ Counselor or school psychologist
- ☐ Short-term substitute
- ☐ Teacher aide
- ☐ Other occupation → *please specify* _____

ITEM 12

Indicate the level of importance EACH of the following played in your decision to leave the position of a K-12 teacher.

**Mark (X) one box on each line.*

** If any of the reasons for leaving teaching do not apply to you, mark 1 for 'Not at all important.'*

(The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important)

I left the position of a K-12 teacher –

Personal Life Factors

- a. Because I wanted to take a job more convenient to my home.
- b. Because I was pregnant or needed more time to raise my child(ren).
- c. Because my health or the health of a loved one required that I leave the profession.
- d. Because I decided it was time to retire.

Assignment and Credential Factors

- e. Because I have not taken or could not pass the required test(s).
- f. Because I was being involuntarily transferred and did not want the offered assignment.
- g. Because I was dissatisfied with changes in my job description or responsibilities at last year's school.
- h. Because I was dissatisfied with the grade or subject I taught in last year's school.

Salary and Other Job Benefits

- i. Because my salary did not allow me to meet my financial obligations (e.g., rent, loans, credit card payments)
- j. Because I needed better benefits than what I received at last year's school.
- k. Because I wanted a higher standard of living than what my salary provided.
- l. Because I was concerned about my job security at last year's school.

Other Career Factors

- m. Because I decided to pursue a position other than that of a K-12 teacher.
- n. Because I was dissatisfied with opportunities for professional development at last year's school.
- o. Because I decided to take courses to improve career opportunities WITHIN the field of education.
- p. Because I decided to take courses to improve career opportunities OUTSIDE the field of education.
- q. Because I was dissatisfied with teaching as a career.

ITEM 12 (continued)

Classroom Factors

- r. Because I did not have enough autonomy over my classroom at last year's school.
- s. Because I was dissatisfied with the large number of students I taught in last year's school.
- t. Because I did not feel prepared to mainstream special needs (e.g., disabled) students in my regular classes in last year's school.
- u. Because I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at last year's school.

School Factors

- v. Because I was dissatisfied with workplace conditions (e.g. facilities, classroom resources, school safety) at last year's school.
- w. Because student discipline problems were an issue at last year's school.
- x. Because I was dissatisfied with the administrator(s) at last year's school.
- y. Because I was dissatisfied with the lack of recognition or support I received from the administration.
- z. Because I was dissatisfied with the lack of influence I had over school policies and practices.

Student Performance Factors

- aa. Because I was dissatisfied with how student assessments and school accountability measures impacted my teaching at last year's school.
 - bb. Because I was dissatisfied with having some of my compensation, benefits, or rewards tied to the performance of my students in last year's school.
 - cc. Because I was dissatisfied with support received for preparing my students for student assessments.
 - dd. Because I was dissatisfied with the influence student assessments had on the curriculum at my school.
 - ee. Because I was dissatisfied with other aspects of accountability measures not included above.
 - ff. Because I decided to leave teaching for other reasons not included above → *Specify*
-

ITEM 13

a. Did you apply for the position of a K-12 teacher for the 2008–09 school year?

- ☐ Yes → GO TO item x on page x.
☐ No
☐ I'm on leave from last year's school (e.g., on maternity or paternity leave, disability leave, or on sabbatical) → GO TO item x on page x.

b. Which of the following factors influenced your decision NOT to apply for the position of a K-12 teacher for the 2008–09 school year?

	Yes	No
a. I already had a short-term substitute or teacher aide position	<input type="checkbox"/>	<input type="checkbox"/>
b. I was not interested in continuing a career in K-12 teaching	<input type="checkbox"/>	<input type="checkbox"/>
c. I wanted to pursue more education	<input type="checkbox"/>	<input type="checkbox"/>
d. I was not ready to apply	<input type="checkbox"/>	<input type="checkbox"/>
e. No classroom positions were available locally in my subject area	<input type="checkbox"/>	<input type="checkbox"/>
f. None of the available positions interested me	<input type="checkbox"/>	<input type="checkbox"/>
g. I wanted a position outside the classroom in an elementary or secondary school	<input type="checkbox"/>	<input type="checkbox"/>
h. I wanted to pursue an occupation outside elementary and secondary schools	<input type="checkbox"/>	<input type="checkbox"/>
i. I have not taken or could not pass the required test or I am not yet certified	<input type="checkbox"/>	<input type="checkbox"/>
j. Other reason not specified above	<input type="checkbox"/>	<input type="checkbox"/>
If yes → <i>please specify</i> _____		

Findings:***Instructions & Layout***

- Three respondents did not realize that the table had two sections and that for each row they were asked to check one box in each of the two sections. Two of the three did not answer the second section that asked respondents to indicate the extent to which their work improved. The third individual treated the scale for the two sections, as one large scale going from “Never” to “To a great extent.”
- Two respondents were confused with the instructions on the second section of the table. They were not sure if the question referred to the extent to which their mentors improved their teaching, or if the question was asking how their teaching improved in general.
- Four respondents had a difficult time understanding which mentor should serve as their point of reference in order to answer the question. Although one respondent could identify two teachers who mentored him during his first year as a teacher, he was not sure if he was ever assigned an official mentor. Another respondent had two mentors, one provided through her school district and the other through her alternative certification program. The two other respondents were assigned official mentors, but also had other colleagues who they interacted with more frequently who mentored them. In one of these cases the respondent referenced their officially assigned mentor when answering the question. In the other case, the respondent answered each question based on which mentor (colleague or official) provided the most help in that area.
- Two respondents pointed out that there was a gap in the scale. They said that in some areas they interacted with their mentor less than once a week, but more than once or twice a month. Both finally selected once or twice a month.
- Two teachers initially had difficulty identifying the frequency with which their mentors interacted with them, as the frequency of interaction changed throughout the year. In the beginning of the year, their mentor met with them frequently, but as the school year progressed they met less frequently. Both respondents appeared to make their selection based on how often they met with their mentor at the start of the year.
- As respondents went through the list, two became slightly confused and appeared to answer some questions based on their own activity, rather than how often mentors met with them with regard to that activity. For example, instead of estimating how often their mentor met with them about interacting with parents, they instead noted how often they themselves interacted with parents.

Responses

- *Item (d):* One respondent was confused with this item as she was not clear about the type of technology the question referenced. She questioned whether it meant her use of technology such as using SMART boards, or her students’ use of technology such as using computers. She based her response on her students’ technology use, not her own.
- *Item (e):* One respondent was unsure of how to answer this question. She felt that although her ability to assess and interpret data improved, this was not due to her mentor, but to other colleagues. In answering this question, she therefore referenced her other mentors. In other items she referenced her assigned mentor.
- *Item (f):* Two respondents thought this item was awkward, because they felt that this item was an “umbrella” term that captured all the other items. Two additional respondents had a difficult time differentiating between this item and item a.
- *Item (h):* Two respondents were unsure what the word “reflect” meant. One questioned whether it meant journaling; while another thought it meant looking at yourself and deciding what you need to improve on. With school administration.

- One respondent recommended that two items be added to the list. One that referenced differentiation (teaching or managing students with varying learning styles and abilities), and another that referenced interaction with the school administration.

Recommendations:

- Ensure that the layout of the table is clear so that respondents recognize there are two separate questions being asked.
- Clarify in the instructions whether respondents are to consider only officially assigned mentors, or whether they are also to consider other teachers that may have provided support. In addition, clarify whether respondents should reference their school mentor or their teacher preparation program mentor. (Note: This may also be clarified through lead-in questions that were not tested as part of this project.)
- Revise the second part of the question (“To what extent...”) to emphasize that respondents are only to address the extent to which interactions with their mentor improved their practice, rather than the extent to which their practice generally improved.
- Consider changing “Once or twice a month” to “One to three times a month”.
- Consider removing or modifying item (f).
- Consider adding an item that asks about differentiation: teaching or managing students with varying learning styles and abilities.
- Consider adding an item that asks about interacting with the school administration.

ITEM 2

Findings:

- Six respondents reviewed this question. The majority thought that although the program staff did their best to prepare them, there was no program that can truly prepare you for the classroom. One respondent thought the program qualified him to teach but did not prepare him skill-wise.
- Two respondents were concerned that the question sounded judgmental. They were concerned that the question insinuated that a program was either good or bad. These respondents felt that the issue was more complex and they didn’t want their answer to reflect that their program was not doing a good job.

Recommendations:

- Depending on the intent of the question, consider re-wording it as follows:

How effective was your alternative certification program at developing the skills you needed to become a classroom teacher?

** Mark (X) only one box*

☐ Very effective
☐ Somewhat effective
☐ Not at all effective

ITEM 3

Findings:

- In general, this was a difficult question for respondents to answer—most found some aspect of the question confusing.
- *Item (a)*: Most respondents could identify the length of the training portion of their program before entering the classroom. For some respondents this was an estimate (one respondent stated

he could be off by about 3 weeks), other respondents could accurately record the length of the training. Most respondents said their training took 6-8 weeks.

Two respondents were teachers' aides in summer school while also participating in the training that was required before entering their classroom in the fall. After thinking about this question, these teachers decided not to include the summer teaching commitment in their response.

- *Item (b)*: The phrase that confused respondents was "required commitment to teaching." Two respondents were not sure if their program had a "required commitment to teaching." Another teacher said that the length of the program was the "required commitment to teaching." Three teachers were unsure if they should include the training in which they participated before entering the classroom in the length of the program. Some teachers did include this training, some did not.
- *Item (c)*: Again respondents had difficulty identifying the "required commitment to teaching." One respondent said his required commitment was 5 years. When probed, he said this was the time after which teachers could leave the school and receive a bonus for their service. If teachers left after 2 years, they would not receive a bonus. Another respondent stated that her 2 year program was the required commitment, and so entered 2 years in part (a) and also in part (b). One respondent, who also made a similar claim, instead entered 2 years for part (a) and 0 for part (b) and checked "No commitment."
- *Item (c)*: One respondent stated that changing the reporting scale in part (c) to school years (instead of years and months) would make answering this question easier, as all required teaching commitments are normally stated in school years.

Recommendations:

- Clarify what is meant by "length of program." For example, indicate whether or not time spent student teaching should be included.
- Clarify what is meant by "required commitment to teaching"—for example:
"Teaching required by your program AFTER completing all coursework required by your state to apply for a standard or traditional teaching license/certificate. If you were not required to teach after receiving your certification, check "No teaching commitment".

ITEM 4

Findings:

- Only one respondent, of the 12 who reviewed this item, answered yes to this question. She was laid off as part of a reduction in force.
- Three respondents thought that a teacher may not know the real reason his/her contract was not renewed.
- One current teacher was not clear on what the "Highly Qualified Teacher (HQT) requirements" were. While a description of HQT requirements was provided in the version of the question that was given to former teachers, this description was not in the form shown to current teachers.

Recommendations:

- Include a description of HQT requirements in all versions of this question.

ITEM 5

Findings:

- Two respondents left items blank that did not apply to them, even though the instructions indicated to place a "1" beside those items.
- *Item (k)*: Two respondents did not know what the word "autonomy" meant. One thought it meant "something to having to do with control." It is not clear what the other respondent (a teacher with English as her second language) thought this word meant.
- *Item (l)*: One respondent questioned what would be considered a "large number" of students.

- *Item (s)*: One respondent perceived recognition and support to be two different things. One she would give a rating of 5 and the other a rating of 3. Consequently she gave a combined rating of 3.
- *Item (z)*: Two respondents provided an “other” reason that they changed schools. In both cases, their reason was that they moved to another city or state.
- *Item (z)*: One participant was confused as to whether item z referenced other “student performance factors” not included above, or any other reason not included in any of the items.

Recommendations:

- Consider modifying item (z), *“Because I decided to leave last year’s school for other reasons not included in items a-y above.”*

ITEM 6

Findings:

- All respondents thought this question was clear, and that teachers in general would know if their principal changed.

Recommendations:

- No changes are necessary for this item.

ITEM 7

Findings:

- Three of 10 respondents who reviewed this question appeared to have difficulty identifying their level of satisfaction. This difficulty was due to the fact they experienced varying levels of satisfaction based on the aspect of their teaching life they were contemplating.
- Four respondents recommended the question be broken down to address specific aspects of teaching such as curriculum, school facility, and administration.

Recommendations:

- No changes are necessary for this item.

ITEM 8

Findings:

- Most respondents did not have any difficulty answering this question. However, one respondent was unclear as to whether he was in an “official” mentor program

Recommendations:

- No changes are necessary for this item.

ITEM 9

Findings:

- Eight of the 16 respondents who reviewed this question had no difficulty answering it.
- One respondent listed the job he was in before becoming a K-12 teacher as teaching. This was because he was teaching overseas before coming back to the US to obtain his certification.
- Another respondent answered “job related to teaching” for item ‘a’ because of her student teaching experience in college. She indicated in part (d) that she has been teaching for 3 years, but she was referring to the 3 years that she has been teaching since she graduated from college.
- One respondent worked as a delivery truck supervisor for 9 years while attending school. Although he considered this a temporary job, for item ‘a’ he selected “job not related to teaching” because other people in that position might have considered it a job or career.
- One respondent was not clear how to answer this question because she worked at a department store part-time but was also a substitute teacher. She was not sure which one represented the

majority of her work history. She eventually selected “job not related to teaching”. Interestingly, during the time she was working she was also a student, but she did not think to check “part-time or temporary job while going to school”.

- Only one respondent had difficulty describing the important activities or duties of his/her occupation (part c). This was because he/she had been an executive assistant, and did a variety of tasks.

Recommendations:

- Reword the instructions associated with part (b). Currently, the item asks teachers to record their primary job or career prior to becoming a K-12 teacher, but the instructions below this sentence ask them to record their “most recent job title”. These may be contradictory—for example, the majority of a respondent’s work history may be in banking, but they may have substitute taught the previous year.
- Note in the directions that respondents are not to consider student teaching in their answers to this item.

ITEM 10

Findings:

- Seven of the ten respondents were able to answer this question correctly.
- One respondent answered part (a) correctly, but instead of putting numbers in part (b), he put check marks beside the various categories. Because he was identifying himself, his spouse, and one child, the appropriate responses could be easily derived. Another began using check marks, but realized his mistake when he encountered a category for which the answer was ‘2’.
- Another respondent answered 0 in part (a) and on all lines of part (b), not recognizing that he should count himself.
- One respondent was confused as to whether he should include his spouse, as he does not consider his spouse a dependent.

Recommendations:

- Simplify the directions for the item as follows: *“Please include yourself, your spouse/partner, and anyone who received more than half their support from you, including children and parents”*
- Do not use the word “dependent” in the question, because people find it confusing. In particular, do not use this word in part (b) of the question if it was not used in part (a) because some respondents may not realize that both items are asking about the same group of people.
- Consider combining parts (a) and (b) and pre-printing a “1” on the “yourself” line, so that respondents know they are to write numbers in the blanks. For example,

Including yourself, how many people did you (and your spouse/partner) support between July 1, 2008 and June 30, 2009?

**Please include yourself, your spouse/partner, and anyone who received more than half their support from you including children and parents.*

- 1 yourself?
- your spouse/partner?
- your parents?
- children less than 5 years old?
- children at least 5 years old but less than 18 years old?
- other people 18 years of age or older (excluding yourself, your spouse/partner, and your parents)?

ITEM 11

Findings:

- Most respondents had no difficulty with this question and were able to select the most appropriate options for their situation. The exception was one respondent who selected “Working in an occupation outside the field of education” AND “unemployed or seeking work” as she is currently an independent contractor seeking work. Although she understood that the instructions required that only one box be checked, she did not think that one box could define what she did.
- Some respondents were unsure what it meant to be working “in the field of K-12 education”. One respondent who selected this option worked in the field of museum education. Another worked in a marketing role for a publishing company that produces K-12 material.
- Additional positions that respondents thought should be included in the list of K-12 occupations were: paraprofessional, technology coordinator/facilitator, and special education teachers/coordinators.

Recommendations:

- Depending on the intent of the item, consider clarifying what is meant by working in the field of K-12 education. For example *“Working for a school or school district in a position in the field of K-12 education, but not as a K-12 classroom teacher”*.

ITEM 12

Findings:

- *Items (dd) and (ee)*: One respondent was not sure if these questions were referring to assessments and accountability measures at the state or district level. She selected a 1 for this question as she was not sure what was being asked.
- *Item (ff)*: One respondent was unclear whether item ff was referring to any other student performance reasons, or any other reasons in general.
- Another respondent felt that one option missing under personal life factors was “Emotional and mental stress or pressures associated with teaching,” which was her primary reason for leaving.

Recommendations:

- No changes are necessary for this item.

ITEM 13

Findings:

- All respondents thought this question was clear and could easily identify the items that best fit their situation.
- One respondent checked under “yes” the items that applied to him, but failed to check “no” for the items that did not.
- Another respondent suggested including removing one column of check boxes and converting the question to one that instructed respondents to “check all that apply.”

Recommendations:

- No changes are necessary for this item.

Attachment E-1. Interview Protocol

Note: The question numbers used in this protocol do not match the numbers used in the body of Macro's report of findings.

NCES Teacher Follow-up Survey Interview Protocol

I. Introduction

“Thank you for agreeing to be interviewed for this project. My name is _____, and I work for Macro International, an independent company that has been hired by the U.S. Department of Education to conduct this study. We will be asking you to help revise and improve a questionnaire called the Teacher Follow-Up Survey. This is a survey that the Department of Education administers to teachers and former teachers every four years.

“During this interview I am going to ask you to read and answer a number of questionnaire items, one at a time. As you go through the questions, I would like you to explain what you are thinking out loud, so I can get a sense of your thought process as you answer each item. For example, if you are trying to decide what your answer is, please explain why you are unsure. If you have trouble understanding a question, or are confused by it, please be sure to explain that to us as well.

“The feedback you provide in this interview will be completely anonymous. In our report to the Department of Education, we will not connect anyone’s comments with their name. The feedback that we collect will have a direct impact on the design of next year’s survey, so please open and honest in your comments.

“Do you have any questions before we begin?”

Following this introduction, interviewers were instructed to go through the appropriate questionnaire items with the participant. As the participant answered each item, the interviewer recorded their answers on the sheet. If they hesitated while answering or reading a question at any point, the interviewer asked them to explain why.

In each case, the interviewer allowed the participant to complete the entire question series before asking any follow-up or probe questions, or providing any clues as to the purpose or meaning of the question. After the series is completed, the interviewer then went back and asked the following follow-up questions for each item:

Item 1 (TFS-2L & TFS-3L: Mentor teacher support)

- What do you think of the way this question is laid out in table format? Is it confusing? Is it clear that you are to select TWO boxes for each area of teaching?
- Are the areas and response options easily and consistently understood? (Is there a clear distinction between the items?)

Item 2 (TFS-2L & TFS-3L: Preparation by Alternative Certification program)

- NCES defines an alternative certification program as a program that is designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative certification program. Is this what you have always understood an alternative certification program to be?
- Did you have a difficulty selecting from the response options?
- Why did you select the response option you did?

Item 3 (TFS-2L & TFS-3L: Length of Alternative Certification program)

- In your response to part A, did you only include training prior to beginning your teaching position?
- For part A, how difficult was it to remember and accurately report weeks and months? Was your answer here just a guess? If so, about how far off from the correct answer do you think you could be?
- For part B, what does “Required commitment to teaching” mean to you? Did you have any difficulty differentiating between this commitment and the length of your program?
- For part B, does the time you entered include all training you received before and after entering the classroom until the program’s requirements were met? Was the time frame you entered just a guess or is it accurate? Would it make sense to just ask for years instead of years and months?
- For part C, was the time frame you entered just a guess or is it accurate? Was it difficult to report this information?

Item 4 (TFS-2L & TFS-3L: Contract not renewed)

- Was there anything about the questions or options that were unclear or could be conceived by someone else as unclear?

Item 5 (TFS-3L: Factors influencing change school decision)

- How difficult was it to rate your reasons using the scale?
- Were any of the items unclear?
- Were any of them not relevant reasons that teachers would leave teaching?
- How difficult was it to stay focused as you went through the list? (*Were you still reading through the items carefully, or did you begin to just scan? If you were doing this in private, would you carefully read and answer each item?*)

Item 6 (TFS-3L: Change in principal/school head)

- Do you think all teachers would be aware of whether or not a change in their principal or school head had occurred?

Item 7 (TFS-3L: Satisfaction as a teacher)

- How are you defining satisfied when you answer this question?
- Do you think this question needs to be more specific? If so, how could this question be modified?

Item 8 (TFS-3L: Mentor program impact on teaching)

- What factors did you consider as you thought about this question?
- How difficult was it to come up with a rating?

Item 9 (TFS-2L & TFS-3L: Work history prior to teaching)

- Are the response options clear and comprehensive? Did you have any difficulty selecting an option?
- Did you have any difficulty identifying your primary job/career?
- Did you have any difficulty describing your duties?
- For part D, how easy was it to figure out the number of years you spent in this occupation? Is this an accurate number or just a guess? If it is a guess, by how many years may you be off?

Item 10 (TFS-2L & TFS-3L: Number of people supported)

- How difficult was it to determine who would qualify as someone being supported?
- How difficult was it to classify each of those individuals into one of the groupings provided?

Item 11 (TFS-2L: Main occupational status)

- How easy was it to classify your current occupational status using the selection provided?
- Do you think the list is comprehensive? Is there anything that should be added?

Item 12 (TFS-2L: Factors influencing decision to leave teaching)

- How difficult was it to rate your reasons using the scale?
- Were any of the items unclear?
- Were any of the items not relevant reasons that teachers would leave teaching?
- How difficult was it to stay focused as you went through the list? (*Were you still reading through the items carefully, or did you begin to just scan? If you were doing this in private, would you carefully read and answer each item?*)

Item 13 (TFS-2L: Applying for teaching position next year)

- Do you think former teachers who are on leave would have a difficulty or be confused by this question?
- Are all of the response options clear and relevant?

Appendix F. Cognitive Testing of Proposed Items for BTLS: Summary of Findings and Recommendations (2009)

This appendix contains a report prepared by ICF Macro, and delivered to the U.S. Census Bureau in August 2009. The contents are listed below.

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Background

In the spring of 2009, the Census Bureau contracted with ICF Macro, a research and evaluation company in Calverton, Maryland, to plan and carry out a series of cognitive interviews with current teachers in K–12 schools. The purpose of these interviews was to gather feedback on a number of proposed questions for the Beginning Teacher Longitudinal Survey (BTLS), which is a national survey that will be administered for the first time during the 2009–10 school year by the National Center for Education Statistics (NCES) and the Census Bureau.

This report is a summary of the feedback that ICF Macro received from participants, as well as the methodology that was used in conducting the interviews. The report also provides ICF Macro’s recommendations for revisions to the proposed BTLS items.

Summary of Methodology

Research Timeline

The interviews were carried out in two separate phases. The first phase focused on testing a set of 17 items with teachers who had returned to teaching after a short time away from the field. The second phase tested an additional nine items with teachers who had either (a) served as a mentor teacher or (b) taught at a school affected by a reduction-in-force.

The first phase of interviews began in May, and findings were presented to NCES and the Census Bureau on June 16. The second phase began in early June, and ICF Macro presented findings on July 7.

Description of Recruiting Process

To facilitate recruitment of participants, the Census Bureau provided ICF Macro with a list of schools that were included in the sampling frame of the Schools and Staffing Survey (SASS), but had not been sampled for SASS. ICF Macro then created a stratified random list of schools by region and grade level, and researched the names and e-mails of five teachers in each school using the school’s online website. If a school did not have a website, the school was removed from the sample and replaced with another school in the region. The five teachers in each school were then sent an e-mail, which indicated that they should forward the message to any colleagues who they believed might be qualified to participate in the study. To qualify for the first phase of the study, teachers had to be current K–12 teachers, have left teaching for 3 years or less, and returned to teaching within the last 4 years.

To qualify for the second phase, teachers had to be current K–12 teachers and have either (a) served as a mentor teaching or (b) taught at a school affected by a reduction-in-force.¹

In addition to using the list provided by the Census Bureau, e-mail invitations were sent to an ICF Macro internal database of educators. The e-mail sent to these participants also asked them to forward the message to colleagues who they thought might qualify for the study.

¹ The recruiting criteria were later updated to also require that participants have less than 3 years of teaching experience.

Description of Participants

During the first phase of research, ICF Macro conducted a total of 16 interviews with returning teachers. Seven of these teachers taught at the high school level, four at the middle school level, two at the elementary/middle level, and three at the elementary level. Five of the 16 teachers had been teaching for 3 years or less. Participants represented eight states: California, Georgia, Louisiana, Maryland, New Jersey, Pennsylvania, South Carolina, and Virginia.

During the second phase, ICF Macro conducted interviews with 12 additional teachers. Of these teachers, all but one had experience as a mentor teacher, and five had taught at a school that had experienced a reduction in force. Five taught at the high school level, one at the middle school level, and six at the elementary level. Eight states were represented (California, Connecticut, Georgia, Maryland, Massachusetts, New Jersey, North Carolina, and Virginia), as well as the District of Columbia.

Structure of Interviews

Each interview was approximately 45 minutes long and was conducted by phone. Prior to each interview, the participant was e-mailed a copy of the proposed items and told to print them out but not to read them. During the interview, participants were asked to answer each of the proposed items as they normally would if they were answering a paper survey. As they answered each item, they were asked to “think aloud”—that is, to describe out loud what they were thinking as they read and answered the question and point out anything that surprised or confused them. After the participant had answered a set of items, the interviewer would then ask a series of follow-up questions or probes, as well as asking for clarification of responses as necessary. If a skip pattern caused a participant not to respond to an item, he or she was later asked to review the item and provide feedback. A copy of the protocols for the two phases of the study are included as attachments F-1 and F-2 to this report.

Summary of Participant Feedback and Recommendations

The following section of this report summarizes the results of this study. For each item, we provide the wording of the question being tested, a list of relevant findings, and then our recommendations for how the item could be improved.

First Phase of Testing

(May/June 2009)

ITEM 1

You were teaching in [school] during the 2007–08 school year. Did you return to that school?

☐ Yes → GO TO Item 2.

☐ No → GO TO Item 3 below.

Findings:

- All respondents thought this question was clear.

Recommendations:

- No changes are necessary for this item.

ITEM 2

Have there been any changes in your current school, such as a change in name, location, or grades offered?

☐ Yes → GO TO Item 5 below.

☐ No → GO TO Item 5 below.

Findings:

- Almost all the teachers who answered this question thought it was clear. One teacher hesitated in answering this question as she wasn't sure if the question referred to a change in grade levels or in the grading system. She eventually decided the question referred to grade levels.
- Only one teacher answered this question incorrectly. She responded "Yes" to this question even though there had been no changes in grade levels offered at her school. She incorrectly thought the question was asking if there had been any changes in the grade levels she taught.

Recommendations:

- Change the word "grades" to "grade levels"—"Have there been any changes in your current school, such as a change in name, location, or grade **levels** offered?"

ITEM 3

Are you currently teaching in the SAME STATE as you were during the 2007–08 school year?

☐ Yes → GO TO Item 4.

☐ No → GO TO Item 4.

Findings:

- All respondents thought this question was clear.

Recommendations:

- No changes are necessary for this item.

ITEM 4

Which of the following describes the change from your 2007–08 school to your current school? (For this question, all charter and Bureau of Indian Education [BIE]-funded schools are considered public schools.)

*Mark (X) only one box.

☐ Moved from a PUBLIC school to another PUBLIC school in the SAME SCHOOL DISTRICT.

☐ Moved from a PUBLIC school to another PUBLIC school in a DIFFERENT SCHOOL DISTRICT.

☐ Moved from a PUBLIC school to a PRIVATE school.

Findings:

- Almost all respondents who answered this question thought it was clear. One teacher was confused about whether a charter school was a public school, and did not see the sentence in the question that addressed this issue. As this teacher had never taught at a charter school, her misunderstanding did not affect the accuracy of her response.

Recommendations:

- No changes are necessary for this item.

ITEM 5

Indicate the level of importance EACH of the following played in your decision to return to the position of a preK-12 teacher. *Mark (X) one box on each line.

The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important

If any of the reasons for returning to teaching do not apply to you, mark “1” as not at all important.

I returned to the position of a preK-12 teacher:

	1	2	3	4	5
a. Because I had a change in residence or wanted to take a job more convenient to my home.					
b. Because my maternity/paternity leave ended or I no longer needed to stay at home with my children.					
c. Because my health or the health of a loved one no longer required me to be out of teaching.					
d. Because I decided I was not ready to stop teaching.					
e. Because I passed the required test(s).					
f. Because I was offered the grade level or subject area that I wished to teach.					
g. Because I needed the income to meet my financial obligations (e.g., rent, loans, credit card payments).					
h. Because my current school or district offered at least partial forgiveness of my student loans.					
i. Because I needed the health benefits.					
j. Because I wanted the retirement package.					
k. Because I could continue receiving my teacher retirement benefits.					
l. Because I was given a housing incentive by my current school.					
m. Because I wanted a higher standard of living than my household income provided.					
n. Because I wanted job security.					
o. Because I decided to pursue a preK-12 teaching position as a career.					
p. Because I completed the coursework I was pursuing.					
q. Because a part-time teaching assignment became available.					
r. Because I liked the school schedule/calendar.					
s. Because I obtained a position in a school with desirable characteristics.					
t. Because I was able to maintain my seniority.					
<i>Other factors</i>					
u. Because of other factors not included in previous items a–t → <i>please specify:</i>					

Findings:

Instructions and Layout

- The instructions for the question asked respondents to select “1” if a particular reason did not apply to them. However, two respondents commented that assigning the value of “1” to two different values (“not at all important”, and “does not apply”) seemed inappropriate.

Individual Items

- Part (d): Respondents thought this question meant that an individual took a break from teaching and now wanted to return.
- Part (i): Respondents understood this item, and did not feel it was too specific. They felt that other important teacher benefits, including retirement benefits and the school schedule/calendar, were already covered in other parts of the question.
- Part (j): All respondents understood that this question referred to the desirability of the state’s retirement package for future use.
- Part (k): Only half (8) of all respondents understood that this question was intended for teachers who officially retire but then come back to teach in some capacity. Four respondents were not currently receiving retirement benefits, but provided a rating for this factor greater than 1 (which was clearly not what the item intended).
- Part (l): All respondents understood the term “housing incentive.”
- Part (m): Respondents understood this question to mean that they wanted additional income above and beyond what they require to meet their basic financial obligations. They saw this part of the question as being distinct from part (g).
- Part (o): Respondents thought this question referred to an individual who left teaching to pursue another career, who now decided to return to teaching to pursue it as a career.
- Part (r): Respondents had no difficulty with this item. When asked what they thought were the aspects of the school schedule/calendar being referenced, they mentioned the time off during school breaks and the early end to the school day.
- Part (s): Respondents had no difficulty with this item. When asked what characteristics they thought of when they saw the term “desirable characteristics,” they mentioned the location, type of students, and characteristics of their administration, colleagues, and students’ parents.
- Part (t): Respondents had different ideas of what “seniority” meant. About half of all respondents stated that seniority was related to pay scale, while the other half associated seniority with privileges given to teachers who have been at a school for a long time (e.g., selecting their own class).

- It was not clear that participants distinguished between parts (d) and (o) when answering the question. In 9 of 16 interviews, respondents gave the same ratings to parts (d) and (o). The situations of these 9 respondents are as follows:

Had always planned to return

- This respondent returned to teaching after taking sick leave. She rated both (d) and (o) as 5. Her most important reason for returning was listed as (i).
- This respondent always planned to return to teaching when your youngest child started kindergarten. She rated both (d) and (o) as 5. Her most important reason for returning was listed as (b).
- This respondent planned to return to teaching after completing her Master's. She rated both (d) and (o) as 5. She rated her most important reason for returning as (o).
- This respondent returned to teaching as had she finished her graduate work and wanted to get additional teaching experience so she could move into administration. She rated both (d) and (o) as 4. Her most important reason for returning was listed as (u) (in which she explained exactly why she wanted teaching experience).

Changed mind about leaving teaching

- This respondent left teaching to go back to her work as a magazine editor. While there she realized she missed teaching. She rated both (d) and (o) as 5. Her most important reason for returning was listed as (d).
- This respondent left teaching to be in politics, but returned to teaching because she felt "dead-ended." She rated both (d) and (o) as 4. Her most important reason for returning was listed as (d).
- This respondent returned to teaching after trying to pursue another career. He rated both (d) and (o) as 4. He rated his most important reason for returning as (r). When probed, he said he would change his answer to (d).

Other reasons

- This respondent moved to be closer to family and teaching was the first job she was able to get. She rated both (d) and (o) as 2. Her most important reason for returning was listed as (g).
- This respondent returned when she was able to get the position she wanted. She rated both (d) and (o) as 5. She rated her most important reason for returning as (o).
- One respondent had left teaching to become an actuary, but then decided to go back to teaching. He rated (d) as 5, (o) as 4, and listed his most important reason for returning as (d).

Recommendations:

- Modify part (k) so that participants understand this question applies only if they are currently receiving teacher retirement benefits.
- Consider adding a “Not Applicable” column to reduce confusion among teachers if items do not apply to them.
- In Macro’s briefing on this research, NCES indicated that the part (d) was intended to refer to teachers who had retired and were coming back, while part (o) was intended to refer to teachers who were returning to teaching from another career. This distinction was clearly not evident to the respondents, many of whom answered (d) even though they had not retired. Therefore, parts (d) and (o) should be clarified so that their meanings are distinct and clear to respondents.

ITEM 6

From the items above, which do you consider the one most important reason in your decision to return to the position of a preK-12 teacher?

*Enter the letter from Item 5 above.

Most important

Findings:

- In general, respondents did not have any difficulty responding to this question.
- Prior to beginning the interview, each respondent was asked to describe their primary reason for returning to teaching. The purpose of this question was to determine if respondents' answers to Item 6 would be consistent with the answer given at the start of the interview. In all but two interviews, respondents either readily selected reasons for returning to teaching from the list that closely matched their true reason, or entered their own reason for returning using the "other" option.
- One of the two respondents whose responses appeared inconsistent said at the beginning of the interview her primary reason for returning was because her health had improved (which would seem to most closely match option (c)). For Item 6, however, she selected option (i): "Because I needed the health benefits." When asked about this inconsistency, she indicated that to her both items meant the same thing.
- The other respondent stated at the beginning of the interview that she returned to teaching because she decided that she missed it. When answering Item 6, however, she initially chose option (g): "Because I needed the income to meet my financial obligations (e.g., rent, loans, credit card payments)." She commented that this was the primary purpose of any job, since if she had no need for money she would not work. After thinking about it, however, she decided that this was not in the spirit of what Item 6 was asking, and she changed her answer to option (d): "Because I wasn't ready to stop teaching," which was more consistent with her explanation at the beginning of the interview.

Recommendations:

- No changes are necessary for this item.

ITEM 7

Since December 31, 2008, have you completed a teacher preparation program leading to your initial teaching certificate?

___ Yes → GO TO Item 8.

___ No → GO TO Item 9 below.

Findings

- Most respondents found this question to be clear. There was no confusion about the definition of a “teacher preparation program” or an “initial teaching certificate.”
- Three respondents were initially confused as to whether the word “since” was to be interpreted as prior to December 31, 2008 or after December 31, 2008. After some thought these three respondents correctly concluded that the questions should be interpreted as after December 31, 2008.
- One respondent who completed her teacher preparation program since December 31, 2008 but did not yet have an initial teaching certificate answered “Yes” to this question.

Recommendations:

- No changes are necessary for this item.

ITEM 8

Was the teacher preparation program a part of an alternative certification program?

(An alternative certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative certification program, Teach For America, or National Teacher Project).

☐ Yes

☐ No

Findings:

- Almost all respondents found this question clear. Two respondents obtained their certification through alternative means (Teach for America and Maryland's Resident Teacher Certificate program) and found the definition to accurately reflect their own understanding.
- After reading the definition, only one respondent remained unclear as to what an alternative certification program entailed. This respondent thought an alternative certification program was one that prepared you for teaching through online courses.
- One respondent who possessed a Masters of Arts in Teaching (MAT) commented that in some states the MAT is considered an alternative program, while in other states it is considered a traditional program. She classified her program as traditional.

Recommendations:

- If appropriate, consider adding language to this question that clarifies how MAT programs should be classified.

ITEM 9

Since December 31, 2008 have you renewed your teaching certificate?

☐ Yes

☐ No

Findings:

- Most respondents were able to answer whether they had renewed their teaching certificate since December 31, 2008. Two respondents again struggled to determine whether “since” meant prior to or after December 31, 2008. Again, these respondents eventually correctly concluded that the question should be interpreted as after December 31, 2008.
- Three respondents that were fairly new to teaching were not sure what it meant to “renew their certificate.” Since these respondents were not yet required to renew their certificates, this did not affect the accuracy of their responses.
- One respondent had moved to a new state, and therefore had to obtain a new teaching certificate for that state. She answered “no” to this question, because she did not consider this to be “renewing” her certificate.

Recommendations:

- No changes are necessary for this item.

ITEM 10

Since December 31, 2008 have you received an endorsement to your certificate?

☐ Yes

☐ No

Findings:

- Four respondents did not understand the meaning of the word “endorsement.” Of these four:
- One left the question blank because he did not know what it meant.
- One responded “No,” which turned out to be the correct answer.
- One responded “Yes,” but after the definition of “endorsement” was explained to her it became clear that she actually did not have one. She stated that she had initially answered “Yes” because she had completed her Masters and had moved up on the pay scale.
- The final respondent responded “No.” She was initially certified to teach multi-categorical special education grades 6-8. Due to changes in her state’s criteria for “highly qualified” teachers, she was required to re-certify to teach grades K-12. She completed the requirements to become highly qualified after December 31, 2008.
- One respondent commented that she had lost some of her endorsements. This teacher was initially certified to teach in grades K-6. When she changed states and needed to become re-certified, she was only able to obtain certification for grades K-3.

Recommendations:

- Provide a definition for “endorsement” as part of this question.

ITEM 11

Since December 31, 2008 have you completed a master's degree, educational specialist or professional diploma, doctoral degree (Ph.D., Ed.D), or professional degree (M.D., J.D., D.D.S.)?

☐ Yes → GO TO Item 12.

☐ No → GO TO Item 13.

Findings:

- All respondents thought this question was clear.

Recommendations:

- For consistency consider inserting the word “degree” after the word “educational specialist.” Educational Specialist (Ed.S.) programs are generally considered to be degree programs.

ITEM 12

Please specify the field of the master's degree, educational specialist or professional diploma, doctoral degree (Ph.D., Ed.D), or professional degree (M.D., J.D., D.D.S.) that you have completed.

***Record one of the assignment field codes and names listed in Table 1 on page 7.**

Note: The list of field codes and names that was given to participants is provided on the following page.

Findings:

- Several respondents with Master's degrees experienced difficulty identifying the field of their degree from the table. One respondent commented that the list more closely resembled a Bachelor's degree list than a Master's degree list, and that the majority of educational fields were not reflected.
- Several respondents found themselves trying to combine degrees, such as Administration (131) and Policy Studies (134).
- One respondent had multiple graduate degrees, and was unsure which to use in his response to Item 12.

Recommendations:

- Replace the current degree list with a Master's degree list that includes programs with concentrations in areas such as Administration and Supervision, and Curriculum and Instruction. This list should also include Masters of Arts in Teaching (MAT) and Masters in Business Administration (MBA) degrees.
- For consistency consider inserting the word "degree" after the word "educational specialist." Educational Specialist (Ed.S.) programs are generally considered degree programs.

**Table 1. Major Fields of Study Codes
General Education**

Elementary Education

- 101 Early childhood or PreK, general
- 102 Elementary grades, general

Secondary Education

- 103 Middle grades, general
- 104 Secondary grades, general

Special Education

- 110 Special education, any

Other Education

- 131 Administration
- 132 Counseling and guidance
- 133 Educational psychology
- 134 Policy studies
- 135 School psychology
- 136 Other non-subject matter specific education

Subject Matter Specific

Arts and Music

- 141 Art or arts or crafts
- 142 Art history
- 143 Dance
- 144 Drama or theater
- 145 Music

English and Language Arts

- 151 Communications
- 152 Composition
- 153 English
- 154 Journalism
- 155 Language arts
- 156 Linguistics
- 157 Literature or literary criticism
- 158 Reading
- 159 Speech

English as a Second Language

- 160 ESL or bilingual education: general
- 161 ESL or bilingual education: Spanish
- 162 ESL or bilingual education: other languages

Foreign Languages

- 171 French
- 172 German
- 173 Latin
- 174 Spanish
- 175 Other foreign language

Health Education

- 181 Health education
- 182 Physical education

Mathematics and Computer Science

- 190 Mathematics
- 197 Computer science

Natural Sciences

- 211 Biology or life sciences
- 212 Chemistry
- 213 Earth sciences
- 214 Engineering
- 217 Physics
- 218 Other natural sciences

Social Sciences

- 221 Anthropology
- 222 Area or ethnic studies (excluding Native American Studies)
- 223 Criminal justice
- 224 Cultural studies
- 225 Economics
- 226 Geography
- 227 Government or civics
- 228 History
- 229 International studies
- 230 Law
- 231 Native American studies
- 232 Political science
- 233 Psychology
- 234 Sociology
- 235 Other social sciences

Vocational, Career, or Technical Education

- 241 Agriculture and natural resources
- 242 Business management
- 243 Business support
- 244 Marketing and distribution
- 245 Health occupations
- 246 Construction trades, engineering, or science technologies (including CADD and drafting)
- 247 Mechanics and repair
- 249 Manufacturing or precision production (electronics, metalwork, textiles, etc.)
- 250 Communications and related technologies (including design, graphics or printing; not including computer science)
- 253 Personal and public services (including culinary arts, cosmetology, child care, social work, protective services, custodial services, and interior design)
- 254 Family and consumer sciences education
- 255 Industrial arts or technology education
- 256 Other vocational, career, or technical education

Miscellaneous

- 261 Architecture
- 263 Humanities or liberal studies
- 264 Library or information science
- 265 Military science or ROTC
- 266 Philosophy
- 267 Religious studies, theology or divinity

Other

- 268 Other

ITEM 13

This school year (2008–09) have you been assigned as a mentor to other teachers in your school or district?

___ Yes → GO TO Item 14.

___ No → GO TO Item 17.

Findings:

- Of all the respondents who answered this question, one was currently a mentor and two were former mentors.
- Almost all respondents assumed that the question referred to being formally assigned as a mentor. Only one thought the question could also refer to being an unofficial mentor. As this respondent did not operate in either capacity, this incorrect assumption did not affect the accuracy of his response.
- Two respondents who worked with student teachers wondered whether the question included this type of mentoring. They eventually decided it did not, and responded “No.”

Recommendations:

- Consider modifying the question to read “...formally assigned as a mentor...” if this is the intent of the question.

ITEM 14

How many teachers are you mentoring in your school or district this year?

Findings:

- Three respondents provided answers to this question—one who was currently a mentor and two who were former mentors. None had any difficulty answering the question.
- One respondent, in addition to mentoring one teacher in her school, was a part of a district-wide mentoring program through which she works with 20-25 teachers. She did not consider her district-wide role when answering this question, and responded “1.”
- Respondents who were not mentors were also asked to review this question. One respondent was not sure if the question referred to the current calendar year, or the current school year. Two respondents who had never been mentors thought that mentors might have difficulty reporting the number of mentees with whom they worked—although as noted above, this did not appear to be the case.

Recommendations:

- Consider modifying the question to read “...this school year.”

ITEM 15

Were you given any training related to mentoring by your school or district prior to becoming a mentor?

☐ Yes

☐ No

Findings:

- The respondent who currently serves as a mentor responded “Yes” to this question. However, she commented that she would have wanted to be able to provide more detail about her experience, rather than just answering “Yes” or “No.” She recommended the following response options: “formal mentor training program,” “informal mentor training,” and “no training.”
- One of the former mentors who answered this question indicated that she received training while she served as a mentor, but not prior to becoming a mentor. Therefore, she would have answered “No” to Item 15.

Recommendations:

- Consider modifying the question so that it also captures information about training that is provided while teachers are serving as mentors, not only before.

ITEM 16

To what extent do you feel prepared to be a mentor?

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

Findings:

- The three respondents who were current or former mentors had no difficulty rating their level of preparedness on this scale. The current mentor felt “somewhat prepared”, while the former mentors felt “well prepared” and “very well prepared.”
- One respondent commented that there were two distinct aspects to mentoring—content (mentoring on how to teach a specific subject) and process (mentoring on how to handle other teacher issues, such as classroom management and time management). This respondent indicated that it would be possible to have different levels of preparedness in these two aspects, and therefore felt that perhaps the question should ask about both separately.

Recommendations:

- No changes are necessary for this item.

ITEM 17

For your main teaching assignment have you:

*Mark (X) one box on each line.

(Please answer yes or no to the following):

	Y	N
Received an in-state teaching certificate in this field		
Received an in-state teaching certificate for the grades you teach		
Received a National Board Certification in this field		
Earned a bachelor's or higher degree in this field		
Taken and passed a state exam showing subject competency in this field		
Taken and passed the HOUSSE (High Objective Uniform State Standard of Evaluation) in this field		

Findings:

- Three respondents initially thought that the question was asking about a specific time frame (either “this school year” or “since December 31, 2008”). This was likely because previous questions were limited to specific time frames. All three participants eventually understood that this question did not include a time frame, so this misconception did not impact their responses to the questions.
- Part (a): Three participants were unsure what to consider their “field” for the purposes of this question. One, who possessed a certificate to teach in elementary grades but specifically taught math, was not sure whether her “field” was elementary education or mathematics (she did not possess any certification in mathematics). She eventually decided to respond to the questions using elementary education as her field. Another reported that she had certification in both social studies and in elementary education but was unsure which of the two was her “field” (she eventually answered the question based on her certification in social studies). A third teacher was also initially unsure of her “field,” but eventually concluded that she was certified to teach kindergarten.
- Part (b): Respondents had no difficulties with this question.

- Part (c): National Board Certification was familiar to all respondents.
- Part (d): Respondents had no difficulties with this question.
- Part (e): Two respondents were unsure of whether they had taken a state exam showing subject competency in their field. These respondents had taken the PRAXIS content exam, but they were not sure if this was also considered the state test. Both answered “No” to this question. One respondent who had taken the PRAXIS test did respond “Yes” to this question, because he knew his state had adopted the PRAXIS as the state exam.
- Part (f): Only one of 16 respondents had ever heard of HOUSSE. This participant had recently taken and passed the HOUSSE in her state.

Recommendations:

- While two interview participants had difficulty answering part (a) because they were unsure what to consider their “field,” this may have been in part because no context was provided for this item. If it is preceded by other items that ask respondents to specify their field, this confusion should be reduced. This potential confusion may be more frequent among elementary school teachers.
- Consider clarifying whether PRAXIS II content exams should be considered “state exams.”

**Second Phase of Testing
(June/July 2009)**

ITEM 1

What was the primary reason for this reduction in force?

- ☐ Budget cuts or budget shortfalls
- ☐ Reduced pupil enrollment
- ☐ School and/or district merger
- ☐ Reason unknown
- ☐ Other reason – please specify _____

Findings:

- Of the twelve teachers interviewed, three had failed to have their contract renewed due to a reduction in force. However, all remaining teachers had taught in schools affected by a reduction in force.
- Seven teachers gave the first response to this question (“budget cuts or budget shortfalls”), while five gave the second response (“reduced pupil enrollment”).
- Although all teachers were knowledgeable about the reasons for the reduction in force at their school, several said they could not answer confidently as to which was the primary reason. In fact, about half reported that they would like to be able to select more than one option from the list as their reduction in force was due to a combination of several factors. One specifically noted that since budget cuts are often due to reduced pupil enrollment, the first two response options will often overlap.
- Teachers were not able to identify any additional reasons for reductions in force that should be included in the list.

Recommendations:

- As teachers may not know the primary reason for the reduction in force, consider allowing respondents to check all responses that apply to their situation.

ITEM 2

To what extent do you agree or disagree with each of the following statements?

		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a) My principal supports me in classroom management issues.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) My principal supports me in my interactions with parents.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) My principal is readily available to me.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) My principal listens to my concerns.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) My principal takes time to visit my classroom.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) My principal supports my professional development.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) My principal provides me with useful feedback about my teaching.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) My principal has respect for teachers.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) My principal has respect for students.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) My principal treats teachers fairly.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) My principal encourages collaboration among teachers.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) My principal supports student teachers in my school.	There are no student teachers in my school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) My principal is readily available to student teachers in my school.	There are no student teachers in my school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Findings:

Specific Items:

- *Part (a):* Two respondents had difficulty answering this part of the question because although their principal is generally helpful, they do not need support in classroom management issues. One commented that disagreeing with this statement seemed to be a negative statement about the principal, when in fact it could mean that no support is necessary.
- *Part (c):* Two teachers had difficulty answering this question. One teacher was unsure how to interpret the question as her principal is readily available by e-mail, but face-to-face contact is minimal. The other teacher thought the question was ambiguous as her principal is frequently required to be out of the building and this teacher wasn't clear if the question seemed to suggest that the principal's lack of availability was due to him neglecting his responsibilities.
- *Part (e):* Teachers had differing interpretations of what "takes time to visit my classroom meant." Some felt that a brief visit lasting a few minutes would qualify, while others only counted incidents when the principal observed an entire class.
- *Part (e):* Two principals commented that at their school it is not the principal's job to visit classrooms; they both selected "somewhat agree."
- *Part (f):* One teacher was unsure of how to answer this question as her principal supports teachers' required professional development, but not necessarily their preferred professional development (e.g. enrolling in a graduate program). She indicated that her principal "checked the box" with respect to professional development, but was not particularly helpful. This teacher eventually selected "somewhat agree."
- *Part (g):* Two teachers stated that as it was not the principal's job to provide feedback (it is her supervisor's responsibility). One said that she would have preferred a "not applicable" option, because disagreeing with this statement seemed to reflect badly on her principal. Both respondents eventually selected "somewhat disagree."
- *Part (h):* Three teachers thought the term "respect" was too broad. Two thought a distinction should be made between personal and professional respect for teachers, while one commented that there were many different levels of respect, such as listening to teachers' concerns vs. seeking teacher input in decision making.
- *Parts (l) and (m):* Teachers were split almost evenly on whether they thought respondents to this survey would know the extent to which their principal supported or was available to student teachers.

Overall:

- One respondent questioned the efficacy of having "somewhat agree" and "somewhat disagree" options instead of "agree" and "disagree." She would have preferred the latter response choices.
- When asked what additional aspects of a principal's job could be added to the list, teachers suggested:
 - Principal's support for new teachers.

- Principal's support or enforcement of school-wide discipline.
- Principal's interaction with the community.
- Principal's effective use of teacher time (especially with regard to scheduling and planning meetings).

Recommendations:

- Reword parts (a) and (b) as "My principal *is able to provide me with* support in classroom management issues/in my interactions with parents."
- It is likely that in larger schools principals delegate to other administrators the job of visiting classrooms and providing feedback. Consider including a "not applicable" column for parts (e) and (g).
- Consider including a "don't know" column in parts (l) and (m).

ITEM 3

How satisfied are you with the principal at your current school?

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

Findings:

- Most teachers (9 of 12) had no difficulty responding to this question.
- Two teachers felt the question was ambiguous, because there were some things with which she was satisfied and some with which she was not. They indicated that they had to “average out” their opinions to select their responses (one ended up selecting “somewhat satisfied,” while the other selected “somewhat dissatisfied”).
- Another teacher reported that she always has a hard time answering these types of questions as she hates to give anyone a “bad review.” She also expressed concern that a teacher might rate a principal poorly on the basis of one or two experiences.
- When asked what factors they considered in determining their level of satisfaction, teachers stated:
 - Respect for teachers (6 of 12)
 - Principal availability (5 of 12)
 - Support (5 of 12)
 - Leadership skills (2 of 12)
 - Student discipline (2 of 12)

Recommendations:

- No changes are necessary for this item.

ITEM 4

Did you have input in choosing your mentee(s)?

☐ Yes

☐ No

Findings:

- All teachers were either current mentors or had previously been mentors.
- Only one teacher reporting having had input in choosing their mentee(s). However, this may have been because several respondents were actually “mentors” for student teachers, not other faculty members at their school.
- Teachers were asked if in their general experience, mentor teachers had input in selecting their mentees. Almost all said that in their experience mentor teachers did not have input, although again several may have been thinking of how their school treats student teachers, not new teachers.
- When asked what type of “input” they thought the question referenced, teachers’ responses generally fell into two categories:
 - Having the ability to select a mentee from a group of mentees; or
 - Having their opinions considered in the assignment of a mentee (i.e. being able to accept or reject the mentee they were assigned).

Recommendations:

- If the intent of the question matches respondents’ interpretations of “input” as described above, no changes are necessary.

ITEM 5

Did your principal work with you to choose your mentee(s)?

☐ Yes

☐ No

Findings:

- All but one respondent answered “No” to this question. The one who responded “Yes” later explained that despite her response, it was actually her Assistant Principal that worked with her, not the principal.
- Two teachers reported that usually there is some dialogue between principal and mentor teacher regarding mentees. The other ten participants indicated that in their experience, principals do not usually work with mentor teachers to choose their mentees.
- About half of the respondents said that it was someone else’s job to select mentees, not their principal’s. For example, the one respondent who indicated in Item 4 that they had input in choosing their mentee indicated that her principal was not involved at all in the process; it was handled by another member of her school’s leadership team.

Recommendations:

- In a significant number of schools, the selection of mentees seems to be handled by someone other than the principal. Therefore, consider revisiting the question to determine whether the intent is to measure specifically whether respondents worked with the principal to choose their mentees, or whether they worked with anyone. If the intent is the latter, also consider whether Item 5 is redundant with Item 4.

ITEM 6

Has your principal discussed your mentoring relationship with you this school year?

- ☐ Yes → GO TO Item 7.
- ☐ No → GO TO Item 8.

Findings:

- Only two of twelve teachers responded affirmatively to this item. One of these teachers stated that her district requires principals to meet with mentors once a month.
- When asked to explain the phrase “discuss your mentoring relationship with you,” teachers’ responses fell into two categories:
- Discussing how mentees were progressing; and
- Discussing how the mentors themselves were managing their mentor responsibilities.
- Some teachers referenced both categories in their response while other teachers only referenced one of these categories.
- As with Item 5, several participants indicated that while they answered “No” to Item 6, they actually meet with some other staff member other than the principal.

Recommendations:

- Consider clarifying the item as to which of the two types of discussions described above should be considered. Discussions about the progress of mentees and discussions about the progress of the mentor relationship itself are very different, and perhaps their frequency should not be measured through the same question.
- As with Item 5, consider revisiting the question to determine whether the intent is to measure specifically whether respondents had discussions with the principal specifically, or whether they had these discussions with anyone.

ITEM 7

How often does your principal discuss your mentoring relationship with you?

- ☐ At least once a week
- ☐ Once or twice a month
- ☐ A few times a year

Findings:

- All teachers indicated that this question was clear.
- Of the two teachers who answered this question, one responded “once or twice a month”, and the other responded “a few times a year”. As noted above, one teacher stated that monthly meetings between principals and mentors are required by her district.

Recommendations:

- No changes are required for this item—although any changes to Item 6 (such as changing the item to address all administrators rather than the principal specifically) should obviously be carried through to Item 7 as well.

ITEM 8

To what extent do you agree with the following statement?

Outside my school, I have a strong support system (e.g. family, close friends, neighbors).

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Strongly disagree

Findings:

- Eleven teachers strongly agreed with the statement, while one teacher somewhat agreed. The teacher that somewhat agreed stated that she would have preferred to have the option to “agree.”
- Three teachers commented that the term “support” was too broad and could refer to personal or professional support. Two of the three teachers eventually decided the question referenced professional support, while the other teacher decided the question referenced personal support.
- When asked what was meant by the phrase “a strong support system,” most teachers’ responses generally included statements referring to having close family and friends they can rely on. However, three actually referenced sources of support within their schools; two teachers considered communication and cooperation with their colleagues, and another thought of support she had received from her school system in her role as a mentor.

Recommendations:

- If appropriate, clarify the question to emphasize that respondents should only reference non-school-based support systems.
- Revisit the intent of the question, and consider whether there is a more direct or appropriate way of phrasing the question. For example, if the intent is to measure teachers’ ability to deal with job-related stress, sources of support within their school may well be important to consider, and should not be excluded.

ITEM 9

During this school year, did you or do you ...

- ☐ a) Coach a sport?
- ☐ b) Sponsor any student groups, clubs, or organizations?
- ☐ c) Serve as a department lead or chair?
- ☐ d) Serve as a curriculum specialist?
- ☐ e) Serve on a school-wide or district-wide committee or task force?
- ☐ f) Serve as a consultant or coach in a particular subject?
- ☐ g) Serve as a mentor coordinator?
- ☐ h) Have a teacher union leadership position?
- ☐ i) Present at a conference?
- ☐ j) Participate in any other leadership activity? *Specify:* _____

Findings:

Specific Items

- *Part (d):* Only one of the 12 respondents reported that the title of *curriculum specialist* was used at their school. One teacher stated, however, that this term was used at the district level and it was given to the Associate Superintendent. In general teachers had two concepts of the role of a “curriculum specialist”:
 - A curriculum writer or developer; or
 - A curriculum content expert or resource person who provides teacher support.

One teacher indicated that all teachers in her school conduct curriculum mapping, which essentially makes them an expert. She therefore considered herself a curriculum specialist and checked this item in the list. Another teacher who checked this item stated that she served on a curriculum committee for one subject.

Titles that teachers thought were similar were:

- *Curriculum Committee Member.* In one district this is a paid summer position and in another district this is a rotating responsibility.
- *Curriculum and Administration Dean.* This is a district level position.
- *Curriculum Facilitator.* This is a school level position where the Facilitator visits classrooms and models lessons (one per school).
- Academic Coach
- Associate Superintendent

- *Part (f)*: The title of *consultant* is not used in any school system represented by the teachers interviewed. One respondent indicated that she serves as a consultant in her school, because she often provides informal feedback to younger teachers.
- *Part (f)*: The title of *coach* is more frequently used. One teacher stated that her school has a literacy coach, and one teacher stated her school has an academic coach. For all other teachers the concept of a coach varied. Teachers' responses are summarized below:
 - The department head or chair is the coach as he/she serves as the content area expert (no one is just a coach) (2 teachers).
 - A coach is someone knowledgeable about content, but this position doesn't formally exist.
 - A tutor--someone who stays after school to work with students.
 - We only have a graduation coach to make sure students don't drop out.
 - We have athletic coaches and coaches for after school activities such as a spelling bee coach.
 - Mentors for new teachers can be sometimes thought of as coaches.
- *Part (g)*: Four teachers stated that the term *mentor coordinator* was used in their school and/or district. Other teachers stated that although someone acted in the role of a mentor coordinator, they did not have a title; this was just considered an additional responsibility. Whether or not they used this particular title in their school, all participants seemed to understand what was meant by this phrase.
- *Part (h)*: One teacher whose state did not allow teachers to unionize stated she felt this question should have a "not applicable" option.
- *Part (i)*: A few teachers wondered whether presenting at large faculty meetings should also be included under this item. They all eventually decided it should not, but one stated that if she were completing the paper survey she would have probably checked this box as it would make her "look good." Two teachers were unsure whether this item included parent-teacher conferences. One of the two decided it did, and checked the box.
- *Part (i)*: At least one participant misread this part of the question to mean that she was present at a conference (i.e., that she attended a conference).
- *Part (j)*: Some participants checked part (j) and specified other leadership activities they had participated in. In some cases, however, it was unclear that these activities represented the type of leadership intended by the question; for example, one wrote that she was a member of a professional organization, and another said he was a tutor in his school.

Overall

- In general, respondents seemed to want to check as many boxes as possible, and in some cases tried to rationalize checking a box (such as the teacher who considered herself a “consultant” to other teachers).
- Some teachers were unsure of whether this question was restricted to school-level leadership positions or if district and state-wide leadership positions were to be included. Most teachers decided to include all levels of activity.
- When asked what additional activities they felt should be included in the list, teachers mentioned leadership teams and steering committees (such as a prom planning committee), although it appears these activities could be included under parts (b) or (e).
- One teacher did not understand that she should check all activities in the list that applied to her.

Recommendations:

- One general problem with this question is that some of the items relate to titles (such as “curriculum specialist” or “department chair” while other items related to roles (such as a presenter at a conference, or a sponsor of school groups). The intent could perhaps be clarified for respondents by separating these two types of questions into two different items.
- Modify the stem of the item so that teachers are aware they are to “check all that apply.”
- If appropriate, consider modifying the stem of the item to reflect that teachers are to consider all school, district, or state-wide positions.
- Provide a description of the role of a curriculum specialist (part (d)) and consultant/coach (part (f)) to ensure that teachers interpret this item consistently.
- Reword part (i) as “Give a presentation at a professional conference”.

Attachment F-1: Interview Protocol for First Phase of Interviews

NCES Beginning Teacher Longitudinal Survey

Interview Protocol

I. Introduction

“Thank you for agreeing to be interviewed for this project. My name is _____, and I work for ICF Macro, an independent company that has been hired by the U.S. Department of Education to conduct this study. We will be asking you to help revise and improve a questionnaire called the Beginning Teacher Longitudinal Survey.

“During this interview I am going to ask you to read and answer a number of questionnaire items, one at a time. As you go through the questions, I would like you to explain what you are thinking out loud, so I can get a sense of your thought process as you answer each item. For example, if you are trying to decide what your answer is, please explain why you are unsure. If you have trouble understanding a question, or are confused by it, please be sure to explain that to us as well.

“The feedback you provide in this interview will be completely anonymous. In our report to the Department of Education, we will not connect anyone’s comments with their name. The feedback that we collect will have a direct impact on the design of next year’s survey, so please open and honest in your comments.

“Do you have any questions before we begin?”

Before you begin, ask them the screening question for their group just to confirm that they are qualified for the interview:

All

1. Are you currently a K–12 classroom teacher?
2. Have you ever temporarily left the teaching profession?
3. What is the name of the school you were teaching in before you temporarily left the profession?
4. For how long were you away from the teaching profession?
5. What was your last year as a teacher before you temporarily left the profession?
6. What were you doing during your break from teaching?
7. In what year did you return to the profession?
8. Why did you decide to return to teaching?

II. Questionnaire Items

Go through the appropriate questionnaire items with the participant. As the participant answers each item, record their answer on the sheet. If they hesitate while answering or reading a question at any point, ask them to explain why.

In each case, allow them to complete 1 series (there are 5 series) of questions before asking any follow-up or probe questions, or providing any clues as to the purpose or meaning of the question. The series are as follows:

Series 1: Items 1 through 4

Series 2: Items 5 and 6

Series 3: Items 7 through 12

Series 4: Items 13 through 16

Series 5: Item 17

ITEM 1

You were teaching in [school] during the 2007–08 school year. Did you return to that school?

☐ Yes → GO TO Item 2.

☐ No → GO TO Item 3 below.

Interviewer Notes

Probes

Was there anything about this question that was unclear?

ITEM 2

Have there been any changes in your current school, such as a change in name, location, or grades offered?

☐ Yes → GO TO Item 5 below.

☐ No → GO TO Item 5 below.

Interviewer Notes

Probes

Do you think teachers who have returned to their old school could be expected to know if these changes occurred?

ITEM 3

Are you currently teaching in the SAME STATE as you were during the 2007–08 school year?

☐ Yes → GO TO Item 4.

☐ No → GO TO Item 4.

Interviewer Notes

Probes

Is there anything about this question that you think could be confusing or misinterpreted?

ITEM 4

**Which of the following describes the change from your 2007–08 school to your current school?
(For this question, all charter and Bureau of Indian Education [BIE]-funded schools are
considered public schools.)**

**Mark (X) only one box.*

☐ Moved from a PUBLIC school to another PUBLIC school in the SAME SCHOOL
DISTRICT.

☐ Moved from a PUBLIC school to another PUBLIC school in a DIFFERENT SCHOOL
DISTRICT.

☐ Moved from a PUBLIC school to a PRIVATE school.

Interviewer Notes

Probes

Is there anything about this question that you think could be confusing or misinterpreted?

ITEM 5

Indicate the level of importance EACH of the following played in your decision to return to the position of a preK-12 teacher.

**Mark (X) one box on each line.*

The following scale is used for the items below: 1) Not at all important, 2) Slightly important, 3) Somewhat important, 4) Very important, 5) Extremely important

If any of the reasons for returning to teaching do not apply to you mark "1" as not at all important.

I returned to the position of a preK-12 teacher:

	1	2	3	4	5
a. Because I had a change in residence or wanted to take a job more convenient to my home.					
b. Because my maternity/paternity leave ended or I no longer needed to stay at home with my children.					
c. Because my health or the health of a loved one no longer required me to be out of teaching.					
d. Because I decided I was not ready to stop teaching.					
e. Because I passed the required test(s).					
f. Because I was offered the grade level or subject area that I wished to teach.					
g. Because I needed the income to meet my financial obligations (e.g., rent, loans, credit card payments).					
h. Because my current school or district offered at least partial forgiveness of my student loans.					
i. Because I needed the health benefits.					
j. Because I wanted the retirement package.					
k. Because I could continue receiving my teacher retirement benefits.					
l. Because I was given a housing incentive by my current school.					
m. Because I wanted a higher standard of living than my household income provided.					
n. Because I wanted job security.					
o. Because I decided to pursue a preK-12 teaching position as a career.					
p. Because I completed the coursework I was pursuing.					
q. Because a part-time teaching assignment became available.					
r. Because I liked the school schedule/calendar.					
s. Because I obtained a position in a school with desirable characteristics.					
t. Because I was able to maintain my seniority.					
<i>Other factors</i>					
u. Because of other factors not included in previous items a – t → <i>please specify:</i>					

Interviewer Notes

Probes

Do you think there are any important reasons for returning to teaching that are not included in this list?

Question d, o: What do you see as the difference between what items d and o are asking?

Question i: Do you think there are other types of benefits that would be important enough to a teacher to make him/her return to teaching?

Question j, k: What do you see as the difference between what items j and k are asking?

Question l: Is it clear what is meant by the term "housing incentive?" Please give me a few examples of what you think a "housing incentive" is?

Question m: What do you understand this statement to be asking?

Question r: What do you understand this statement to be asking? What aspects of the school schedule/calendar do you think are being referenced? Is the wording awkward or confusing?

Questions: Is the term “desirable characteristics” clear? What characteristics do you think of when you see this term?

Question t: Explain what you think the term “seniority” means?

ITEM 6

From the items above, which do you consider the one most important reason in your decision to return to the position of a preK-12 teacher?

*Enter the letter from Item 5 above.

|___| Most important

Interview Notes

Probes

Did you think your most important reason for returning to teaching was adequately reflected in the table?

Interviewer – please check if the reason given here is consistent with the answer they gave immediately before they began this section. If not, please ask why.

ITEM 7

Since December 31, 2008, have you completed a teacher preparation program leading to your initial teaching certificate?

___ Yes → GO TO Item 8.

___ No → GO TO Item 9 below.

Interview Notes

Probes

What do you understand by the term “teacher preparation program?”

What do you understand the term “initial teaching certificate” to mean? **[wait for response]**

The intent of this question is to determine if teachers obtained their first teaching certificate since December 31, 2008. Do you think the term “initial teaching certificate” is clear? Is there another term that would be more appropriate?

ITEM 8

Was the teacher preparation program a part of an alternative certification program?

(An alternative certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative certification program, Teach For America, or National Teacher Project.)

☐ Yes

☐ No

Interviewer Notes

Probes

Did you have any difficulty determining whether your teacher preparation program was an alternative certification program?

Is the definition of “alternative certification program” sufficiently clear?

ITEM 9

Since December 31, 2008 have you renewed your teaching certificate?

☐ Yes

☐ No

Interviewer Notes

Probes

Was there anything about this question that was confusing?

ITEM 10

Since December 31, 2008 have you received an endorsement to your certificate?

☐ Yes

☐ No

Interviewer Notes

Probes

What do you understand by the term “endorsement”? (It should mean an added field or grade level to an already existing teaching certification)

ITEM 11

Since December 31, 2008 have you completed a master’s degree, educational specialist or professional diploma, doctoral degree (Ph.D., Ed.D), or professional degree (M.D., J.D., D.D.S.)?

☐ Yes → GO TO Item 12.

☐ No → GO TO Item 13.

Interviewer Notes

Probes

Is there anything about this question that may seem unclear?

ITEM 12

Please specify the field of the master’s degree, educational specialist or professional diploma, doctoral degree (Ph.D., Ed.D), or professional degree (M.D., J.D., D.D.S.) that you have completed.

***Record one of the assignment field codes and names listed in Table 1 on page 7**

Interviewer Notes

Probes

Did you have any difficulty identifying your field from Table 1?

ITEM 13

This school year (2008–09) have you been assigned as a mentor to other teachers in your school or district?

☐ Yes → GO TO Item 14.

☐ No →GO TO Item 17.

Interviewer Notes

Probes

What do you understand the phrase “assigned as a mentor” to mean?

ITEM 14

How many teachers are you mentoring in your school or district this year?

Interviewer Notes

Probes

Do you think a mentor would find it difficult to report the exact number of teachers he/she mentors?

ITEM 15

Were you given any training related to mentoring by your school or district prior to becoming a mentor?

___ Yes

___ No

Interviewer Notes

Probes

What do you understand by the term “training”? Do you think this term could be ambiguous?

ITEM 16

To what extent do you feel prepared to be a mentor?

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

Interviewer Notes

Probes

Did you have any difficulty identifying your level of preparation on the scale?

ITEM 17

For your main teaching assignment have you:

**Mark (X) one box on each line.*

(Please answer yes or no to the following):

- a. Received an in-state teaching certificate in this field
- b. Received an in-state teaching certificate for the grades you teach
- c. Received a National Board Certification in this field
- d. Earned a bachelor's or higher degree in this field
- e. Taken and passed a state exam showing subject competency in this field
- f. Taken and passed the HOUSSE (High Objective Uniform State Standard of Evaluation) in this field

Interview Notes

Probes

What is your main teaching assignment?

As you answered all the questions in this section did you consistently only reference your **main** teaching assignment?

Did you have any difficulty distinguishing between what was being asked in part (a) and part (b)?

Please explain your understanding of National Board Certification? Do you think that most teachers understand what this is?

Note to interviewer: National Board Certification is advanced professional certification based on the National Board for Professional Teaching Standards (NBPTS). There are 25 different certificates available. The assessment for National Board Certification consists of a multimedia teaching portfolio that is used to evaluate pedagogy and student outcomes, and a three-hour assessment center examination.

Was there anything confusing about part (e)?

Please explain your understanding of HOUSSE? Is this a term with which you think most teachers are familiar?

Note to interviewer: HOUSSE allows current teachers to demonstrate subject matter competency and Highly Qualified Teacher (HQT) requirements through a combination of proven teaching experience, professional development, and knowledge in the subject acquired over time through working in the field.

**Table 1. Major Fields of Study Codes
General Education**

Elementary Education

- 101 Early childhood or PreK, general
- 102 Elementary grades, general

Secondary Education

- 103 Middle grades, general
- 104 Secondary grades, general

Special Education

- 110 Special education, any

Arts and Music

- 141 Art or arts or crafts
- 142 Art history
- 143 Dance
- 144 Drama or theater
- 145 Music

English and Language Arts

- 151 Communications
- 152 Composition
- 153 English
- 154 Journalism
- 155 Language arts
- 156 Linguistics
- 157 Literature or literary criticism
- 158 Reading
- 159 Speech

English as a Second Language

- 160 ESL or bilingual education: general
- 161 ESL or bilingual education: Spanish
- 162 ESL or bilingual education: other languages

Foreign Languages

- 171 French
- 172 German
- 173 Latin
- 174 Spanish
- 175 Other foreign language

Health Education

- 181 Health education
- 182 Physical education

Mathematics and Computer Science

- 190 Mathematics
- 197 Computer science

Natural Sciences

- 211 Biology or life sciences
- 212 Chemistry
- 213 Earth sciences
- 214 Engineering
- 217 Physics
- 218 Other natural sciences

Other Education

- 131 Administration
- 132 Counseling and guidance
- 133 Educational psychology
- 134 Policy studies
- 135 School psychology
- 136 Other non-subject matter specific education

Subject Matter Specific

Social Sciences

- 221 Anthropology
- 222 Area or ethnic studies (excluding Native American Studies)
- 223 Criminal justice
- 224 Cultural studies
- 225 Economics
- 226 Geography
- 227 Government or civics
- 228 History
- 229 International studies
- 230 Law
- 231 Native American studies
- 232 Political science
- 233 Psychology
- 234 Sociology
- 235 Other social sciences

Vocational, Career, or Technical Education

- 241 Agriculture and natural resources
- 242 Business management
- 243 Business support
- 244 Marketing and distribution
- 245 Health occupations
- 246 Construction trades, engineering, or science technologies (including CADD and drafting)
- 247 Mechanics and repair
- 249 Manufacturing or precision production (electronics, metalwork, textiles, etc.)
- 250 Communications and related technologies (including design, graphics or printing; not including computer science)
- 253 Personal and public services (including culinary arts, cosmetology, child care, social work, protective services, custodial services, and interior design)
- 254 Family and consumer sciences education
- 255 Industrial arts or technology education
- 256 Other vocational, career, or technical education

Miscellaneous

- 261 Architecture
- 263 Humanities or liberal studies
- 264 Library or information science
- 265 Military science or ROTC
- 266 Philosophy
- 267 Religious studies, theology or divinity

Other

- 268 Other

Attachment F-2. Interview Protocol for Second Phase of Interviews

NCES Beginning Teacher Longitudinal Survey

Interview Protocol

I. Introduction

“Thank you for agreeing to be interviewed for this project. My name is _____, and I work for ICF Macro, an independent company that has been hired by the U.S. Department of Education to conduct this study. We will be asking you to help revise and improve a questionnaire called the Beginning Teacher Longitudinal Survey.

“During this interview I am going to ask you to read and answer a number of questionnaire items, one at a time. As you go through the questions, I would like you to explain what you are thinking out loud, so I can get a sense of your thought process as you answer each item. For example, if you are trying to decide what your answer is, please explain why you are unsure. If you have trouble understanding a question, or are confused by it, please be sure to explain that to us as well.

“The feedback you provide in this interview will be completely anonymous. In our report to the Department of Education, we will not connect anyone’s comments with their name. The feedback that we collect will have a direct impact on the design of next year’s survey, so please open and honest in your comments.

“Do you have any questions before we begin?”

Before you begin, ask them the screening question(s) for their group just to confirm that they are qualified for the interview:

All

1. Are you currently a K-12 classroom teacher? (Yes)

All participants must answer “Yes” to Q1 to qualify.

Mentor Group

2. Are you currently a mentor teacher?
3. Have you ever been a mentor teacher?

Participant must answer “Yes” to one of these two questions to qualify in this group.

Reduction in Force (RIF) Group

4. Have you taught at a school that has been affected by a reduction in force?

Participant must answer “Yes” to Q4 to qualify in this group.

II. Questionnaire Items

Go through the appropriate questionnaire items with the participant. As the participant answers each item, record their answer on the sheet. If they hesitate while answering or reading a question at any point, ask them to explain why.

In each case, allow them to complete 1 series (there are 4 series) of questions before asking any follow-up or probe questions, or providing any clues as to the purpose or meaning of the question. In this document, a series is identified by a color block. For example, all the questions in Series 1 are blue in this document; all the questions Series 2 are yellow in this document, etc. After the interviewee completes each series (color block), then go back and ask any follow-ups that are necessary for each of the individual items.

ITEM 2

Have you taught at a school that has been affected by a reduction in force?

- ☐ Yes → GO TO Item 3.
- ☐ No → GO TO Item 4.

ITEM 1

Have you had your contract not renewed as part of a reduction in force?

- ☐ Yes → GO TO Item 3.
- ☐ No → GO TO Item 2.

Note: Items 1 and 2 are not proposed questions for the survey; they were included to provide context for Item 3. Therefore, we are less interested in participants' feedback on those items.

Interviewer Notes

Probes

ITEM 3

What was the primary reason for this reduction in force?

- ☐ Budget cuts or budget shortfalls
- ☐ Reduced pupil enrollment
- ☐ School and/or district merger
- ☐ Reason unknown
- ☐ Other reason – please specify _____

If participant skips Item 3 because they have never taught at a school where a RIF took place, still ask him/her the following probes.

Is there anything about Item 3 that could be confusing or unclear?

Based on your understanding, are there any other reasons that reductions in force could take place? What are they?

How likely do you think it could be that a teacher whose contract was not renewed because of a reduction in force (i.e., a teacher who answered “Yes” to Item 1) would not know the reason for the reduction in force at their school?

ITEM 4

To what extent do you agree or disagree with each of the following statements?

		Strongly Agree	Somewh at Agree	Somewh at Disagree	Strongly Disagree
a) My principal supports me in classroom management issues.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) My principal supports me in my interactions with parents.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) My principal is readily available to me.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) My principal listens to my concerns.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) My principal takes time to visit my classroom.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) My principal supports my professional development.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) My principal provides me with useful feedback about my teaching.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) My principal has respect for teachers.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) My principal has respect for students.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) My principal treats teachers fairly.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) My principal encourages collaboration among teachers.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) My principal supports student teachers in my school.	<input type="checkbox"/> There are no student teachers in my school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) My principal is readily available to student teachers in my school.	<input type="checkbox"/> There are no student teachers in my school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interviewer Notes

Probes

Could any of the parts of Item 4 be confusing or unclear? Are there any items that you feel may be ambiguous?

Did you have difficulty answering any of these questions for any reason?

Explain your response to item (e). Why did you select the option you did? [Note: We are trying to get at what people understand by the term “take time to visit my classroom”]

How knowledgeable would you be about items (l) and (m) if you were not actually a student teacher? To what extent would you know whether your principal supports student teachers, or is readily available to them?

The purpose of this question is to ask teachers to evaluate their principals based on a variety of factors. Do you think there are any important aspects of a principal’s job that are not reflected in this question? Are there any other items that should be added?

ITEM 5

How satisfied are you with the principal at your current school?

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

Interviewer Notes

Probes

Is there anything about Item 5 that could be confusing or unclear?

Did you have any difficulty answering this question for any reason?

ITEM 6

Are you currently a mentor teacher?

- ☐ Yes → GO TO Item 8.
- ☐ No → GO TO Item 7.

When selecting your answer for this question, what factors did you consider? What were the primary factors that determine whether or not you were satisfied with your principal?

ITEM 7

Have you ever been a mentor teacher?

- ☐ Yes → GO TO Item 8.
- ☐ No → GO TO Item 12.

Note: Items 6 and 7 are not proposed questions for the survey; they were included to provide context for Item 8. Therefore, we are less interested in participants' feedback on those items.

Interviewer Notes

ITEM 8

Did you have input in choosing your mentee (s)?

- ☐ Yes
- ☐ No

Probes

If participant skips Item 8 because they have never been a mentor teacher, still ask him/her the following probes.

Is there anything about Item 8 that could be confusing or unclear?

What kind of “input” do you think this question is referring to?

Have you ever taught at a school that had mentor teachers? If so, based on your experience do mentor teachers usually have input in choosing their mentee(s)? If so, what kind of input?

ITEM 9

Did your principal work with you to choose your mentees(s)?

☐ Yes

☐ No

Interviewer Notes

Probes

If participant skips Item 9 because they have never been a mentor teacher, still ask him/her the following probes.

Is there anything about Item 9 that could be confusing or unclear?

In your own words, what do you think Item 9 is asking?

(If participant has taught at a school that had mentor teachers) Based on your experience, do principals usually work with mentor teachers to choose their mentee(s)? If so, how?

ITEM 10

Has your principal discussed your mentoring relationship with you this school year?

- ☐ Yes → GO TO Item 11.
- ☐ No → GO TO Item 12.

ITEM 11

How often does your principal discuss your mentoring relationship with you?

- ☐ At least once a week
- ☐ Once or twice a month
- ☐ A few times a year

Interviewer Notes

Probes

If participant skips Items 10 and 11 because they have never been a mentor teacher, still ask him/her the following probes.

Is there anything about Item 10 that could be confusing or unclear?

In your own words, what does the phrase “discuss your mentoring relationship with you” mean?

Is there anything about Item 11 that could be confusing or unclear?

ITEM 12

To what extent do you agree with the following statement?

Outside my school, I have a strong support system (e.g. family, close friends, neighbors).

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Strongly disagree

(If participant has taught at a school that had mentor teachers) Based on your experience, do principals usually discuss mentoring relationships with mentor teachers? If so, what are these discussions like? How often do they usually take place?

Interviewer Notes

Probes

Is there anything about Item 12 that could be confusing or unclear?

Did you have any difficulty answering this question for any reason?

In your own words, what do you think is meant by a “strong support system”?

When selecting your answer for this question, what factors did you consider? What were the primary factors that determine whether or not you think you have a “strong support system”?

ITEM 13

During this school year, did you or do you...

- ☐ a) Coach a sport?
- ☐ b) Sponsor any student groups, clubs, or organizations?
- ☐ c) Serve as a department lead or chair?
- ☐ d) Serve as a curriculum specialist?
- ☐ e) Serve on a school-wide or district-wide committee or task force?
- ☐ f) Serve as a consultant or coach in a particular subject?
- ☐ g) Serve as a mentor coordinator?
- ☐ h) Have a teacher union leadership position?
- ☐ i) Present at a conference?
- ☐ j) Participate in any other leadership activity? *Specify:* _____

Interviewer Notes

Probes

Could any of the parts of Item 13 be confusing or unclear?

Are there any other leadership activities that are not included on this list? If so, what?

In your own words, what do you think is meant by Item (d)? Is “curriculum specialist” a term used in your school? If not, what do you think is the equivalent term?

In your own words, what do you think is meant by Item (f)? Is a subject area “consultant” or “coach” a term used in your school? If not, what do you think is the equivalent term?

In your own words, what do you think is meant by Item (g)? Is “mentor coordinator” a term used in your school? If not, what do you think is the equivalent term?

Appendix G. Cognitive Testing of BTLS Survey Items: Summary of Findings and Recommendations (2010)

This appendix contains a report prepared by Michael Long of Macro International, Inc., and delivered to the National Center for Education Statistics in September 2010. The contents are listed below.

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Background

In the spring of 2010, the Census Bureau contracted with ICF Macro, a research and evaluation firm in Calverton, Maryland, to plan and carry out a series of cognitive interviews with current and former teachers. The purpose of these interviews was to gather feedback on a number of proposed items for the surveys that will be a part of the Beginning Teacher Longitudinal Study (BTLS), a national study conducted by the National Center for Education Statistics (NCES) and the Census Bureau. The BTLS survey will be administered annually for 10 years to a cohort of teachers in order to gain insight into teachers' responses to transitions.

This report summarizes the methodology used in conducting the interviews and feedback ICF Macro received from participants about the survey items. In addition, this report provides ICF Macro's recommendations for revisions to the proposed Schools and Staffing Survey (SASS) items.

Summary of Methodology

Recruitment Protocol and Summary of Participants

ICF Macro conducted cognitive interviews with 18 current or former teachers. Teachers were recruited from several sources, including a list provided by NCES of schools in the SASS sampling frame, a list purchased from an outside vendor, and an ICF Macro database of educators. An e-mail was sent out to potential participants that described the study and offered an incentive to those who participated. Interested teachers who contacted ICF Macro by telephone or e-mail were then screened and scheduled for an interview.

Depending on their circumstances, teachers were classified as "Movers," "Leavers," or "Returners" and sent the appropriate interview protocol. Movers were defined as teachers who had left one school and moved to another within the past 5 years. Leavers were defined as teachers who had left the teaching profession in the past 5 years. Returners were defined as teachers who, in the past 5 years, had left teaching for at least 1 year and then returned to teaching. ICF Macro interviewed six teachers in each group.

Teachers represented each of the school levels (elementary, middle, and high) as well as public, private, and charter schools. Interviews were conducted with teachers in Illinois, Kentucky, Louisiana, Maryland, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, and Tennessee.

Interview Protocol

Each interview lasted approximately 60 minutes and was conducted by phone. Prior to each interview, the participants were e-mailed a copy of the survey items and told to print them out but not to read them. The interview protocols were different for each group (Movers, Leavers, and Returners). At the beginning of each interview, the interviewer rescreened the participants to ensure that the participant was eligible for the study and classified in the correct group.

During the interview, participants were asked to answer the proposed BTLS items as they normally would if they were responding to the survey. As they answered each item, they were also asked to "think aloud"—that is, to describe out loud their thought process as they read and responded to each item. After the participant answered a series of items, the interviewer then asked appropriate follow-up questions or probes. A copy of the original interview protocol is included in this report as appendix A. Following the proposed items for the BTLS questionnaire, all participants were asked to read a "Study Information Form" that would be provided to respondents. They were then asked a series of questions about the information presented in that form to test their comprehension of the content. The Study Information Form that participants were shown is included in this report as appendix B.

Summary of Participant Feedback and Recommendations

The following section of this report summarizes the results of this study. For each item being tested, we provide the wording and response options, a list of relevant findings, and our recommendations for revisions to the item based on those findings.

Q1 (Matrix Item; Movers, Leavers, Returners)

NOTE: The matrix for each group is found in attachment G-3.

Movers: Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR’S school.

Leavers: Indicate the level of importance EACH played in your decision to leave your preK–12 teaching position.

Returners: Indicate the level of importance EACH played in your decision to return to the position of a preK-12 teacher.

Findings

- While some of the participants said this item initially *appeared* overwhelming, none of the participants felt it was actually too burdensome to complete. They commented that the way it is broken up into “factors” makes it easier to complete.
- Before looking at this item, participants were asked to give their own description of why they left teaching, returned to teaching, or left their school. In almost all cases, participants’ responses to this item matched this description. In a few cases, however, there were some discrepancies:
 - One Leaver said she left teaching to go to graduate school to become a school counselor. However, she rated “take courses to improve opportunities INSIDE the field of education” as “not at all important,” because she seemed to consider school counseling as outside the field of education. She also rated “pursue a position other than K–12 teaching” as “extremely important,” even though she was not immediately pursuing a position.
 - Two Returners rated some of the items based upon the level of importance they played in their decisions to return to teaching, but other items based on the level of importance they played in their decisions to leave teaching in the first place. For example, one teacher rated “making a difference in students’ lives” as “very important.” However, she later explained that this was not a factor in her return to teaching, but rather, had made her decision to leave teaching very difficult.
 - At least one Returner answered some of the items (particularly those later in the list) in terms of the extent to which they were true, rather than the extent to which they contributed to his decision to return to teaching. Initially, he explained that health care was his primary reason for returning to teaching. However, he marked several unrelated items as “very important” because he agreed that they were good reasons (e.g., “offered the grade/subject area he wished,” “liked the school schedule/calendar”). Several other respondents found themselves beginning to answer the items in this way, but reminded themselves of the intent of the item.
- Participants were also asked, hypothetically, how they would indicate that their spouse’s relocation was a factor in their decision, some participants said they would select both Factors A (because I moved) and B

(other personal life reasons), some said they would select only Factor B, and one said she would select only *Factor A*.

- Several participants suggested that other factors should be added to the list as reasons a teacher would leave a school or leave teaching:
 - Dissatisfaction with colleagues (suggested by two participants)
 - Too many demands on time outside of the classroom (suggested by three participants)
- Returners suggested that other factors should be added to the list as reasons a teacher would return to teaching:
 - Because they missed their colleagues,
 - Opportunities for professional development
 - Opportunity for promotion (suggested by two participants)

Recommendations

- Consider revising the question stem to emphasize that responses should be based on the level of importance the factor played in the decision made, and not in general. For example, ***“Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR’S school:”***
- Consider adding the factors “dissatisfaction with colleagues” and “too many demands on time outside of the classroom” to the Movers and Leavers versions.
- Consider adding the factor “opportunities for professional development and/or advancement” to the Returners version.

Q2 (Movers, Leavers, Returners)

During the 2009 calendar year, did you renew your teaching certificate?

- ☐ Yes
- ☐ No

Findings

- Five of the 18 participants responded “Yes” to this item. However, in four of the five cases it was not clear that the participant had truly renewed their certificate in 2009:
 - One respondent said “Yes” to this item because she changed certifications (from initial to professional) in 2009.
 - One respondent said “Yes” to this item because she submitted the paperwork to change certifications (from initial to standard) in 2009. However, she has not yet received her standard certification.
 - One respondent renewed his certificate in 2008, but said “Yes” to this item because it was “still renewed” (i.e., current) in 2009.

- One respondent said “Yes” to this item, explaining, “I didn’t do anything to renew it but I say ‘Yes’ because the state renews it automatically.”
- Three participants suggested adding a “not applicable” response option. Two of these participants taught in private schools and were not certified. For the third, the state in which she teaches does not require teachers to renew their teaching certificate.
- This item was shown to participants after a series of items that referenced the “school year.” Participants did not seem to have any difficulty going from “school year” to “calendar year.” Two teachers, however, said they preferred the term “school year.”

Recommendations

- Depending on the intent of the item, consider revising the question as *“Was your teaching certificate renewed during the 2009 calendar year?”*
- If teachers who are not certified will be responding to this item, consider adding a “not applicable” response option.

Q3 (Movers, Leavers, Returners)

During the 2009 calendar year, did you add a content area, field, or grade levels to your teaching certificate? (These additions to existing, valid certifications may be termed endorsements, authorizations, additional areas, or extensions.)

- ☐ Yes
- ☐ No

Findings

- None of the participants had any difficulty with this item. All understood the terms used.
- One participant suggested adding a “not applicable” option for those who are not certified.

Recommendations

- If teachers who are not certified will be responding to this item, consider adding a “not applicable” response option.

Q4 (Movers, Leavers, Returners)

During the 2009 calendar year, did you complete a master’s degree, educational specialist degree or professional diploma, doctoral degree (PhD, EdD), or professional degree (MD, JD, DDS)?

- ☐ Yes
- ☐ No

Findings

- No participants had any difficulty responding to this item.

Recommendations

- No modifications are recommended for this item.

Q5 (Movers, Leavers, Returners)

After the 2008–09 school year, have you enrolled in any courses (degree program, certificate, or non-degree) at a college or university?

- ☐ Yes
- ☐ No

Findings

- All participants were able to report for this time frame. Several were initially confused by the phrase “after the 2008–09 school year,” but this did not appear to affect their responses.
- When asked how they would respond to this item if they had enrolled in a course in July of 2009, all participants said they would respond “Yes.”
- All participants who responded “Yes” to this item were referring to courses taken as part of a degree program.
- Although it was not relevant to the time frame in question, one participant wondered if she would count CEU credits she earned at a conference that were later validated by a university. She decided that she would probably not count them, but felt the item was unclear on this issue.

Recommendations

- To help respondents understand which courses to include, consider providing an instruction on the kinds of courses that should not be counted in this item.

Q6 (Movers, Leavers, Returners)

Including yourself, how many family members were living in your household or were financially dependent on you (or your spouse) during 2010?

Findings

- Most participants commented that they answered this item in a similar way to how they would on their tax return.
- Of the seventeen participants who responded to this item, two did not include themselves in the count. One of the two responded “0”; the other responded “2.”
- When asked whether they would count a roommate in their response to this item, all but two said they would not. The other two said they would consider a roommate to be part of their “household.”
- When asked whether they would count a financially dependent child who lived in another state in their response to this item, all but one said they would. The remaining participant indicated that she would not count the child because he or she would not be part of her “household.”
- When asked whether they would count a romantic partner who they lived with but were not married to, participants were almost evenly split. For those who would, the most common reason was that they would consider the romantic partner as part of the family. Those who would not count a romantic partner typically

said it was because they would not count them as part of the family, or because they would not consider them to be financially dependent.

Recommendations

- Consider including an instruction as to whether to count romantic partners in the response to this item.
- Consider adding an instruction to respondents to use the number of dependents they report on their tax return as a guide.

Q7 (Movers, Leavers, Returners)

How many family members counted above were under 5 years of age?

Findings

- Several participants mentioned that they were not sure if children who were exactly 5 years old should be included in this item. One participant had a 5 year old child and included this child in her count.
- A few participants said this item was initially confusing to them because both the words “above” and “under” were in the same sentence. They had to reread the item in order to understand the item.

Recommendations

- Consider rewording the item as follows, “Of the family members included in your response to Item XX, how many were 4 years of age or younger?”

Q8 (Movers, Leavers)

(Movers) Did you change schools involuntarily (e.g., contract not renewed, laid off, school closed or merged)?

(Leavers) Did you leave last year's school involuntarily (e.g., contract not renewed, laid off, school closed or merged)?

**Report on the most recent time you left preK–12 teaching if you've left teaching more than once.*

☐ Yes

☐ No → go to item 5

Findings

- Participants did not have any difficulties with this item.
- Three participants indicated they had changed schools or left schools involuntarily. They gave the following reasons: funding issues, budget cuts, and contract not renewed following medical leave.

Recommendations

- No modifications are recommended for this item.

Q9 (Movers, Leavers)

(Movers) Which of the following best describes the reason why you changed schools involuntarily?

(Leavers) Which of the following best describes the reason why you involuntarily left the school?

☐ Budget cuts or budget shortfalls

☐ Reduced pupil enrollment

☐ School and/or district merger or school closed

☐ Transfer required by school or district (*Note: Movers only*)

☐ I did not meet Highly Qualified Teacher (HQT) requirements
(*Generally, to be Highly Qualified, teachers must 1) have a bachelor's degree; 2) hold full state certification or licensure, including an "alternative certification"; and 3) demonstrate competency in the subject area(s) they teach. The HQT requirement is a provision under No Child Left Behind [NCLB].*)

☐ My contract was not renewed for unknown reasons

☐ My contract was not renewed for other reason(s)

(→ go to item 6)

Findings

- Participants did not have any difficulties with this item.
- The participants who said “Yes” to the previous item selected the appropriate reason in this item.
- Participants agreed that tenured teachers would always know why they were forced to leave a school involuntarily. Some participants felt that it was possible, though highly unlikely, that new teachers or teachers

working for an “at will” employer might not know why they were forced to leave. A few said it was more likely that teachers would know why they were forced to leave but would be unwilling to share the reason.

- Two participants suggested adding a space to specify why their contract had not been renewed for “other reason(s).”
- One participant suggested adding “student performance” as a response option, as it might apply to teachers in private or charter schools.

Recommendations

- Consider adding a space to specify “other reason(s)” why the contract was not renewed.

Q10 (Movers, Returners)

Does your current school offer tenure?

___ Yes

___ No → go to item _

Findings

- Most of the participants did not have any difficulty with this item.
- Two participants found it somewhat confusing because tenure is offered through their district and not through their school. They both responded “Yes” to this item.

Recommendations

- Consider revising the item as follows, “Does your current school, school system, or state offer tenure?”

Q11 (Movers, Returners)

Are you tenured at your current school?

- ☐ Yes
- ☐ No

Findings

- Most of the participants did not have any difficulty with this item.

Recommendations

- No modifications are recommended for this item.

Q12 (Movers, Returners)

Do any of the following people or groups conduct your formal evaluation at this school?

- a. Principal
 - ☐ Yes
 - ☐ No
- b. Vice principal or assistant principal
 - ☐ Yes
 - ☐ No
- c. Your peers
 - ☐ Yes
 - ☐ No
- d. Outside group (e.g., consultant)
 - ☐ Yes
 - ☐ No

Findings

- Most participants did not have difficulty with this item.
- Participants defined “formal evaluation” in a similar way—that is, that they are observed by an administrator who completes an official report and gives them feedback. However, some participants expressed confusion over what this item was asking. This led to some false positive responses.
 - One teacher selected “Yes” to principal, vice principal, and outside group—however, only the vice principal was actually responsible for conducting evaluations at his school. At his school, the principal conducts *informal* observations, and state-level personnel come into the school to provide needs-based training to staff because they are a “school in warning.”
 - Another teacher selected “Yes” for all four parts of this item, even though the principal and vice principal were the only people who conduct formal evaluations. In Part (c) she counted a former teacher (i.e., a peer) who is now employed by the district to conduct informal evaluations and coach teachers. In Part (d), she was referring to accreditation evaluators.
- Two participants were not sure how to respond because their schools do not have a principal or vice principal.

- For one participant, who was an art teacher, the art director or academic director conducts the formal evaluations. This participant selected “No” for all parts of this item.
- In one non-traditional, performing arts school, the school president and outside consultants conduct formal evaluations. This participant respond “Yes” to Part (d) and “No” to the other parts of this item.
- Evaluators that participants considered under Part (d) (“outside group”) included: district-level staff, state-level staff, school board staff, accreditation evaluators, and consultants hired by the school or district.

Recommendations

- Consider modifying the item as follows, “Do any of the following people or groups conduct your FORMAL EVALUATION at this school?”
- Consider including an instruction indicating that respondents should not consider informal evaluations in their answer.
- Consider adding part (e): “Other (specify)” so that teachers who work in non-traditional schools can provide information on who conducts their formal evaluations.
- Depending on the intent of the item, consider adding “district-level staff” as an example in part (d), or as a separate category.

Q13 (Movers)

Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK–12?

** If you work as a library media specialist or librarian at your current school, do not include classes in which you teach students how to use the library (e.g., library skills or library research).*

** If you teach a particular specialty either within or outside of a regular classroom (e.g., reading specialist, special education teacher, English as a Second Language teacher), include that time as a regularly scheduled class.*

☐ Yes

☐ No

Findings

- Based on the background information collected at the beginning of the interview, all participants responded accurately to this item.
- Participants were asked how they thought a special education teacher who did not teach her own class but went into different classes to help certain students would answer this item.
 - Three participants said this teacher should respond “Yes” and gave the following reasons: because the students she worked with would be her “class”; because the directions say to count a special education teacher; and because the teacher would be “regularly scheduled” in those classrooms.
 - Two teachers said this teacher should respond “No” because she would not be the head teacher or because she would not teach regularly scheduled classes.
 - The remaining participant said the teacher should respond “Yes” if the students were officially assigned to her, but “No” if they were not.

Recommendations

- Based on these findings, there may be some inconsistency in how special education teachers choose to respond to this item. However, because there is already an instruction addressing this it is not clear how the item could be improved in this respect.

Q14 (Movers)

Were you teaching in the same school during 2009–2010 as you were during the 2008–2009 school year?

☐ Yes → go to item 6

☐ No

Findings

- Participants did not have any difficulties with this item.

Recommendations

- No modifications are recommended for this item.

Q15 (Leavers)

What is your current MAIN occupational status?

- ___ Working for a school or school district in a position in the field of K–12 education, but not as a regular K-12 classroom teacher
- ___ Working in a position in the field of preK or postsecondary education → go to item 3
- ___ Working in an occupation outside the field of education, including military service → go to item 3
- ___ Student at a college or university → go to item 3
- ___ Caring for family members → go to item 3
- ___ Retired → go to item 3
- ___ Disabled → go to item 3
- ___ Unemployed → go to item 3
- ___ Other → go to item 3

Findings

- Most participants did not have any difficulty with this item.
- One former teacher who worked for an after school mathematics and reading franchise was not sure which option to select. She felt the first option did not apply because she does not work for a school or school district. The second option did not apply because she does not work in preK or postsecondary. The third option did not apply because she works in the field of education. Ultimately, she selected “Other.”
- When asked what the phrase “working in the field of K-12 education” meant, all participants said working in a school but not necessarily as a teacher. Some participants also mentioned working for the district or working directly with K-12 children.

Recommendations

- No modifications are recommended for this item.

Q16 (Leavers)

Is your current main occupation a –

**If you have more than one position, mark (X) the position for which you spend the most time.*

- ___ Principal/school head/dean
- ___ Assistant principal
- ___ School district administrator
- ___ Librarian/Library technician
- ___ Instructional coordinator
- ___ Academic coach/specialist
- ___ Teacher assistant/aide
- ___ Counselor or school psychologist
- ___ Short-term substitute
- ___ Other occupation

Findings

- Two teachers were confused by the “academic coach/specialist” response option.
 - One teacher had difficulty because her current position is as an “instructional coach.” She had trouble deciding whether that position was best represented by “instructional coordinator” or “academic coach/specialist.” Ultimately she selected “instructional coordinator.” She explained that she interpreted the coordinator option as someone who gives support/instruction to teachers in any content area, while the coach would give support in a specific content area.
 - Another teacher was not sure what “specialist” meant. She suggested that it would be an art or music teacher (i.e., a teacher who teaches “specials”). She did not think art or music teachers would consider themselves regular classroom teachers.

Recommendations

- No modifications are recommended for this item.

Study Information Form

NOTE: The Study Information Form that was tested is provided as appendix B.

Findings

- None of the participants expressed any confusion about anything they read in the Study Information Form.
- When asked whether there was any other information they would want to know about the study that wasn’t provided on the form, participants mentioned the following:
 - Who will be using the data?
 - What kinds of reports will be created, and who will read them?
 - How will the results of the survey help me and my school?
- After reading the Form, all 18 participants understood:
 - The purpose of the study;
 - That the study is voluntary;
 - How they could notify the Census Bureau that they did not wish to participate;
 - How long it takes on average to complete the survey; and
 - How the response data will be used.⁴⁴

⁴⁴ While all participants understood the information on the form about how the data will be used, some thought that more specific information should be provided.

- All but one participant understood how the confidentiality of their data would be ensured; the remaining participant mistakenly thought that no personal information would be collected.
- While all participants understood that both NCES and the Census Bureau were responsible for the survey, a few were unsure about their respective roles.

Recommendations

- The current content of the form is clear to readers; no revisions are necessary.

Consider providing more specificity about how the data will be used (e.g., “by policymakers to inform decisions that affect teachers and schools”).

Attachment G-1.
BTLS Teacher Interview Protocol

Interview Protocol for Beginning Teacher Longitudinal Survey

June 2010

Introduction

“Thank you for agreeing to assist us with this project. My name is _____, and I work for ICF Macro, a research company that the Department of Education has hired to conduct this study. Before we begin, I’d like to ask whether you have copies of the questions that we are going to be talking about today.

“The purpose of this interview is to test potential items for the Beginning Teacher Longitudinal Study, a national educational survey that is conducted by the National Center for Education Statistics and the Census Bureau. Before they make any changes to the survey items, the researchers always test them with potential participants to make sure that the items are as easy to understand as possible. In today’s interview, I am going to have you answer some of these items just as you would if you were really taking the survey so that we can make sure that they are clear and that they are soliciting the information that the survey writers intended.

“As you answer each item I’d like you to ‘think aloud.’ In other words, I would like you to say aloud what you are thinking as you read each question, as you consider the answer choices, and as you finally answer the question. For example, if you are trying to decide which answer to select, please explain why you are unsure. This will help us determine whether the question is truly being understood as it is intended.”

Re-Screening

Before you begin, ask the interviewee the screening questions below for their group just to confirm that they are qualified for the interview:

(Movers) Why did you leave your school and move to a new one?

- *Probe for all reasons that may have contributed to this decision.*
- *(This information will be used to check their response to Item 5.)*

(Leavers) Why did you leave teaching?

- *Probe for all reasons that may have contributed to this decision.*
- *Could you describe to me what you have been doing since you left teaching?*
- *OR, if participant has already returned to teaching: Could you describe to me what you did during the period of time you left teaching?*

(Returners) Why did you return to teaching?

- *Probe for all reasons that may have contributed to this decision.*
- *(This information will be used to check their response to Item 1.) NOTE: it is more natural to ask about when/why participant started teaching, left, and returned.*

Directions for Interviewer:

For each item, do the following:

- a) Ask the participant to read the item, consider the potential answer choices, and then select the most appropriate choice—just as if he or she were actually completing this survey. As they do, remind them to “think aloud.” If they are quiet for a period of time, ask them what they are thinking about. When they select an answer, mark it on the answer sheet for that participant.
- b) Allow the participant to answer a complete series (as marked on the protocol) before asking probing questions. Try not to ask any probing or prompting questions as they give their initial answer; if they are having trouble understanding the item or choosing an answer, ask them to describe exactly what they are struggling with.
- c) For each item, record three things:
 - a. Their final answer(s)
 - b. Notes on any follow-up questions
 - c. Any other notes on issues that they brought up with the item, anything they struggled with, or anything else relevant that they said while “thinking aloud.”

Questionnaire Items

Q1: Matrix Item

(Movers) Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR’S school.

(Leavers) Indicate the level of importance EACH played in your decision to leave your preK-12 teaching position.

(Returners) Indicate the level of importance EACH played in your decision to return to the position of a preK-12 teacher.

- Is there anything about this item that could be confusing or unclear?
- Did you find answering this question to be at all overwhelming, due to the length of the list?
- Let’s take a look at the items listed under each of the categories. *For each group, ask: Are any items redundant? Too narrow? Too broad?*
 - Personal life factors
 - Assignment and credential factors
 - Salary and other job benefits
 - Career factors
 - Classroom factors
 - School factors
 - Student performance factors
 - Other factors
- (Movers) How easy was it for you to choose the reasons why you changed schools?
 - How easy was it for you to rate how important these reasons were?
 - Did you have any difficulty answering this question for any reason?
- (Leavers) How easy was it for you to choose the reasons why you left teaching?
 - How easy was it for you to rate how important these reasons were?
 - Did you have any difficulty answering this question for any reason?
- (Returners) How easy was it for you to choose the reasons why you returned to teaching?
 - How easy was it for you to rate how important these reasons were?
 - Did you have any difficulty answering this question for any reason?

- (Movers) Do you think there are any other reasons for switching schools that should be added to this list?
- (Leavers) Do you think there are any other reasons for leaving teaching that should be added to this list?
- (Returners) Do you think there are any other reasons for returning to teaching that should be added to this list?
- (Movers) Imagine that you switched schools because your spouse accepted a new job and you had to move. How would you answer this question in that situation?

Q2 (Movers, Leavers, Returners) During the 2009 calendar year, did you renew your teaching certificate?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
 - *If yes*, on what date did you renew your teaching certificate? (*If date reported is not in 2009, ask why.*)
 - *If no*, when was the last time you renewed your teaching certificate? When is the next time you'll need to renew your teaching certificate? How often do you need to renew your certificate?

Q3 (Movers, Leavers, Returners) During the 2009 calendar year, did you add a content area, field, or grade levels to your teaching certificate?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- Do you know what is meant by “adding a content area, field, or grade levels to your teaching certificate”? What term is used in your school to describe this?
- Does the sentence in parentheses make sense? Which of these terms have you heard before? Do you think that all of these terms mean what this item says they mean?

Q4 (Movers, Leavers, Returners) During the 2009 calendar year, did you complete a master's degree, educational specialist degree or professional diploma, doctoral degree (Ph.D., Ed.D.), or professional degree (M.D., J.D., D.D.S.)?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- *If yes*, on what date did you complete your degree? What type of degree did you complete?

Q5 (Movers, Leavers, Returners) After the 2008-2009 school year, have you enrolled in any courses (degree program, certificate, or non-degree) at a college or university?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- *If yes*, how many courses did you take?
 - *For each of the courses, ask:* Please describe the course.
 - Was the course(s) part of a degree program, certificate, or non-degree program?
 - When did the course begin?
 - Did you complete the course? If so, when did the course end? (*Figure out how teachers are interpreting “after the 2008-2009 school year.”*)

Q6 (Movers, Leavers, Returners) Including yourself, how many family members were living in your household or were financially dependent on your (or your spouse) during 2010?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- Who did you include in your number? (Family members, roommates, etc.?) *Did they include themselves, as instructions state?*
 - *If children are included:* What are the ages of the children?

- Imagine that you were not married and had no children, and lived with a roommate. Would you include the roommate in your response to this question? [*Note: if participant asks whether they are supporting the roommate financially, answer “no.”*]
 - *If no:* Why not?
- Imagine that you had a child that you supported financially, but who lived in a different state. Would you include them in your response to this question?
 - *If no:* Why not?
- Imagine that you lived with your romantic partner/boyfriend/girlfriend. Would you include them in your response to this question?
 - *If no:* Why not?

Q7 (Movers, Leavers, Returners) How many family members counted above were under 5 years of age?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?

Q8

(Movers) Did you change schools involuntarily (e.g., contract not renewed, laid off, school closed or merged)?

(Leavers) Did you leave last year’s school involuntarily (e.g., contract not renewed, laid off, school closed or merged)?

**Report on the most recent time you left preK–12 teaching if you’ve left teaching more than once.*

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- *If yes, please describe the circumstances around what happened when you changed schools involuntarily. (Interviewer: Try to figure out if they were fired, forced to transfer, etc.)*
- Do the examples in parentheses make sense? Are there other examples that could be added to help clarify the question?

Q9

(Movers) Which of the following best describes the reason why you changed schools involuntarily?

(Leavers) Which of the following best describes the reason why you involuntarily left the school?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- Do any of the response options overlap? Do any seem too similar or redundant?
- Are there any other response options that should be added to this list?
- How likely do you think it would be that a teacher would not know the reason they were laid off?

Q10 (Movers and Returners) Does your current school offer tenure?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- How would you define “tenure?”
- Does your district have a tenure system?

Q11 (Movers and Returners) Are you tenured at your current school?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?

Q12 (Movers and Returners) Do any of the following people or groups conduct your formal evaluation at this school?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- Explain what you think is meant by the term “formal evaluation.”
- Have you been formally evaluated? If so, please describe the evaluation process at your school.
 - Who does the evaluations? Does someone from the district come to your school to evaluate you or is it someone from your school? Is it someone else?
 - How often are you evaluated?
- Who did you think of when you saw option (d) “Outside group (e.g. consultant)?”
- Are there any other people (internal and external) that conduct formal evaluations that are not on this list?

Q13 (Movers) Do you CURRENTLY TEACH any regular scheduled class(es) in any of grades preK–12?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- Please describe your role or position in your school. (*Interviewer: Check for contradictions by making sure that their position matches their response to Item 1. If you notice a contradiction, ask why.*)
- If you were a special education teacher who didn’t teach your own class, but instead went into different classes to help certain students, how would you answer this question?

Q14 (Movers) Were you teaching in the same school during 2009–2010 as you were during the 2008–2009 school year?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?

Q15 (Leavers) What is your current MAIN occupational status?

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- What do you think the phrase “working in the field of K–12 education” means?
- Are there any additional answer choices that should appear in this list, but do not?

Q16 (Leavers) Is your current main occupation a --

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- This question will be answered by people who say they are working in the field of K–12 education, but not as a “regular classroom teacher.” With that in mind, are there any additional answer choices that should appear in this list, but do not?

Study Information Form (Movers, Leavers, Returners)

- Was there anything in the text that you found difficult to understand?
- Is there information that you would like to know about the study that is not presented in this statement?
- If you wanted to get more information about this study, how would you go about doing that?
- After reading this document, what do you think is the purpose of this study?
 - Did participant mention that study will be tracking a set cohort of teachers?
 - Did participant mention that data will be collected over an extended period of time?
 - Did participant mention that information will be used to study teachers’ transitions, or impact that life events have on their careers?
- Which government agency is sponsoring the study?
- Which government agency is collecting data from participants?

- Is the study voluntary? How do you know? *Note whether the participant sees from the form that it is voluntary, and WHERE on the form they see that.*
- If someone doesn't want to participate, how can he/she remove himself/herself from the study?
- How long does it take to complete the survey on average?
- How will the data be used?
 - *Did participant mention that his/her data will be combined with data from other respondents?*
 - *Did respondent mention that the data will be used to create statistical reports?*
- What is your understanding of data confidentiality?
 - *Did participant mention that his/her individual data will never be released?*
 - *Did participant mention that his/her data will be stored on an NCES server?*

Attachment G-2.
Study Information Form

Thank you for being a part of the Beginning Teacher Longitudinal Study!

The U.S. Census Bureau is conducting this survey for the National Center for Education Statistics (NCES) of the U.S. Department of Education. The purpose of the study is to collect data from a cohort of teachers over time to get a better understanding of how teachers respond to transitions in their lives. Please know that your participation in this study is completely voluntary. If you would like to be removed from the study, please contact Freddie Cross in writing at freddie.cross@ed.gov. However, we hope you will want to be part of this important and exciting study.

How will the data be collected?

The data will be collected through a web-based questionnaire every year for about a decade, beginning in the 2007–08 school year. At the beginning of each data collection, you will receive e-mails from NCES containing a username, password, and link to the questionnaire. We estimate it will take an average of 20 minutes for you to complete the survey each year, including the time spent reviewing instructions, searching existing data sources, gathering the data needed, and completing and reviewing the questionnaire.

How will my information be reported?

The information you provide will be combined with data from other respondents to develop statistical reports about teachers and schools across the country. No individually-identifiable data will be included in these reports.

Will my data be kept confidential?

All responses are protected by Public Law 107-279, the Education Sciences Reform Act of 2002, Title I, Part E, Section 183. Your answers will be used for statistical purposes only and will not be disclosed, or used, in identifiable form for any other purpose except as provided by law. Your responses to the survey are stored on a secure server at the National Center for Education Statistics.

Where can I get more information about this study?

For more information, go to <http://nces.ed.gov/surveys/btls>.

This survey is authorized by Title I, Part E, Sections 151(b) and 153(a) of Public Law 107-279, the Education Sciences Reform Act of 2002. According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0868.

Attachment G-3.
Matrix Item for Movers, Leavers, and Returners

ITEM 1 (Movers)

Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR'S SCHOOL:

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
A. Because I moved or wanted to take a job more conveniently located.					
B. Because of other personal life reasons (e.g., health, pregnancy/childcare, caring for family).					
Assignment and Credential Factors					
C. Because I have not taken or could not pass the required test(s).					
D. Because I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).					
Salary and Other Job Benefits					
E. Because I wanted or needed a higher salary.					
F. Because I needed better benefits than I received at last year's school.					
G. Because I was concerned about my job security at last year's school.					
Classroom Factors					
H. Because I did not have enough autonomy over my classroom at last year's school.					
I. Because I was dissatisfied with the large number of students I taught at last year's school.					
J. Because I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at last year's school.					
School Factors					
K. Because I wanted to teach at my current school.					
L. Because I was dissatisfied with opportunities for professional development at last year's school.					
M. Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.					
N. Because student discipline problems were an issue at last year's school.					
O. Because I was dissatisfied with the administration at last year's school.					
P. Because I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.					
Student Performance Factors					
Q. Because I was dissatisfied with how student assessments/school accountability measures impacted my teaching or the curriculum at last year's school.					
R. Because I was dissatisfied with having some of my compensation, benefits, or rewards tied to the performance of my students at last year's school.					
S. Because I was dissatisfied with the support I received for preparing my students for student assessments at last year's school.					
Other Factors					
T. Because of other factors not included in the previous items.					
→ Please specify:					

ITEM 1 (Leavers)

Indicate the level of importance EACH played in your decision to leave your preK-12 teaching position:

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
A. Because I moved or wanted to take a job more conveniently located.					
B. Because of other personal life reasons (e.g., health, pregnancy/childcare, caring for family).					
C. Because I decided to retire.					
Assignment and Credential Factors					
D. Because I have not taken or could not pass the required test(s).					
E. Because I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).					
Salary and Other Job Benefits					
F. Because I wanted or needed a higher salary.					
G. Because I needed better benefits than I received at last year's school.					
H. Because I was concerned about my job security at last year's school.					
Career Factors					
I. Because I decided to pursue a position other than that of a preK-12 teacher.					
J. Because I was dissatisfied with opportunities for professional development at last year's school.					
K. Because I decided to take courses to improve career opportunities WITHIN the field of education.					
L. Because I decided to take courses to improve career opportunities OUTSIDE the field of education.					
M. Because I was dissatisfied with teaching as a career.					
Classroom Factors					
N. Because I did not have enough autonomy over my classroom at last year's school.					
O. Because I was dissatisfied with the large number of students I taught at last year's school.					
P. Because I felt that there were too many intrusions on my teaching time (i.e., time spent with students) at last year's school.					
School Factors					
Q. Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.					
R. Because student discipline problems were an issue at last year's school.					
S. Because I was dissatisfied with the administration at last year's school.					
T. Because I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.					
Student Performance Factors					
U. Because I was dissatisfied with how student assessments/school accountability measures impacted my teaching or the curriculum at last year's school.					
V. Because I was dissatisfied with having some of my compensation, benefits, or rewards tied to the performance of my students at last year's school.					
W. Because I was dissatisfied with the support I received for preparing my students for student assessments at last year's school.					
Other Factors					
X. Because of other factors not included in the previous items.					
→ Please specify:					

ITEM 5 (Returners)

Indicate the level of importance each of the following played in your decision to return to the position of a preK–12 teacher.

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
A. Because I moved or wanted to take a job more conveniently located.					
B. Because of other personal life reasons (e.g., maternity leave ended, change in childcare or healthcare needs).					
Salary and Other Job Benefits					
C. Because I wanted or needed a higher salary.					
D. Because I was offered a financial incentive to teach.					
E. Because some of my compensation, benefits, or rewards are tied to the performance of my students.					
F. Because I needed the health benefits.					
G. Because I wanted the retirement package.					
H. Because I wanted job security.					
Career Factors					
I. Because I realized I preferred preK-12 teaching as a career.					
J. Because I completed the coursework I was pursuing.					
K. Because I missed being able to make a difference in the lives of students.					
Assignment and Credential Factors					
L. Because I passed the required test(s).					
M. Because I was offered the grade level or subject area that I wished to teach.					
School Factors					
N. Because I wanted to teach at my current school.					
O. Because I was able to maintain privileges based on my seniority.					
P. Because I liked the school schedule/calendar.					
Other Factors					
Q. Because of other factors not included in the previous items.					
R. → Please specify:					

Appendix H. Cognitive Testing of Proposed Items for BTLs:

Summary of Findings and Recommendations (2011)

This appendix contains a report prepared by ICF Macro and delivered to the U.S. Census Bureau in August 2011. The contents are listed below.

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Background

In the summer of 2011, the Census Bureau contracted with ICF Macro, a research and evaluation firm in Calverton, Maryland, to plan and carry out a series of cognitive interviews with current and former teachers. The purpose of these interviews was to gather feedback on a number of proposed items for the surveys that will be a part of the Beginning Teacher Longitudinal Study (BTLS). The BTLS is a national study conducted by the National Center for Education Statistics (NCES) and the Census Bureau. The survey will be administered annually for 10 years to a cohort of teachers in order to gain insight into teachers' responses to transitions.

This report summarizes the methodology used in conducting the interviews, as well as feedback ICF Macro received from participants about the survey items.

Summary of Methodology

Recruitment Protocol and Summary of Participants

ICF Macro conducted cognitive interviews with nine current or former teachers. Teachers were recruited from several sources, including a list purchased from an outside vendor and an ICF Macro database of educators. An e-mail was sent out to potential participants that described the study and offered an incentive to those who participated. Interested teachers who contacted ICF Macro by telephone or e-mail were then screened and scheduled for an interview.

Depending on their circumstances, teachers were classified as “Movers,” “Leavers,” or “Returners” and sent the appropriate interview protocol. “Movers” were defined as teachers who had left one school and moved to another within the past 5 years. “Leavers” were defined as teachers who had left the teaching profession in the past 5 years. “Returners” were defined as teachers who had left teaching for at least 1 year and had returned to teaching in the past 5 years. In addition, participants were asked whether or not they had served as a mentor teacher, which was defined as an experienced teacher who was assigned to provide support to a newer teacher.

ICF Macro interviewed three teachers in each group (Movers, Leavers, and Returners). Participants represented each of the school levels (elementary, middle, and high) and taught in five states (Alabama, Arizona, Georgia, Florida, and Virginia). Seven of the nine teachers indicated that they had previous mentor experience.

Interview Protocol

Each interview lasted approximately 45 minutes and was conducted by phone. Prior to each interview, the participants were e-mailed a copy of the survey items and asked to print them out but not to read them until the interview. The interview protocols were different for each group (Movers, Leavers, and Returners). At the beginning of each interview, the interviewer rescreened the teacher to ensure that he or she was eligible for the study and classified in the correct group.

During the interview, participants were asked to answer several BTLS items as they normally would if they were responding to the survey. As they answered each item, they were also asked to “think aloud”—that is, to describe out loud their thought process as they read and responded to each item. After the participant answered a series of items, the interviewer asked several follow-up questions to test his or her understanding and interpretation of the items and response options. The interview protocols are included in this report as attachment H-1.

Summary of Participant Feedback and Recommendations

The following section of this report summarizes the results of this study. For each item being tested, we provide the wording and response options, a list of relevant findings, and our recommendations for revisions to the item based on those findings.

Q1

Movers: Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR’S school.

- a. Because of a change in residence.
- b. Because I wanted the opportunities offered at my current school.
- c. Because I was dissatisfied with how some of my compensation, benefits, or rewards were tied to the performance of my students at last year’s school.

Leavers: Indicate the level of importance EACH played in your decision to leave your preK–12 teaching position.

- a. Because of a change in residence.
- b. Because I wanted the opportunities offered at my current school.
- c. Because I was dissatisfied with how some of my compensation, benefits, or rewards were tied to the performance of my students at last year’s school.

Returners: Indicate the level of importance EACH played in your decision to return to the position of a preK-12 teacher.

- a. Because of a change in residence.
- b. Because I wanted or needed a job/higher salary.
- c. Because of how some of my compensation, benefits, or rewards are tied to the performance of my students.
- d. Because I wanted the opportunities offered at my current school.
- e. Because I was able to maintain privileges based on my seniority/tenure.

Note: These items were included as a part of a larger set of items, which is shown in appendix A.

Findings

Overall

- When answering these questions, five of the nine participants answered in part based on whether the statements were true or important in general, not whether they had played a part in their decision. For example:
 - One returner rated “Because I passed the required test(s)” as “extremely important” because it was true, even though she actually passed the tests years before she left teaching and it was not a factor in her decision to return.
 - One leaver rated “Because I was dissatisfied with how student assessments/school accountability measures impacted my teaching...” as “very important.” However, upon further questioning he said that this was not actually a factor in his decision, but he rated it as “very important” because it was something that he felt strongly about.

- One mover who was forced to change schools because of budget cuts rated as “slightly important” the items “Because I was dissatisfied with opportunities for professional development” and “Because I was dissatisfied with workplace conditions.” However, neither was actually a factor in why she left.
- At least one participant (a returner) factored into her answers the extent to which each statement might be true for *other teachers*; for example, she rated “Because I was able to maintain privileges based on my seniority/tenure” as “extremely important” despite the fact that she had moved to another state and this could not have been a factor in her decision to return to teaching.
- One participant did not check any boxes for this item, because she felt that none of the items applied to her (she wrote in a reason under “other reasons,” but did not check the box). Another participant left most of the rows blank because they did not apply to her situation. A third initially left most rows blank, but then went back and checked “not at all important” for those rows he had left blank.
- One returner noted that (p) “Because I liked the school schedule/calendar” could mean that a respondent liked the schedule or calendar of a specific school, but could also mean that he or she liked the general schedule of the teaching profession (i.e., summer breaks).
- One mover found (j) problematic (“Because I felt that there were too many intrusions on my teaching time at last year’s school”). She was unsure whether this was referring to additional non-teaching duties that she was assigned outside of the classroom, or solely classroom intrusions such as assessments.
- When asked whether there were any other possible reasons that should be included in the question, two participants thought that an item should be added for teachers who left teaching or switched schools because of budget cuts in their district. One participant mentioned that someone could choose to return to teaching because they missed the “camaraderie” (she rated this as “very important” in her own response). Another participant listed reasons that were already captured in other items (e.g., “lack of administrative back-up”) apparently because he wanted to reiterate their importance in his decision.

“Because of a change in residence” (Movers, Leavers, and Returners)

- When asked what was meant by this item, all participants said that it referred to any situation in which the respondent moved his or her residence, whether because of divorce, a change in employment by a spouse, the purchase of a house, or another reason.
- Participants were asked which item would be most appropriate if they had made their decision because they wanted a job closer to where they lived (i.e., if their decision had been based on the relative location of their home and job, but they had not actually moved). Four said that “Because of a change in residence” would be the most appropriate response, while one said “Because of other personal life reasons” and another said “Because I liked the school calendar.” Three said that this situation would not fall under any of the current items.

“Because of how some of my compensation, benefits, or rewards are tied to the performance of my students” (Movers, Leavers, and Returners)

- Participants generally had a consistent understanding of this item, and thought that it referred to bonuses and other ways in which teachers could be rewarded or punished monetarily based on how their students performed on standardized assessments.

- Participants generally did not see a distinction between whether their compensation was tied to student performance and the specific way in which it was tied to performance. While two participants noted that the wording of the item seemed to imply that it was referring to the latter, it did not appear that this distinction would have affected any of their responses.

“Because I wanted the opportunities offered at my current school” (Movers and Returners)

- Four participants were asked which item would be most relevant if they had made their decision because they wanted to coach soccer at their new school. Three chose this item, while the fourth said that she would write in this reason under “other factors.”
- When asked what kind of “opportunities” this item might be referring to, participants mentioned the following:
 - Professional development opportunities
 - A job coaching a sports team or leading a club
 - A position such as a subject area specialist or department chair
 - The opportunity to train to be an administrator
 - Mentoring opportunities
 - The opportunity to work with technological resources not available in other schools

“Because I decided to take courses or pursue a degree to improve career opportunities WITHIN/OUTSIDE the field of education” (Leavers)

- Participants consistently understood the difference between these two items. They indicated that improving career opportunities within the field of education referred to situations in which teachers pursued coursework or a degree to further their careers as teachers or, potentially, administrators. Improving career opportunities outside the field of education referred to teachers who were looking to change careers (e.g., by attending nursing school).

“Because I was able to maintain privileges based on my seniority/tenure” (Returners)

- Participants had a consistent understanding of this item. When asked what the item meant, one participant commented that retaining her seniority when she returned to teaching would give her more job security and preference for certain positions (such as that of a department chair). Another commented that it meant that you would not need to “start over” when you returned to teaching.

“Because I wanted or needed a job/higher salary” (Returners)

- Returners were asked which item would be most relevant if they had returned to teaching because they were laid off from a non-teaching job. Two chose item (c) “Because I wanted or needed a job/higher salary,” while the third chose item (h) “Because I wanted job security.”
- When asked what this item meant, participants consistently thought it referred to a situation in which someone returned to teaching because they had no other job or because they needed more money.

Recommendations

- NCES should be aware that some participants will answer this question based on the extent to which the statements were true for them, not the extent to which they influenced their decision. However, it is unclear how this issue could be addressed without drastically changing the question (e.g., adding “I returned to teaching because...” to the beginning of every item).
- Consider asking this item as an open-ended question, rather than a selected response matrix. While this may increase transcription and coding costs, it may also lead to more accurate measurement of the reasons teachers make decisions, rather than what is important or true of them in a more general sense.
- There are likely to be some respondents who have difficulty answering this question because it does not include a “not applicable” response option. However, adding this option would likely change participants’ responses and affect the comparability of longitudinal results.
- Consider adding an item to the survey for movers and leavers who changed schools or left teaching involuntarily because of surplussing or district budget cuts.
- Consider either revising the wording for (a) (“Because of a change in residence”). Alternatively, consider adding an item to encompass teachers who made decisions based on their desire to work closer to home, but did not change their residence.
- Consider adding examples to the item about opportunities offered at respondents’ current school.

Q2

What are your estimated annual before-tax earnings at this job?

**If you are in the military service, report military earnings here.*

**Include earnings from commissions, merit pay bonuses, and other bonuses from this job.*

- ☐ less than \$40,000
- ☐ \$40,000 to \$49,999
- ☐ \$50,000 or more

Findings

- All but two of the participants said they would respond to this item if it were on a survey. Of the two participants who said they would not, one said he would be more likely to respond if there were only two response options: “less than \$X” or “\$X or more.” The other participant said she would be more likely to respond to the item if it explained more clearly why Census wanted the information and how it would be used.
- Three participants said they found the italicized part under the question somewhat confusing, particularly the direction related to military earnings. None of these participants were in the military service.
- One leaver had difficulty answering this item because he was unsure if “this job” referred to the teaching position he left or the position he currently held. He answered based on the non-teaching position he currently held.

Recommendations

- Based on findings from testing, it is possible that the response rate to this question might be slightly higher if only two response options were provided (e.g., “less than \$50,000” and “\$50,000 or more”). However, most participants indicated that they would answer the question as it is currently worded.
- For leavers, make sure that in the context of the survey it is clear to which job this question is referring.
- If this question is asked of current teachers, do not include the direction about military earnings because it may be confusing and lead people to include other sources of income as well.

Q3

This school year (2010–11), are you a Highly Qualified Teacher (HQT) according to your state’s requirements?

(Generally, to be Highly Qualified, teachers must 1) have a bachelor’s degree; 2) hold full state certification or licensure, including an “alternative certification”; and 3) demonstrate competency in the subject area(s) they teach. The HQT requirement is a provision under No Child Left Behind [NCLB].)

☐ Yes

☐ No

Findings

- All participants responded “Yes” to this item.
 - Four people did not express any doubt about their status, and seemed to define HQT in a way that was consistent with the definition provided.
 - Two teachers, both from Florida, were confident they were HQT based on the fact that they were certified in their subject areas and had been teaching for a long time.
 - Three people said they were unsure if they were HQT based on this item because they did not know if they had “demonstrated competency” in their subject areas. All three decided they had demonstrated competency based on their belief that they were good teachers or a positive evaluation.
- A few participants commented that if a particular state’s standards were higher than the definition given (e.g., if a state required a degree in a specific subject area), some respondents from that state might answer “Yes” to this question even though they were not HQT according to their state’s standards.
- Most teachers said the first qualification was clear, accurate, and easy to understand. Two teachers, however, said that it would be more accurate to say that teachers must “have *at least* a bachelor’s degree.” Two participants thought it should specify that the degree had to be in a specific content area. Three teachers said that in their states, a Master’s degree was required to be HQT.
- Most participants felt the second qualification was clear, accurate, and easy to understand. However, one participant was confused because she interpreted the statement to mean that she had to hold some

kind of “alternative certification” in addition to full state certification or licensure. However, she still responded “Yes” to the item, even though she knew she did not possess any kind of alternative certification.

- Participants were divided over whether all teachers would know their HQT status.
 - Four participants felt that all teachers responding to this survey would know their HQT status, either because they believed the definition provided was sufficient or that administrators generally communicated this information clearly with their teachers.
 - The other five participants thought that some teachers might not know their HQT status, particularly new teachers and teachers in private schools. Some thought that if a teacher did not already know what HQT meant, the italicized definition would not be sufficient to explain it to them.

Recommendations

- Consider modifying the first qualification to state that “teachers must have *at least* a bachelor’s degree.”
- Provide a clearer explanation of how teachers would “demonstrate competency in the subject area(s) they teach.”

Q4

During this school year (2010–11), will you (or have you):

- a. Serve as a coach/consultant in a particular subject?
 - ☐ Yes
 - ☐ No
- b. Serve as a mentor coordinator in your school or district?
 - ☐ Yes
 - ☐ No
- c. Serve in a teacher union leadership position?
 - ☐ Yes
 - ☐ No
- d. Give a presentation at a professional conference?
 - ☐ Yes
 - ☐ No
- e. Participate in any other leadership activity at your school or district?
 - ☐ Yes
 - ☐ No

Findings

- Four teachers responded “Yes” to (a). Two of these participants defined a coach/consultant as someone who was considered an expert in a content area and gives support to teachers. The other two participants defined a coach/consultant as someone who teaches teachers how to teach or anyone who has something to share with others.
 - Of the remaining five teachers, three defined a coach/consultant as an expert in a content area and gives support to teachers; one said it would be someone who tutors students; and the remaining participant said it would include an academic, afterschool, or science fair coach.
 - All but one of the teachers said that they would consider serving as a coach/consultant to be a leadership role; the remaining participant said serving coach or consultant was a resource for other teachers but not necessarily a leader.
- Five teachers responded “Yes” to (b). Upon further questioning, it became clear that three of these participants had not served as mentor coordinators. Two of them had been mentors but not mentor coordinators. The other participant said “Yes” because he coordinated a program (although it was unrelated to mentoring) and served as an informal mentor to others.
 - The remaining participants defined a mentor coordinator as someone who identified potential mentors for new teachers and arranged mentor activities.
 - All participants considered a mentor coordinator to be a leadership position.
- One participant responded “Yes” to (c). A different participant commented that she was not sure if serving as the school’s union representative would count as a “teacher union leadership position” because it was leadership within the school but not necessarily the union.
- Four participants responded “Yes” to (d). Most respondents took “professional conference” to mean an education-related meeting outside the school. Two participants, however, believed this could include presenting at a staff meeting; one of these responded “Yes” to the item. All but two of the participants said they considered giving a presentation at a professional conference to be a leadership role. The remaining two participants said it could be considered a leadership role but was not necessarily.
- All but one of the participants answered “Yes” to (e). When asked what kinds of activities might be included under (e), participants seemed to consider the phrase “leadership activity” to be very broad. Examples that they suggested included:
 - Team leader or department head
 - Facilitating/leading staff development sessions
 - Working with the principal
 - Serving as a committee member
 - Working on the curriculum or developing new courses
 - Model teaching

- Attending a conference
- Conducting staff meetings
- Serving as a mentor teacher
- Participating in the PTA
- Organizing events (e.g., Relay for Life)
- Coaching sports
- Sponsoring student clubs
- Taking a group of students on a trip

Recommendations

- Consider specifying in (a) that the question is referring to coaches or consultants who work with other teachers, not students.
- Consider specifying in (b) exactly what is meant by a mentor coordinator.
- If presentations at internal staff meetings should not be included in (d), specify this in the item.
- NCES should be aware that when answering (e), respondents are likely to take a very broad view of what is meant by “leadership activity.”

Q5

Were you given any training related to mentoring by your school or district?

- ☐ Yes
- ☐ No

Findings

- All but one of the participants said this item was clear and easy to understand. The remaining participant said it was unclear whether this question was asking if the respondent had simply been offered mentor training, or if they had participated in the training.
- When asked what they would consider to be training, participants mentioned guidance on how to be a mentor, the responsibilities related to mentoring, what to look for in the “mentee” teacher, how to interact with mentees, effective communication, and how to complete the required paperwork.
- Participants were asked how they would respond to this question if the only “training” they received was an informal conversation with a more experienced mentor about their role. Half said that they would answer “Yes,” while the other half of participants believed that the question was referring only to more formal training.

Recommendations

- Depending on the intent of the question, consider providing clarification as to whether only formal, structured training should be considered when responding to this item.

Q6

To what extent do you feel prepared to be a mentor?

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

Findings

- All participants, regardless of whether or not they had received any training to be a mentor or had served as a mentor, said they felt “Very well prepared” or “Well prepared” to be a mentor.
- None of the participants said there was anything difficult or unclear about this item. A few pointed out that respondents’ answers would be largely based on their own self-confidence, and would not be an objective measure of preparation.

Recommendations

- No modifications are recommended for this item.

Attachment H-1.
BTLS Teacher Interview Protocols

Interview Protocol for National Center for Education Statistics Teacher Telephone Interviews June 2011

Teacher Group: “Movers”

Current teachers who changed schools within the past 5 years (without a break from teaching)

Introduction

“Thank you for agreeing to assist us with this project. My name is _____, and I work for ICF Macro, a research company that the Department of Education has hired to conduct this study. Before we begin, I’d like to ask whether you have copies of the questions that we are going to be talking about today.

The purpose of this interview is to test potential items for the Beginning Teacher Longitudinal Study, a national educational survey that is conducted by the National Center for Education Statistics and the Census Bureau. Before they make any changes to the survey items, the researchers always test them with potential participants to make sure that the items are as easy to understand as possible. In today’s interview, I am going to have you answer some of these items just as you would if you were really taking the survey so that we can make sure that they are clear and that they are soliciting the information that the survey writers intended.

As you answer each item I’d like you to ‘think aloud.’ In other words, I would like you to say aloud what you are thinking as you read each question, as you consider the answer choices, and as you finally answer the question. For example, if you are trying to decide which answer to select, please explain why you are unsure. This will help us determine whether the question is truly being understood as it is intended.

Re-Screening

Before you begin, ask the interviewee the question below to confirm that they are qualified for the interview and to obtain background information for the interview:

1) Why did you leave your school and move to a new one? *Probe for all reasons that may have contributed to this decision. This information will be used to check their response to Item 1.*

Say to the participant: *Please go to the first item and answer it just as you would if you were taking the survey. Remember to think out loud as you are going through so I know how you are thinking about it.*

Directions for Interviewer:

For each survey item being tested, do the following:

- a) Ask the participant to read the item, consider the potential answer choices, and then select the most appropriate choice—just as if he or she were actually completing this survey. As they do, remind them to “think aloud.” If they are quiet for a period of time, ask them what they are thinking about. When they select an answer, mark it on the answer sheet for that participant.
- b) Allow the participant to answer a complete series (as marked on the protocol) before asking probing questions. Try not to ask any probing or prompting questions as they give their initial answer; if they are having trouble understanding the item or choosing an answer, ask them to describe exactly what they are struggling with.
- c) For each item, record three things:
 - a. Their final answer(s)
 - b. Notes on any follow-up questions
 - c. Any other notes on issues that they brought up with the item, anything they struggled with, or anything else relevant that they said while “thinking aloud.”

1. Indicate the level of importance EACH of the following played in your decision to leave LAST YEAR'S SCHOOL. Mark (X) one box on each line.

I left the position of a preK-12 teacher at my last year's school:

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
a. Because of a change in residence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Because of other personal life reasons (e.g., health, pregnancy/childcare, caring for family).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assignment and Credential Factors					
c. Because I have not taken or could not pass the required test(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Because I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary and Other Job Benefits					
e. Because I wanted or needed a higher salary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Because I needed better benefits than I received at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Because I was concerned about my job security at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classroom Factors					
h. Because I did not have enough autonomy over my classroom at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Because I was dissatisfied with the large number of students I taught at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Because I felt that there were too many intrusions on my teaching time at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

School Factors					
	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
k. Because I wanted the opportunities offered at my current school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Because I was dissatisfied with opportunities for professional development at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Because student discipline problems were an issue at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Because I was dissatisfied with the administration at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Because I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student Performance Factors					
q. Because I was dissatisfied with how student assessments/ school accountability measures impacted my teaching or the curriculum at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Because I was dissatisfied with how some of my compensation, benefits, or rewards were tied to the performance of my students at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Because I was dissatisfied with the support I received for preparing my students for student assessments at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Factors					
t. Because of other factors not included in the previous items.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Please specify:					

Stop here and wait for instructions from the interviewer

Testing Goals

- Do participants understand what is meant by the additional items?

Think Aloud Notes

Probes

- Is there anything about this item that could be confusing or unclear?
- How easy was it for you to choose the reasons why you changed schools? How easy was it for you to rate how important these reasons were? Did you have any difficulty answering this question for any reason?
- *Compare participants' answers to **Item 1** with their open-ended explanation of why they changed schools, and probe on any inconsistencies. For example, if they hadn't mentioned a reason but then gave it a non-1 answer in **Item 1**, ask why—or if the first reason they mentioned in their open-ended explanation didn't get the highest ranking in **Item 1**, ask why.*
- Do you think there are any other reasons for changing schools that should be added to this list?
- Now I'd like to give you a few reasons teachers might change schools, and ask which response options you think they would belong under. Which item would you select if you changed schools because...
 - You changed schools because you wanted a teaching job closer to your home?
Part _____ (Part A)
 - You wanted to be able to coach soccer, and your former school didn't have a soccer team? Part _____ (Part K)
 - You didn't like the fact that your pay was determined in part by how your students did on standardized tests? Part _____ (Part R)
 - You didn't mind that your pay was determined by how your students performed on standardized tests, but you didn't like the specific formula that was used to determine the impact of your students' scores on your pay? Part _____ (Part R)
 - You moved to another county because your spouse got a new job, and based on where you now lived it made sense for you to change schools? Part _____ (Part A)
- Great. Now I would like to ask you what you think is meant by a few of the items.
 - In your own words, what do you think is meant by **Part A**? What are some examples of reasons that would fall under **Part A**?
 - *If the participant did not select **Part A** for the above reasons, explain:* The Census would like people to select **Part A** for a wide range of reasons, including if they moved because their spouse got another job, or if they changed schools because the new school was closer to where they lived. How can this be communicated more clearly? How could **Part A** be reworded?

- In your own words, what you do think is meant by **Part K**? What are some examples of reasons for switching schools that might fall under this category?
- *If the participant did not select Part K for the third reason above, explain:* The Census would like people to select **Part K** for a wide range of reasons, including if they were interested in a specific opportunity at the school, other than teaching. How can this be communicated more clearly?
- What do you think is meant by **Part R**?
 - Do you think this question is asking whether you were dissatisfied with the specific ways that your compensation was tied to student performance, or whether you were dissatisfied with the fact that your compensation was tied to performance at all, or both?

Say to the participant: Please answer the remaining items just as you would if you were taking the survey. Remember to think out loud as you are going through them so I know how you are thinking about the items.

2. What are your estimated annual before-tax earnings at this job?

**If you are in the military service, report military earnings here.*

**Include earnings from commissions, merit pay bonuses, and other bonuses from this job.*

- ___ less than \$40,000
- ___ \$40,000 - \$49,999
- ___ \$50,000 or more

Testing Goals

- Will participants respond to this item or is it too personal?

Think Aloud Notes

Prompts

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- If you saw this item on a survey, would you be willing to answer it?
 - Why or why not?
 - *If participant said they would skip it,* Is there anything that would make you more likely to respond to this item?

3. This school year (2010–11), are you a Highly Qualified Teacher (HQT) according to your state's requirements?

(Generally, to be Highly Qualified, teachers must 1) have a bachelor's degree; 2) hold full state certification or licensure, including an "alternative certification"; and 3) demonstrate competency in the subject area(s) they teach. The HQT requirement is a provision under No Child Left Behind [NCLB].)

☐ Yes

☐ No

Testing Goals

- Do respondents understand that HQT is a specialized certificate?
- Will respondents know whether or not they are HQT?

Think Aloud Notes

Prompts

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- In your own words, what is meant by a Highly Qualified Teacher?
- Do you think the definition given for Highly Qualified Teacher is accurate? If not, why not?
- Is there any way that the question could be made clearer or easier to understand?
- How likely do you think it would be that a teacher responding to this survey wouldn't know whether or not they were HQT? In what situations do you think they might not know?

4. During this school year (2010–11), will you (or have you):

a. Serve as a coach/consultant in a particular subject?

☐ Yes

☐ No

b. Serve as a mentor coordinator in your school or district?

☐ Yes

☐ No

c. Serve in a teacher union leadership position?

☐ Yes

☐ No

d. Give a presentation at a professional conference?

☐ Yes

☐ No

e. Participate in any other leadership activity at your school or district?

☐ Yes

☐ No

Testing Goals

- Do participants consider Parts A-E to be examples of “leadership roles”?
- What might other leadership activities be?

Think Aloud Notes

Prompts

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- In your own words, what do you think is meant by **Part A**?
- Let’s go through some of the parts under **Item 4**.
 - Part A: Do you consider a coach/consultant to be a leadership role? Why or why not?
 - Part B: What about mentor coordinator, is that a leadership role? Why or why not?
 - Part D: Giving a presentation at a professional conference? Why or why not?
 - Part E: What are some examples of “other leadership activities”? Why or why not?

5. Were you given any training related to mentoring by your school or district?

☐ Yes

☐ No

Testing Goals

- What do respondents consider to be training?

Think Aloud Notes

Prompts

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?
- What kinds of things would you consider to be “training related to mentoring”?
- Imagine you were told that you were going to be a mentor. You met with an experienced mentor who took the time to explain this new role to you. In the context of this question, would you consider that to be “training”?

6. To what extent do you feel prepared to be a mentor?

☐ Not at all prepared

☐ Somewhat prepared

Testing Goals

- None

Think Aloud Notes

Prompts

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason?

--End of Interview--

That is all the questions I have for you! Thank you for your time. Could you please confirm that we have the correct address for you? <<Read address>>

Thank you again for your help!

Interview Protocol for National Center for Education Statistics Teacher Telephone Interviews July 2011

Teacher Group: “Leavers”

Teachers who left teaching within the past 5 years (may or may not have returned)

Introduction

“Thank you for agreeing to assist us with this project. My name is _____, and I work for ICF Macro, a research company that the Department of Education has hired to conduct this study. Before we begin, I’d like to ask whether you have copies of the questions that we are going to be talking about today.

The purpose of this interview is to test potential items for the Beginning Teacher Longitudinal Study, a national educational survey that is conducted by the National Center for Education Statistics and the Census Bureau. Before they make any changes to the survey items, the researchers always test them with potential participants to make sure that the items are as easy to understand as possible. In today’s interview, I am going to have you answer some of these items just as you would if you were really taking the survey so that we can make sure that they are clear and that they are soliciting the information that the survey writers intended.

As you answer each item I’d like you to ‘think aloud.’ In other words, I would like you to say aloud what you are thinking as you read each question, as you consider the answer choices, and as you finally answer the question. For example, if you are trying to decide which answer to select, please explain why you are unsure. This will help us determine whether the question is truly being understood as it is intended.

Re-Screening

Before you begin, ask the interviewee the question below to confirm that they are qualified for the interview and to obtain background information for the interview:

1) Why did you leave teaching? *Probe for all reasons that may have contributed to this decision. This information will be used to check their response to Item 1. NOTE: It is more natural to ask about when a teacher started teaching, when they left, and what contributed to that decision.*

NOTE: If participant did not leave teaching, or left teaching more than five years ago, he or she does not qualify to be interviewed. Please apologize and say that Joyce will call him or her back.

2) Could you describe to me what you have been doing since you left teaching? *OR, if participant has already returned to teaching: Could you describe to me what you did during the period of time you left teaching?*

Say to the participant: *Please go to the first item and answer it just as you would if you were taking the survey. Remember to think out loud as you are going through so I know how you are thinking about it.*

Directions for Interviewer:

For each survey item being tested, do the following:

- a) Ask the participant to read the item, consider the potential answer choices, and then select the most appropriate choice—just as if he or she were actually completing this survey. As they do, remind them to “think aloud.” If they are quiet for a period of time, ask them what they are thinking about. When they select an answer, mark it on the answer sheet for that participant.
- b) Allow the participant to answer a complete series (as marked on the protocol) before asking probing questions. Try not to ask any probing or prompting questions as they give their initial answer; if they are having trouble understanding the item or choosing an answer, ask them to describe exactly what they are struggling with.
- c) For each item, record three things:
 - a. Their final answer(s)
 - b. Notes on any follow-up questions
 - c. Any other notes on issues that they brought up with the item, anything they struggled with, or anything else relevant that they said while “thinking aloud.”

1. Indicate the level of importance EACH of the following played in your decision to leave your preK-12 teaching position. Mark (X) one box on each line.

I left the position of a preK-12 teacher:

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
a. Because of a change of residence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Because of other personal life reasons (e.g., health, pregnancy/childcare, caring for family).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Because I decided to retire.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assignment and Credential Factors					
d. Because I have not taken or could not pass the required test(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Because I was dissatisfied with my job description or assignment (e.g., responsibilities, grade level, or subject area).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary and Other Job Benefits					
f. Because I wanted or needed a higher salary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Because I needed better benefits than I received at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Because I was concerned about my job security at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career Factors					
i. Because I decided to pursue a position other than that of a preK-12 teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Because I was dissatisfied with opportunities for professional development at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Because I decided to take courses or pursue a degree to improve career opportunities WITHIN the field of education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
l. Because I decided to take courses or pursue a degree to improve career opportunities OUTSIDE the field of education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Because I was dissatisfied with teaching as a career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Classroom Factors					
n. Because I did not have enough autonomy over my classroom at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Because I was dissatisfied with the large number of students I taught at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Because I felt that there were too many intrusions on my teaching time at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School Factors					
q. Because I was dissatisfied with workplace conditions (e.g., facilities, classroom resources, school safety) at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Because student discipline problems were an issue at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Because I was dissatisfied with the administration at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Because I was dissatisfied with the lack of influence I had over school policies and practices at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student Performance Factors					
u. Because I was dissatisfied with how student assessments/school accountability measures impacted my teaching or the curriculum at last year's school, including lack of support for preparing students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Because I was dissatisfied with how some of my compensation, benefits, or rewards were tied to the performance of my students at last year's school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Other Factors					
w. Because of other factors not included in the previous items.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Please specify:					

Stop here and wait for instructions from the interviewer

Testing Goals

- Do participants understand the new items?

Think Aloud Notes

Probes

- Is there anything about this item that could be confusing or unclear?
- Did you have any difficulty answering this question for any reason? How easy was it for you to choose the reasons why you left teaching? How easy was it for you to rate how important these reasons were?
- *Compare participants' answers to this item with their earlier open-ended explanation of why they left teaching, and probe on any inconsistencies. For example, if they hadn't mentioned a reason but then gave it a non-1 answer in **Item 1**, ask why—or if the first reason they mentioned in their open-ended explanation didn't get the highest ranking in **Item 1**, ask why.*
- Do you think there are any other reasons for leaving teaching that should be added to this list?
- Now I'd like to give you a few reasons teachers might leave the field, and ask which response options you think they would belong under. Which item would you select if you left teaching because...
 - You had a teaching job but decided that you wanted a job closer to your home, and a non-teaching job was the best option in terms of location?
Part _____ (Part A)
 - You didn't like the fact that your pay was determined in part by how your students did on standardized tests? Part _____ (Part V)
 - You didn't mind that your pay was determined by how your students performed on standardized tests, but you didn't like the specific formula that was used to determine the impact of your students' scores on your pay? Part _____ (Part V)
 - You moved to another county because your spouse got a new job, and based on where you now lived it no longer made sense for you to teach? Part _____ (Part A)

- Great. Now I would like to ask you what you think is meant by a few of the items. In your own words, what do you think is meant by **Part A**? What are some examples of reasons that would fall under **Part A**?
 - *If the participant did not select **Part A** for the above reasons, explain:* The Census would like people to select **Part A** for a wide range of reasons, including if they moved because their spouse got another job, or if they changed jobs to be closer to where they lived. How can this be communicated more clearly? How could **Part A** be reworded?
- What do you think is meant by taking courses or pursuing a degree to improve career opportunities “WITHIN the field of education,” as in **Part K**? Can you give an example of a situation that might fall under this category?
- What do you think is meant by taking courses or pursuing a degree “OUTSIDE the field of education,” as in **Part L**? Can you give an example of a situation that might fall under this category?
 - What is the difference between **Part K** and **Part L**?
- What do you think is meant by **Part V**?
 - Do you think this question is asking whether you were dissatisfied with the specific ways that your compensation was tied to student performance, or whether you were dissatisfied with the fact that your compensation was tied to performance at all, or both?

Say to the participant: *Please answer the remaining items just as you would if you were taking the survey. Remember to think out loud as you are going through them so I know how you are thinking about the items.*

Note: Questions 2-6 are the same as “Movers” guide.

--End of Interview--

That is all the questions I have for you! Thank you for your time. Could you please confirm that we have the correct address for you? <<Read address>>

Thank you again for your help!

Interview Protocol for National Center for Education Statistics Teacher Telephone Interviews July 2011

Teacher Group: “Returners”

Teachers who had a break in service but returned to teaching in the past 5 years

Introduction

“Thank you for agreeing to assist us with this project. My name is _____, and I work for ICF Macro, a research company that the Department of Education has hired to conduct this study. Before we begin, I’d like to ask whether you have copies of the questions that we are going to be talking about today.

The purpose of this interview is to test potential items for the Beginning Teacher Longitudinal Study, a national educational survey that is conducted by the National Center for Education Statistics and the Census Bureau. Before they make any changes to the survey items, the researchers always test them with potential participants to make sure that the items are as easy to understand as possible. In today’s interview, I am going to have you answer some of these items just as you would if you were really taking the survey so that we can make sure that they are clear and that they are soliciting the information that the survey writers intended.

As you answer each item I’d like you to ‘think aloud.’ In other words, I would like you to say aloud what you are thinking as you read each question, as you consider the answer choices, and as you finally answer the question. For example, if you are trying to decide which answer to select, please explain why you are unsure. This will help us determine whether the question is truly being understood as it is intended.

Re-Screening

Before you begin, ask the interviewee the question below to confirm that they are qualified for the interview and to obtain background information for the interview:

1) Why did you return to teaching? *Probe for all reasons that may have contributed to this decision. This information will be used to check their response to Item 1. NOTE: It is more natural to ask about when a teacher started teaching, left, and returned.*

Say to the participant: Please go to the first item and answer it just as you would if you were taking the survey. Remember to think out loud as you are going through so I know how you are thinking about it.

Directions for Interviewer:

For each survey item being tested, do the following:

- a) Ask the participant to read the item, consider the potential answer choices, and then select the most appropriate choice—just as if he or she were actually completing this survey. As they do, remind them to “think aloud.” If they are quiet for a period of time, ask them what they are thinking about. When they select an answer, mark it on the answer sheet for that participant.
- b) Allow the participant to answer a complete series (as marked on the protocol) before asking probing questions. Try not to ask any probing or prompting questions as they give their initial answer; if they are having trouble understanding the item or choosing an answer, ask them to describe exactly what they are struggling with.
- c) For each item, record three things:
 - a. Their final answer(s)
 - b. Notes on any follow-up questions
 - c. Any other notes on issues that they brought up with the item, anything they struggled with, or anything else relevant that they said while “thinking aloud.”

1. Indicate the level of importance EACH of the following played in your decision to return your preK-12 teaching position. Mark (X) one box on each line.

I returned to the position of a preK-12 teacher:

	Not at all important	Slightly important	Somewhat important	Very important	Extremely important
Personal Life Factors					
a. Because of a change in residence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Because of other personal life reasons (e.g., maternity leave ended, change in childcare or healthcare needs).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary and Other Job Benefits					
c. Because I wanted or needed a job/higher salary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Because I was offered a financial incentive to teach (e.g., signing bonus).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Because of how some of my compensation, benefits, or rewards are tied to the performance of my students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Because I needed the health benefits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Because I wanted the retirement package.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Because I wanted job security.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Career Factors					
i. Because I realized I preferred preK-12 teaching as a career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Because I completed the coursework I was pursuing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Because I missed being able to make a difference in the lives of students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assignment and Credential Factors					
l. Because I passed the required test(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Because I was offered the grade level or subject area that I wished to teach.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School Factors					
n. Because I wanted the opportunities offered at my current school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

o. Because I was able to maintain privileges based on my seniority/tenure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Because I liked the school schedule/calendar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Because of other factors not included in the previous items.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ Please specify:					

Stop here and wait for instructions from the interviewer

Testing Goals

- Do participants understand the new items?

Think Aloud Notes

Probes

- Is there anything about this item that could be confusing or unclear?
- How easy was it for you to choose the reasons why you returned to teaching? How easy was it for you to rate how important these reasons were? Did you have any difficulty answering this question for any reason?
- *Compare participants' answers to this item with their earlier open-ended explanation of why they returned to teaching, and probe on any inconsistencies. For example, if they hadn't mentioned a reason but then gave it a non-1 answer in **Item 1**, ask why—or if the first reason they mentioned in their open-ended explanation didn't get the highest ranking in **Item 1**, ask why.*
- Do you think there are any other reasons for returning to teaching that should be added to this list?
- Now I'd like to give you a few reasons teachers might return to teaching, and ask which response options you think they would belong under. Which item would you select if you returned to teaching because...
 - You had another non-teaching job but decided that you wanted a job closer to your home, and teaching was the best option in terms of location?
Part _____ (Part A)
 - You were laid off from a non-teaching job, so you went back to teaching?
Part _____ (Part C)
 - You had a job, but returned to teaching because it paid more money?
Part _____ (Part C)

- You liked the fact that your pay would be determined in part by how your students did on standardized tests? *Part _____ (Part E)*
- You liked the specific formula that would be used to determine the impact of your students' scores on your pay? *Part _____ (Part E)*
- You moved to another county because your spouse got a new job, and based on where you now lived it made sense for you to teach? *Part _____ (Part A)*
- You wanted to be able to coach soccer, so you decided to teach?
Part _____ (Part N)
- Great. Now I would like to ask you what you think is meant by a few of the items.
 - In your own words, what do you think is meant by **Part A**? What are some examples of reasons that would fall under **Part A**?
 - *If the participant did not select **Part A** for the above reasons, explain:* The Census would like people to select **Part A** for a wide range of reasons, including if they moved because their spouse got another job, or if convenience teaching job was the best option because it was close to where they lived. How can this be communicated more clearly? How could **Part A** be reworded?
- In your own words, what you do think is meant by **Part C**? What are some examples of reasons for returning to teaching that might fall under this category?
- What do you think is meant by **Part E**?
 - Do you think this question is asking whether you liked the specific ways that your compensation would be tied to student performance, or whether you liked the fact that your compensation would be tied to performance at all, or both?
- In your own words, what you do think is meant by **Part N**? What are some examples of reasons for returning to teaching that might fall under this category?
 - *If the participant did not select **Part N** for the fifth reason above, explain:* The Census would like people to select **Part N** for a wide range of reasons, including if they were interested in a specific opportunity at the school, other than teaching. How can this be communicated more clearly?
- Now, please look at **Part O**. In your own words, what is this item saying?
 - What this item was trying to capture was the fact that people might decide to return to teaching because they could retain the benefits or privileges they had accumulated earlier—for example, they could return to the same salary step or could count prior years of teaching towards retirement. Is this what you thought the question meant?
 - Is there any way the question could be worded more clearly?

Say to the participant: Please answer the remaining items just as you would if you were taking the survey. Remember to think out loud as you are going through them so I know how you are thinking about the items.

Note: Questions 2-6 are the same as “Movers” guide.

--End of Interview--

That is all the questions I have for you! Thank you for your time. Could you please confirm that we have the correct address for you? <<Read address>>

Thank you again for your help!

Appendix I. 2010–11 BTLS Incoming Call Training Self Study, BTLS Telephone Follow-up Self Study, and BTLS-27 Call Scripts

This appendix contains three documents related to the telephone calling operations performed by the Census Bureau for BTLS 2010–11. The documents and their contents are listed below.

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Beginning Teacher Longitudinal Study (BTLS)

Telephone Training Self Study, Incoming Calls—Precontact Letter Mailing

Introduction to Beginning Teacher Longitudinal Study (BTLS)

The Beginning Teacher Longitudinal Study (BTLS) is a longitudinal study that follows teachers who began teaching at the elementary or secondary level in 2007 or 2008. The 2010–11 BTLS is the fourth wave of this study. The first wave was the 2007-08 Schools and Staffing Survey (SASS). The second wave was the 2008–09 Teacher Follow-up Survey (TFS). The third wave was the 2009–10 BTLS. The 2010–11 BTLS is more focused on how changes in a teacher’s career and life affect his or her work experiences and decisions. The teacher’s participation in the BTLS will help to:

- Determine the rates at which teachers remain in or leave the teaching profession;
- Determine the rate of reentry into the teaching profession;
- Describe those who stay in the teaching profession, those who move from one school to another, those who leave the teaching profession, and those who return to the teaching profession;
- Determine whether those who leave the teaching profession are working elsewhere or not, and describe the career patterns of those who leave the teaching profession and those who remain in the teaching profession;
- Note changes in the highest degree earned and future plans; and
- Report on attitudes about the teaching profession and job satisfaction.

Overview of Survey Operations

11/1/10	Precontact letter mailout asking respondents to provide updated contact information
11/1/10	Incoming calls begin
1/3/11	Initial e-mail sent inviting the respondents to participate in the BTLS via Internet
1/7/11	Initial letter mailout inviting the respondents to participate in the BLTS via Internet
1/18/11	Reminder letter and e-mail mailout encouraging the respondents to complete their BTLS interview via Internet
1/31–6/3/11	Telephone follow-up

The Sample

There are 1,976 cases in the 2010–11 BTLS. Cases in the 2010–11 BTLS will have one of the following three beginning UserTypes. The UserTypes are determined from the 2009–10 BTLS status. The UserTypes are:

UserType	2009–10 BTLS
C	Current teacher
F	Former teacher
N	Nonrespondent

Precontact Letter Mailing

The purpose of the precontact mailing is to alert the respondents that in early January 2011, they will be invited to participate in the 2010–11 BTLS and that there will be a monetary incentive included in the invitation. The precontact mailing includes a brochure describing the study and a BTLS-1, Information Update sheet. The respondent's contact information is docuprinted on the BTLS-1. The respondent is asked to update or verify his or her contact information, as necessary, either by completing and returning the BTLS-1 or by logging into his or her BTLS account (login information is provided in the letter and e-mail).

Initial Letter and E-mail Invitation

On January 3, 2011, an e-mail inviting participation in the 2010–11 BTLS will be sent to the respondents for whom we have an e-mail address. On January 7, 2011, we will also mail a similar invitation to all respondents. The letter invitation will include a CASH incentive. Both the letter and the e-mail will contain the respondent's login information.

Reminder Letter and E-mail

On January 18, 2011, we will mail a letter reminding the respondent to participate in the study. We will also send a similar reminder by e-mail if we have an e-mail address for the respondent. The letter instructs the respondents to disregard this reminder if he or she has already completed the study.

Call-in Procedures

Please record **ALL** incoming calls using the BTLS Incoming Call Log. See the Job Aid for an example of the BTLS Incoming Call Log and instructions for completing the log. The BTLS Incoming Call Log is designed for one call per sheet. The BTLS Incoming Call Log records the following information:

- Interviewer's Name;
- Date & Time of Call;

- Reason for Call; and
- Case Referred to Supervisor.

And, if the case needs to be referred to the Supervisor, the BTLS Incoming Call Sheet also records the:

- Teacher's Username;
- Teacher's Name;
- Callback Phone Number;
- Issue; and
- Resolution.

When you handle a call that needs to be referred to the supervisor, complete the BTLS Incoming Call Log and **IMMEDIATELY** take it to the supervisor. The supervisor will alert you if further action is needed.

You may hold all other BTLS Incoming Call Logs at your station until the end of your shift or whenever you leave your station. **Be aware that these call logs have personally identifiable information (PII) and may not be left unattended at your station and cannot be taken home.**

Reasons for Respondent Calls

Respondents may call the Telephone Center in response to any of the letters or e-mails they received regarding their participation in the BTLS. Some of these reasons will include:

1. General questions about the BTLS;
2. Questions about the monetary incentive;
3. Respondent is no longer teaching;
4. Respondent did not begin teaching in 2007 or 2008;
5. Respondent requests a paper questionnaire;
6. Respondent refuses to participate;
7. Respondent has trouble logging into the Internet instrument; and
8. Other reasons.

General Questions About BTLS

If the respondent calls with **questions about the BTLS**, refer to the FAQ Job Aid to address the question. If you cannot answer their question using the FAQs, document the issue on the BTLS Call Log and refer case to your supervisor.

Questions About the Monetary Incentive

If the respondent calls with **questions about the monetary incentive**, inform the respondent that the **MONETARY** incentive will be included in the invitation that will be mailed in early January 2011. If this does not address the respondent's concern, document the issue on the BTLS Call Log and refer case to your supervisor.

Respondent Is No Longer Teaching

If the respondent calls to say that they are no longer teaching, inform the respondent that they are still eligible to participate in the study. The BTLS is interested in collecting the characteristics of those teachers who leave the teaching profession temporarily or leave permanently. Former teachers' responses will help:

- Reveal the effect of school policies and practices on teachers' decisions to leave the profession;
- Determine how teachers rate their workplace conditions relative to other professions; and
- Identify promotional tracks of former teachers who remain in the field of education, particularly in school settings.

Respondent Did Not Begin Teaching in 2007 or 2008

If the respondent calls reporting that they **did not begin teaching at the elementary or secondary level in 2007 or 2008**, ask the respondent when they did begin teaching. The respondent should not include time spent as a student teacher. If the respondent **returned** to the teaching profession in 2007 or 2008, but originally began teaching earlier than 2007, the respondent is **not eligible** to participate in the study. Thank the respondent for their interest in the study and inform them that they are **not eligible** for the study and to disregard the letter. Document the results of the call on the BTLS Call Log and refer to your supervisor. If you still cannot resolve their concern, document the issue on the BTLS Call Log and refer case to your supervisor.

Respondent Requests a Paper Questionnaire

If a respondent calls because they want to participate using a **paper questionnaire**, inform the respondent that the study is **ONLY** available on the Internet. If the respondent does not have Internet access or does not want to participate on the Internet, attempt to collect the information over the phone. If the respondent does not want to complete the interview over the phone, record the case on the BTLS Incoming Call Log and refer the case to your supervisor.

Respondent Refuses to Participate

If the respondent calls and **refuses to participate**, use refusal conversion techniques.

If you are unable to convert the refusal, document the DETAILED reason in the Issues portion of the BTLS Incoming Call Log and refer the case to your supervisor.

Respondent Has Trouble Logging Into the Internet Instrument

If the respondent calls and is having **trouble logging into the Internet instrument**, you should determine the nature of the problem. Based on experience in previous waves, the issues will most likely be challenges with the password or the respondent cannot access the BTLS webpage.

For password issues, remind the respondent that the password is case-sensitive. If the respondent continues to have password challenges, encourage the respondent to copy and paste the password from their e-mail. If the respondent still experiences password challenges, ask the respondent to request a new password from the instrument. Before walking the respondent through the steps for a new password, ensure that the respondent has an e-mail address in the system. To do this:

1. Sign on to the Internet instrument with YOUR Username and Password;
2. Search for the respondent by the Username;
3. Verify that there is an e-mail address in one of the following fields:
 - a. My Profile E-mail Address
 - b. Home E-mail Address
 - c. Work E-mail Address
4. If there is at least one e-mail address, verify with the respondent that the e-mail addresses are still valid and continue with 'Instructions to request a new password' below. If the e-mail addresses are no longer valid or there are no e-mail addresses, continue with 'Instructions to update e-mail address' below.

Instructions to update e-mail address:

1. Ask the respondent for an e-mail address where they would like to receive the new password;
2. Click the Edit link;
3. Add the e-mail address into the appropriate field, i.e., home e-mail, work e-mail, etc.;
4. Click the Update link when done recording the e-mail address; and
5. Continue with the Instructions to request a new password.

Instructions to request a new password:

1. Go to the website <https://surveys.nces.ed.gov/btls/>;
2. Click the "Forgot password?" link at the right-side of the Password box;
3. Enter the Username on the FORGOT PASSWORD pop-up box; and
4. Click the SUBMIT button.

The respondent will receive the new password at the e-mail address(es) that are in the system.

If the respondent still continues to have password issues, attempt to conduct the interview over the phone.

For BTLS website issues, ask the respondent to refer to the e-mail invitation and click on the survey link <https://surveys.nces.ed.gov/btls> within the e-mail.

If this does not resolve the issue, ensure that the respondent is typing or copying and pasting the survey address in the ADDRESS BAR of the web browser.



If you are unable to resolve the password or BTLS website issue or if the respondent is having other issues, document the situation in the Issues portion of the BTLS Incoming Call Log and refer the case to your supervisor.

Other Reasons

If the respondent calls for **any reason not addressed previously**, document the situation on the BTLS Incoming Call Log and refer the case to your supervisor.

**2010–11 Beginning Teacher Longitudinal Study
Telephone Follow-up
Self Study Guide**

I. Overview and Purpose of the 2010–11 Beginning Teacher Longitudinal Study (BTLS)

The Beginning Teacher Longitudinal Study (BTLS) is a follow-up study with participants who were first-year teachers in 2007 or 2008. The 2010–11 BTLS is the fourth data collection, which began with the 2007–08 Schools and Staffing Survey (SASS), the 2008–09 Teacher Follow-up Survey (TFS) and the 2009–10 Beginning Teacher Longitudinal Study (BTLS). The BTLS provides a new source of rich and comprehensive information on teachers’ career, starting with first-year teachers as they move into the next phase of their lives. The BTLS contributes to policymakers’ understanding of the lives and careers of teachers over the course of time—even of those who leave the profession. More specifically, the BTLS gathers information regarding –

- Attitudes about the teaching profession and job satisfaction;
- Characteristics of those who stay in the teaching profession; move from one school to another, leave the profession temporarily, or leave permanently;
- The percentage of first-year teachers that leave the profession as well as the percentage that later re-enter it;
- Career patterns of those who remain in teaching and, in contrast, the career patterns of former teachers after they leave the profession; and
- Personal educational activities and plans for the future.

II. Survey Schedule of Operations

11/9/10	Precontact letter mailout informing respondents they were selected to participate in the BTLS and to ask for updated contact information
11/9/10	Incoming calls begin
1/13/11	Initial letter and e-mail mailout inviting the teachers to participate in the BTLS
1/31/11	Reminder letter and e-mail mailout reminding respondents to participate in the BTLS
2/14/11 – 6/3/11	Telephone Follow-up (includes Failed Edit Follow-up)

III. Cash Incentive

To encourage participation in the BTLS, a \$10 cash incentive was included in the initial letter mailout. The initial letter is the only mailing that will contain the cash incentive. No replacement cash incentives can be mailed-out. If a respondent calls to report that they did not receive their cash incentive, please inform them that,

“Unfortunately, due to the extensive and costly process of preparing and examining the incentive materials, we are only able to send one cash incentive per respondent. We apologize for this inconvenience, however, your responses to this study are extremely important and we would greatly appreciate your assistance.”

IV. Your Job

Your job during telephone follow-up is to follow up on non-response cases and insufficient partial failed edit follow-up (FEFU) interviews and to handle incoming respondent calls. You will either:

Offer to conduct the interview over the telephone, or
Encourage/Remind the respondent to complete the questionnaire online.

If you are responding to an incoming call, you should handle the respondent's situation accordingly, which may involve the actions above, or referring the case to your supervisor. For additional information about the BTLS or for instructions on handling the incoming respondent calls, refer to the "BTLS Incoming Call Training Self Study – Precontact" document. If you did not work on the Incoming Calls operation, request the self study from your supervisor.

Be aware that the BTLS-26 Call Logs have personally identifiable information (PII). They may not be left unattended at your station and cannot be taken home. The Internet instrument and the BTLS Status Excel file also contain PII. Log out of the Internet instrument, close the BTLS Status Excel file, and lock your computer whenever you leave your workstation.

Call Guidelines

- Acceptable calling times are Sunday through Saturday 9:00 AM to 9:00 PM (respondent time), unless the respondent requests an appointment before 9:00 AM or after 9:00 PM (must be between 9:00 AM and 12:00 midnight Eastern Standard time). Please note that if you are trying to reach the respondent at school, it may be difficult after 3:00 PM.
- If you or a previous interviewer left an answering machine message, wait one day before contacting the respondent again.
- Do not make more than two call attempts to a respondent per day.
- Do not make more than 20 attempts to contact a respondent during the follow-up operation. Do not leave more than 8 answering machine messages. If you reach a member of the respondent's household or someone at the respondent's school, attempt to determine a better time to reach the respondent. Speaking to a household member or a school employee does not count as leaving an answering machine message.

Making the Call

- **Read and become very familiar with the BTLS-27, Call Scripts and the Internet instrument before calling any respondents.**
- Review the preprinted label and call record information from the BTLS-26, Call Log before contacting the respondent.

- If you or a previous Interviewer has reached the respondent before, look through the form before you begin so that you know the contact history.
- Log each contact with the respondent (outbound calls and incoming calls) on the BTLS-26, Call Log. Enter the date, the original outcome code (from the BTLS Status Excel file), the start time, and your interviewer ID before making the call. At the end of the call, enter the end time, the name of the person with whom you spoke, and the call outcome code. Enter any outcome notes that may be helpful for future contacts with the respondent in either the outcome notes box of the call log or in the notes box of the BTLS-26, Call Log.
- If you get a Busy Signal, FAX Signal, Number Could Not Be Completed As Dialed, No Signal, Bad Connection, or Temporarily Not In Service, retry the number 15 minutes later. If it is still unavailable, then code the case as such. It is considered one call attempt after the retry has been made.
- Make sure you write legibly as the information may be used for future mailings and follow-up phone calls.

V. How To...

The majority of this section contains information on how to use the Internet instrument. If you worked on the previous BTLS follow-up operations, many of these functions will be familiar to you. Please review the Internet instrument briefly and refer to this guide during the course of the survey if necessary.

Review the Excel file for the Status Code

Always refer to the BTLS Status Excel file to obtain the most current status of each case before calling. This file is located in the **Q:\Surveys\BTLS\Interviewer Folder** directory. This file will be updated each morning. The BTLS Status Excel file will contain all non-LMR cases where the status DOES NOT EQUAL 99. If a non-LMR case is not listed on the BTLS Status Excel file, then the status = 99. The current status will determine which BTLS-27, Script to use when contacting the respondent. The status codes are defined at the top of the BTLS-26, Call Log.

The BTLS Status Excel file will contain the following variables:



Variable	Description
STATUS	Current status code for non-LMR cases that do not equal 99
USERNAME	Username from NCES

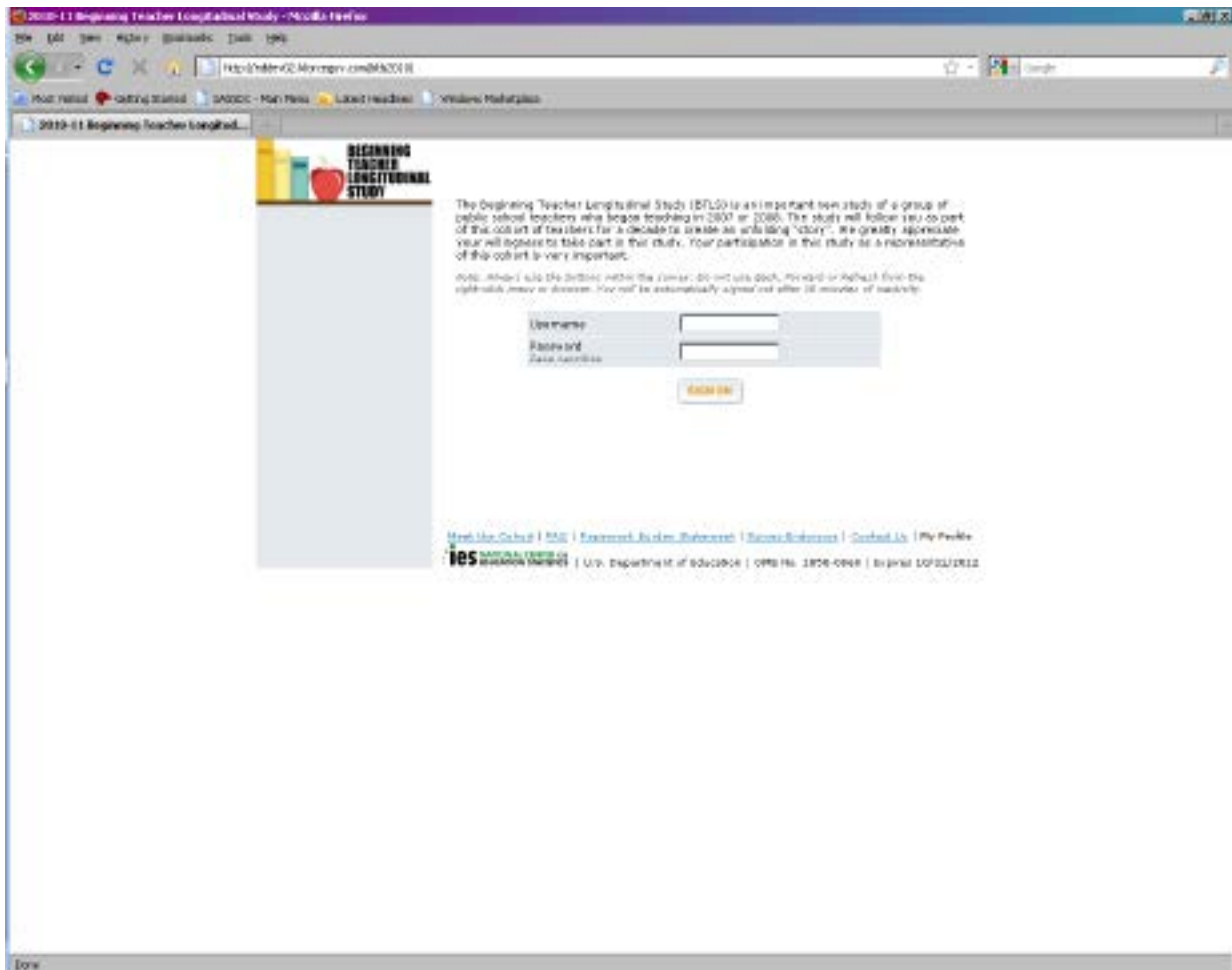
Use Scripts

Refer to the status code on the BTLS Status Excel file to determine which BTLS-27, Script to follow. Instructions to determine which script to use are printed at the top of the BTLS-26, Call Log.

1. **If status = 09 or 17, use Script #1.**
If status = 99 and JTC Outcome does not equal 16, use Script #1.
 - a. Status = 09 indicates that the respondent hasn't been reached by mail or that we don't have a good address.
 - b. Status = 17 indicates that the respondent is temporarily absent for an undetermined amount of time.
 - c. Status = 99 and JTC Outcome ne 16 indicates that no action has been taken by the respondent and the respondent has not indicated a date by which the questionnaire will be completed.
2. **If status = 06, use Script #3.**
 - a. Status = 06 indicates that we have received communication that the respondent does not want to participate in the study. These cases should be assigned only to a refusal conversion specialist.
3. **If status = 13 or 14, use Script #2.**
 - a. Status = 13 indicates that the respondent has accessed the questionnaire online, but did not complete any items.
 - b. Status = 14 indicates that the respondent accessed and completed some items, but did not complete enough items to be considered a complete interview.
4. **If status = 99 and JTC Outcome = 16, use Script #4.**
 - a. Status = 99 and JTC Outcome = 16 indicates that no action has been taken by the respondent but has indicated that they would complete the questionnaire by a certain date.

Log in to the Internet Instrument

1. Click on the BTLS Training Icon  from your desktop to access the BTLS training instrument (click the BTLS Production Icon  during Production).
2. Enter your username and password at the Welcome/Login page (usernames and passwords are case sensitive).
3. Click “Sign on.”



[illegible]

Locate Cases on the Administrator Page

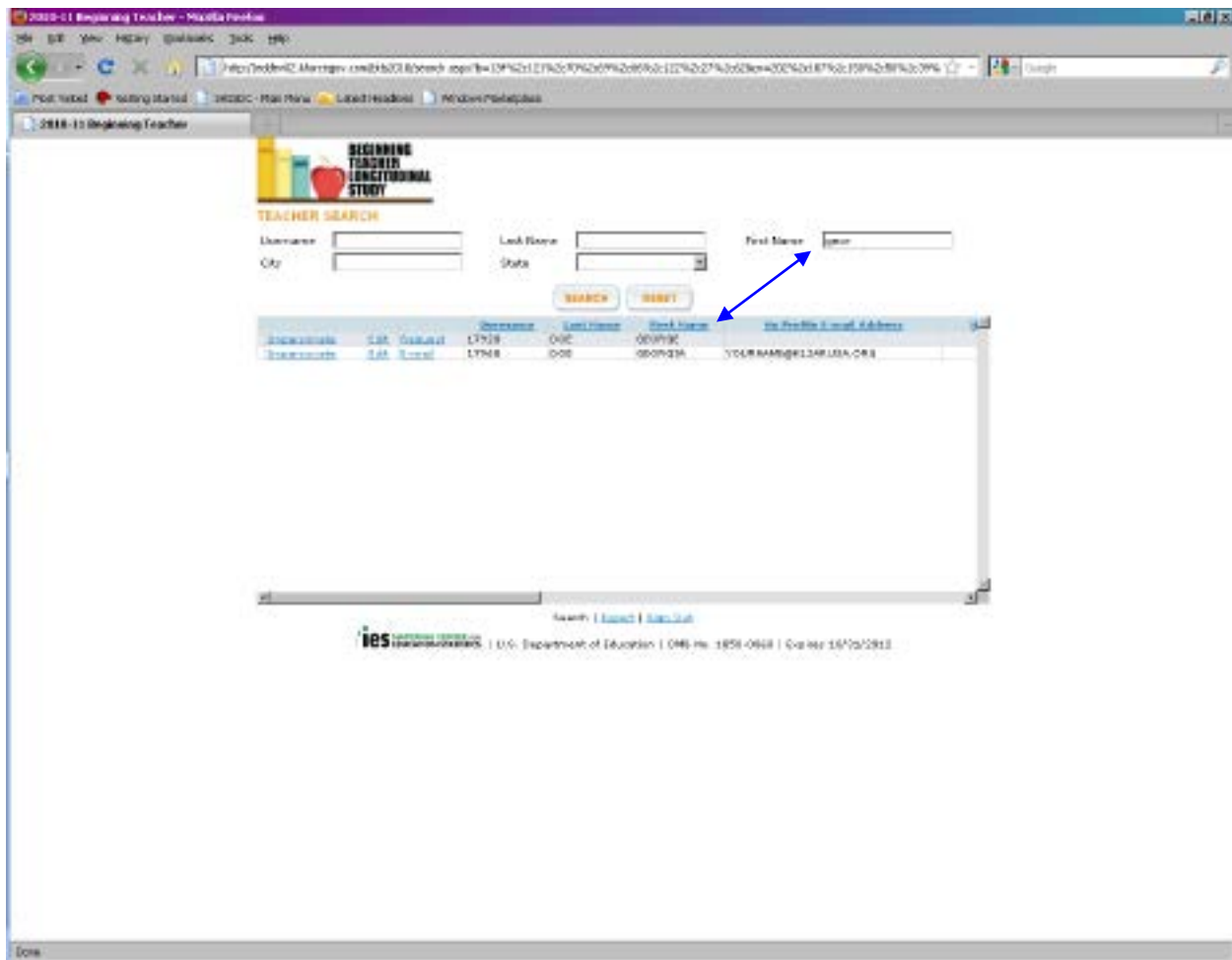
The Administrator Page gives you access to every case in the sample, even to those cases that have already been completed and submitted.

The Administrator Page displays the following information: Username, Last Name, First Name, My Profile E-mail Address, Home E-mail Address, Work E-mail Address, Street Address, City, State, ZIP Code, and User Type (User Type refers to the teacher groups: C for current, F for former, and N for non-respondent). *Note: The User Type will change to one of eight different user types as the interview is completed.*

You can search for cases by: username, first name, last name, city, or state.

Searching by Username is the most efficient method for searching for cases. If the respondent does not have their username, then searching using the respondent's name is the second best choice. You can either enter the first and last name or only the last name and it will display all of the matches that meet the criteria you entered. The search feature also acts as a wild card, for instance, if you enter "Georg" in the first name field, the instrument will return all cases that contain the "Georg" string in first name (see example below). If you don't receive any "hits" on first AND last name, try searching by last name only.

After entering your search criteria, click "Search." To return to the full display of cases, click "Reset."



Once you have located the case, you have several options. Your choice will depend on the specific situation. You can:

- Enter the respondent's case by clicking the "Impersonate" button,
- Unlock the respondent's case by clicking the "Unlock" button, or
- Submit the respondent's questionnaire for them by clicking the "Submit" button.

Impersonate a Case

Enter a respondent's case by clicking the “Impersonate” button. You may impersonate the respondent for a variety of reasons; for example, the respondent may want to change an answer on their already submitted questionnaire or you may be asked to conduct the interview with the respondent over the phone. Using the search feature, locate the case and click the Impersonate link, which is in the second column from the left, to conduct the interview with the respondent over the telephone. You will record the respondent's answers directly into the Internet questionnaire. If the questionnaire is already partially complete, you will enter the instrument where the respondent left off. Proceed according to the situation at hand, either by completing the interview over the phone, backing up to the answer that needs changing, etc.

When conducting the interview with the respondent, ask all the questions precisely as worded. There are INTERVIEWER instructions in blue text to help in making the interview proceed more smoothly. Many of the questions have an INTERVIEWER instruction to indicate that you should read answer categories to help facilitate a response. Each sample group has a unique set of questions, so every interview may not appear the same. The instrument automatically guides the interview through the appropriate questions based on previous responses. Click the “Save & Continue” button to proceed to the next question. Click the “Previous” button to return to the previous question.

The screenshot displays a web-based interview interface. At the top, a purple banner reads "2010-11 Beginning Teacher Longitudinal Study". Below this, a navigation bar includes "Home", "About", "Help", "Contact Us", and "Log Out". The main content area is titled "CURRENT EMPLOYMENT STATUS" and contains the question: "How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (2010-11)?" A red note indicates this is a required question. Below the question is a list of radio button options: Regular teacher (full-time or part-time), Special teacher (i.e., your assignment requires you to provide instruction at more than one school), Long-term substitute (i.e., your assignment requires that you fill the role of a regular teacher on a long-term basis, but you are still considered a substitute), Administrator (e.g., principal, assistant principal, director, school head), Library media specialist or librarian, Other professional staff (e.g., counselor, curriculum coordinator, social worker), Support staff (e.g., secretary), Short-term substitute, Student teacher, and Teacher aide. A blue arrow points to the "Regular teacher (full-time or part-time)" option. At the bottom of the form are "PREVIOUS" and "SAVE & CONTINUE" buttons. The footer includes the logo for the 105th Wisconsin State Fair, the Department of Education, and the date 4/15/2010.

Use the “Submit” button to submit a completed questionnaire. Do not click “Submit” unless the questionnaire is complete.

Unlock Cases

A respondent cannot access their questionnaire once it is submitted. If a respondent realizes that they want to change one or more of their answers after their questionnaire has been submitted, you will need to “unlock” their questionnaire for them.

You can “unlock” a questionnaire at the Administrator Page. Search for the case. You will see an “Unlock” button if the questionnaire has already been submitted. If the “Unlock” button is not displayed next to the case, then the questionnaire has not been submitted

Unlock the case while the respondent is on the phone and let them know when you are done. If, at that point, they request that you change the answers, please click the “Impersonate” button and make the requested changes. Otherwise, the respondent can then access the questionnaire and record the changes themselves.

After recording the changes, it is **EXTREMELY IMPORTANT** that you click the “SAVE & CONTINUE” button until you get to the last page of the questionnaire and click the “SUBMIT” button. As you progress through the questionnaire, verify that each item has been answered. This is important because altering an answer may alter the appropriate path of the interview. If the respondent is going to record his or her own changes, remind the respondent to click to the end of the questionnaire, ensuring that all items are answered, and click the “SUBMIT” button to resubmit the questionnaire. The “SUBMIT” button only appears on the last page of the questionnaire.

Based on experience from a similar questionnaire, many respondents may call the telephone center because they are having difficulty logging into the instrument. Once the respondent logs into the questionnaire using their username and password, they are then asked to create a Profile (see example below) that consists of creating a new password and providing a “My Profile” e-mail address. The “My Profile” e-mail address may be pre-filled depending on whether or not the respondent provided an e-mail address in previous waves. The respondent NEEDS to adhere to the NCES password guidelines to successfully create their profile and continue with the questionnaire. Past experience shows that many respondents are having difficulty creating their passwords. A pop-up box with the NCES guidelines appears (see example below) on the screen while the respondent is creating their new password.

I-19

The NCES password standards are strict and are necessary to create “strong” passwords. The guidelines are:

- Passwords must be between 8 and 14 characters,
- Passwords must contain at least one upper case letter,
- Passwords must contain at least one lower case letter,
- Passwords must contain at least one number,
- Passwords must contain at least one special character (the acceptable special characters are !, @, #, \$, %, ^, &, and *).

Example of a strong password is: P@ssw0rd. ***CAUTION: DO NOT SUGGEST THAT THE RESPONDENT USE THIS EXAMPLE AS THEIR PASSWORD.***

Once the respondent successfully creates their new password, the original password is **NO LONGER VALID.**

Beginning Teacher Licensure Study

TEACHER SEARCH

Surname Last Name First Name

City State

[SEARCH](#) [RESET](#)

Username	Last Name	First Name	My Profile Email Address
Teacher1234	SMITH	JANE	TEACHER1234@EDU.ORG
Teacher567	DOE	JOHN	Teacher567@EDU.ORG
Teacher890	WILSON	EMILY	Teacher890@EDU.ORG
Teacher101	MOORE	DAVID	Teacher101@EDU.ORG
Teacher202	JOHNSON	AMANDA	Teacher202@EDU.ORG
Teacher303	DAVIS	CHRISTOPHER	Teacher303@EDU.ORG
Teacher404	MARTIN	STEPHANIE	Teacher404@EDU.ORG
Teacher505	THOMAS	KEVIN	Teacher505@EDU.ORG
Teacher606	ANDERSON	LAUREN	Teacher606@EDU.ORG
Teacher707	WHITE	ANTHONY	Teacher707@EDU.ORG
Teacher808	GREEN	OLIVIA	Teacher808@EDU.ORG
Teacher909	BROWN	MICHAEL	Teacher909@EDU.ORG
Teacher010	BLACK	ISABELLA	Teacher010@EDU.ORG

Page: 1 2 3 4 5 6 7 8 9 10

[Search](#) | [Reset](#) | [Back](#)

ies NATIONAL CENTER FOR EDUCATION POLICIES | U.S. Department of Education | OMB No. 1605-0046 | Revised 10/31/2012

If the respondent doesn't have a My Profile E-mail Address and refuses to provide one, select the "Request" link. A text box will appear asking if you're sure that you want to reset the password and request a letter be sent to the respondent. Select "Yes" and inform the respondent that they will receive a letter with the new password within 2 weeks.

2009-10 Beginning Teacher Longitudinal Survey

TEACHER SEARCH

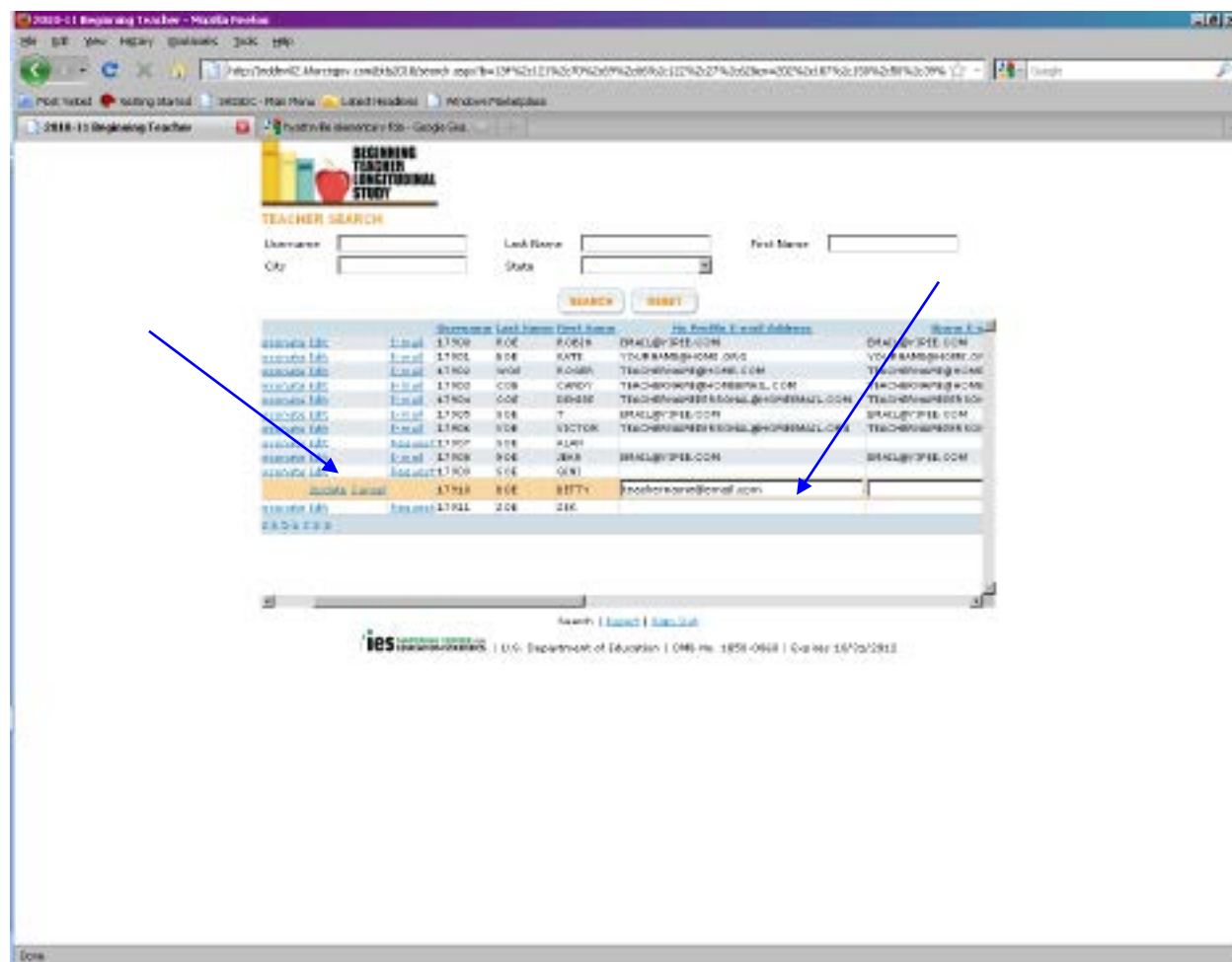
Username: Last Name: First Name:
City: State:

SEARCH

Username	Last Name	First Name	City	State	Request	Request
17900	ROE				Request	
17901	ROE				Request	
17902	WOE				Request	
17903	COE				Request	
17904	COE				Request	
17905	ROE	TINA			Request	
17906	VOE	VICTOR	theida.cox@ed.gov		Request	
17907	ROE	ALAN	christina.cox@census.gov		Request	
17908	ROE	JEAR	christina.cox@census.gov		Request	
17909	ROE	GON	YOURNAME@K12GAUSA.ORG		Request	
17910	ROE	GITTY	YOURNAME@K12FLUSA.ORG		Request	
17911	ROE	ZOH	zohara@hawaiiemail.gov		Request	

Page: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 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2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445

You can edit or delete the My Profile E-mail Address by clicking the “Edit” link. An option of Update or Cancel will appear next to the case. The “Update” option allows you to change or delete the My Profile E-mail Address, the Home E-mail Address and/or the Work E-mail Address. Once you have recorded the change(s) in the appropriate E-mail Address text box(es), click “Update” option to accept the change(s). Click “Cancel” to return to the Administrator Page without making any changes.



Forgotten Username—Verifying Respondent Identity

Before providing a forgotten username to a respondent, you must verify the respondent's identity. Ask the respondent to provide the mailing address or one of the e-mail addresses where the initial letter/e-mail was received. Verify this information with the information on the Administrator page. If the information that the respondent provides is different than shown on the Administrator page, probe for reasons for the differences, i.e., respondent moved, etc. The respondent needs to correctly verify one piece of information before you can provide the username to the respondent.

Request a Paper Questionnaire

There are NO paper questionnaires. If a respondent requests a paper questionnaire, you should attempt to obtain the interview over the telephone.

Research Telephone Numbers

The second page of the BTLS-26 Call Log contains the contact information for persons that the respondent listed in the 2009–10 BTLS as people who would know how to get in touch with the respondent during the coming years. Refer to this information if you are having difficulty finding a correct telephone number for the respondent.

Refer Cases to Supervisor

Refer cases with the following outcome codes to your supervisor:

- Hard refusal (outcome code 20).
- Teacher moved out of U.S. (outcome code 04).
- Did not begin teaching in 2007 or 2008 (outcome code 05).
- Temporarily Unavailable for the Entire Interview Period (outcome code 07).
- Permanently Incapacitated (outcome code 08).
- Temporarily Incapacitated (outcome code 51)
- Other Noninterview (outcome code 25).
- Never a teacher (outcome code 31).
- Other out-of-scope (outcome code 30).
- Out-of-scope, Never a teacher (outcome code 31).

If the respondent has any other problems not addressed in this self study, and/or you get an international address or telephone number for the respondent, document the situation on your BTLS-26, Call Log and refer the case to your supervisor. Assign an outcome code of 90 to any cases you refer to your supervisor that are not identified above.

Assign Outcome Codes to the BTLS-26, Call Log

After each contact or attempt to contact the respondent, enter the appropriate outcome code on the BTLS-26, Call Log. The 2010–11 BTLS outcome codes are:

Code	Description
<i>FULLY RESOLVED OUTCOMES</i>	
21	Interview completed over the telephone
22	Required items completed over the telephone
03	Deceased
95	LMR received (supervisor or clerk should enter this code and pull from workload)

<i>REMINDED – CASE ON HOLD</i>	
04	Moved out of the U.S.
09	Unable to contact/locate
16	Will complete survey via the Internet instrument
17	Temporarily unavailable for unknown length of time
<i>OTHER RESOLVED</i>	
05	Did not begin teaching in 2007 or 2008 – Refer to supervisor
07	Temporarily unavailable for entire interview period – Refer to supervisor
08	Permanently incapacitated – Refer to supervisor
51	Temporarily incapacitated – Refer to supervisor
11	Unconvertible language or hearing barrier
12	Only available number(s) are incorrect for teacher after research (<i>such as wrong number reached – verified number and no listing of new telephone number</i>)
20	Hard refusal – Refer to supervisor
25	Other non-interview (<i>describe the situation in problem/notes in call record</i>)
30	Other out-of-scope (<i>describe the situation in Outcome Notes in Call Record</i>) – Refer to supervisor
31	Out-of-scope, never a teacher – Refer to supervisor
<i>ACTIVE CASES</i>	
90	Refer to Supervisor
34	Appointment Set
40	First Refusal, First Hostile Break-off, or Second Immediate Hang-up
41	Immediate Hang-up
42	Second Refusal – Refer to Refusal Conversion Specialist for Follow-up
50	Bilingual Interview Required
60	Answering Machine, Message Left (AMML) (<i>After a message has been left, wait a day before calling the case again.</i>)
61	Answering Machine, No Message Left (AMNML)
62	Message left with someone in the household or school
63	Someone (other than respondent) answered, but not able to leave a message
70	FAX Machine Reached (FAX) – <i>after retry attempt</i> – send to research after 2 Fax (with retry) attempts
80	Ring No Answer (RNA) – <i>after retry attempt</i> – send to research after 4 RNA (w/retry) attempt.
81	Normal Busy Signal/Circuits Busy (BUSY) - <i>after retry attempt</i>
82	Fast or WATTS/FTS Busy – not a regular busy signal (FBUSY) - <i>after retry attempt</i> – send to research after 2 FBUSY (w/retry) attempts.
83	Number Could Not be Completed as Dialed (NCD)– <i>after retry attempt</i> – send to research after 2 NCD (w/retry) attempts.
84	No Signal or Funny Signal (NS/FS)– <i>after retry attempt</i> – send to research after 2 NS/FS (w/retry) attempts.
85	Bad Connection (Bad C)– <i>after retry attempt</i> – send to research after 2 Bad C (w/retry) attempts.

86	Temporarily Not In Service (TNIS)– <i>after retry attempt</i> – send to research after 2 TNIS (w/retry) attempts.
91	New Number/New Area Code From Recording
92	Number Not In Service – <i>after retry attempt</i> – send to research
93	Circuits Busy – <i>after retry attempt</i> – send to research after 4 Circuits Busy (w/retry) attempts.
94	Number incorrect (number does not reach respondent) – send to research

Respondent Moved Out of the United States

Respondents that move out of the United States are still eligible to participate in the study. Please try to collect the respondent's contact information, i.e., mailing address, e-mail address(es) and phone numbers. Refer new contact information to your supervisor.

Handle Refusals

If a respondent refuses to participate, use refusal conversion techniques and/or ask your supervisor to refer the case to a refusal conversion interviewer. Use the Frequently Asked Questions job aid to respond to any of the respondent's concerns.

If the respondent remains adamant about not participating, use the BTLS-28, Refusal Items, to attempt to collect a few items. Record the data directly onto the BTLS-28, Refusal Items form. Remember to record the Username and Respondent Name in the space provided at the top of the form. Upon completion, refer the case, along with the BTLS-26 Call Log and the BTLS-28 Refusal Items form to your supervisor.

If you are unable to convert the refusal or collect this additional information, document the reason the respondent is refusing and refer the case to your supervisor.

Completing Failed-Edit Follow-up (FEFU) Cases

Each User Type has a required set of items that must be answered for the interview to be considered complete. FEFU cases will be included in telephone follow-up. You will be calling respondents who have opened their Internet questionnaire (i.e., logged in), but haven't answered any items, as well as respondents who have partially completed their questionnaire but have not answered all of the required items. These cases will be indicated by a status = 13 or 14 on the BTLS Status Excel file.

Using the Internet instrument, finish collecting the required items for a complete interview. The majority of the required items are in the beginning of the questionnaire. Continue conducting the interview for as long as the respondent is willing to continue.

The following are the Usertype description and the required items by Usertype:

Usertype Descriptions

Usertype	2009–10 BTLS Status	2010–11 BTLS Status
CC	Current	Current
CF	Current	Former
FF	Former	Former
NcN	Non-respondent, but answered the items retroactively and was Current	Non-respondent
NfN	Non-respondent, but answered the items retroactively and was Former	Non-respondent
FC	Former	Current
NcC	Non-respondent, but answered the items retroactively and was Current	Current
NcF	Non-respondent, but answered the items retroactively and was Current	Former
NfC	Non-respondent, but answered the items retroactively and was Former	Current
NfF	Non-respondent, but answered the items retroactively and was Former	Former

Required Items by Usertype

Item	CC	CF, FF, NcF, NfF	FC, NfC	NcC
Do you CURRENTLY TEACH any regularly scheduled class(es) in any of grades preK – 12? (REGCL)	X	X	X	X
How do you classify your position at your CURRENT school, that is, the activity at which you spend most of your time during this school year (2010–11)? (POSSC)	X	X	X	X
Last school year (2009–10), you were teaching in PRELOADED SCHOOL NAME. Are you still teaching in that school? (MOVYN) OR Are you currently teaching in the SAME SCHOOL as you were last year? (NRSAS)	X			
Are you currently on: maternity or paternity leave or disability leave? (ONLEA) OR What is your current MAIN occupational status? (OCCST)		X		
Are you currently teaching in the SAME SCHOOL as you were last year? (NRSAS)				X

VI. Review Scripts

Read through each of the three separate telephone scripts several times until you are comfortable with each.

VII. Complete Practice Interviews



Click the BTLS training icon on your desktop to access the Administrator page to become familiar with the Administrator page. Practice walking through the interview(s) that are assigned to you by your trainer using the training script(s) provided. Then, if time allows, practice with the Internet instrument on your own to get even more familiar with the survey content. Pay special attention to the critical items.

SCRIPT #1

If status = 09 or 17 OR

If status = 99 and JTC Outcome does not equal 16

Q1 Dial the telephone number in the label.

- 1 Someone Answers – (Go To Q2)
- 2 Answering Machine – (Go To Q3)
- 3 All Other Outcomes – (Go To Call Log)

Q2 Hello, this is _____ from the U.S. Census Bureau. May I please speak to (*respondent name printed in the label*)?

- 1 Yes – (Go To Q4)
- 2 Call back requested – Go To Call Record and record the appointment date and time. Record any other relevant information in the Outcome Notes section. Thank respondent and end call.
- 3 No – verify telephone number
 - a Wrong Number Dialed – Thank respondent/End call (Go To Q1)
 - b Correct Number Dialed – Probe to confirm that this is the number for the respondent. Record any new contact information on the label.

Q3 This is the United States Census Bureau’s Jeffersonville Telephone Center. Please return our call at 1-888-595-1334. Refer to CASE ID (*number printed in label area*). Thank you. (Go To Call Log)

Q4 A few weeks ago we mailed you a letter requesting your participation in the fourth round of the Beginning Teacher Longitudinal Study. Did you receive this letter?

- 1 Yes – (Go To Q6)
- 2 No – (Go To Q5)
- 3 Refusal – READ: “Your response is very important to the success of this study. Your answers represent the answers of other teachers and cannot be replaced with those of another teacher.”
 - a Still a refusal –
 - i. First Refusal? Thank respondent/End call – (Go To Call Log)
 - ii. Second Refusal? Attempt to obtain the items listed on the BTLS-28 Refusal Items form
 1. Still a refusal? Thank respondent/End call (Go To Call Log and refer to your supervisor)
 - b Will participate – (Go To Q6) Don’t Know – (Go To Q5)

Q5 This year we are conducting the fourth round of the Beginning Teacher Longitudinal Study (BTLS) with a sample of teachers who began teaching in 2007 or 2008. Your contribution will help measure data regarding:

- Attitudes about the teaching profession and job satisfaction;
- Characteristics of those who stay in the teaching profession; move from one school to another, leave the profession temporarily, or leave permanently;
- The percentage of first-year teachers that leave the profession—and the percentage that later re-enter it;
- Career patterns of those who remain in teaching and, in the contrast, the career patterns of former teachers after they leave the profession; and
- Personal educational activities and plans for the future.

This survey is authorized by law (Title 1, Part E, Sections 151 (b) and 153 (a) of Public Law 107-279, the Education Sciences Reform Act of 2002). Your participation is very important and voluntary. Our approval number from the Office of Management and Budget is 1850-0868.

Continue – (Go To Q6)

Q6 We would like to encourage you to respond to the Beginning Teacher Longitudinal Study as soon as possible. Which would be easier for you: giving the information to me over the telephone or completing it yourself on the Internet?

- 1 Will give information over the phone – (Conduct the interview. Upon completion, thank the respondent. Then Go To Call Log.)
- 2 Prefer to complete the survey via Internet – Go To Q7

Q7 When do you think you will be able to complete the survey?

Record date and outcome code = 16 on the BTLS-26 Call Log – (Go To Q8)

Q8 Do you need the Internet address for the survey?

- 1 Yes – The Internet address is <http://surveys.nces.ed.gov/btls>
- 2 Yes – Username—verify the respondent’s identity and provide Username
- 3 Yes – Password—provide instructions for the respondent to retrieve the password
- 4 No – Go TO Q9

Q9 Do you have any questions about how to complete the survey over the Internet?

- 1 No, no questions – Thank you in advance for your participation. (Go To Call Log)
- 2 Yes, I have questions – Answer questions. Thank you in advance for your participation. (Go To Call Log)

SCRIPT #2

If status = 13 or 14

Q1 Dial the telephone number in the label.

- 1 Someone Answers– (Go To Q2)
- 2 Answering Machine – (Go To Q3)
- 3 All Other Outcomes – (Go To Call Log)

Q2 Hello, this is _____ from the U.S. Census Bureau. May I please speak to (*respondent name printed in the label*)?

- 1 Yes – (Go To Q4)
- 2 Call back requested – Go To Call Log and record the appointment date and time. Record any other relevant information in the Outcome Notes section. Thank respondent and end call.
- 3 No – verify telephone number
 - a Wrong Number Dialed – Thank respondent/End call (Go To Q1)
 - b Correct Number Dialed – Probe to confirm that this is the number for the respondent. Record any new contact information on the label.

Q3 This is the United States Census Bureau’s Jeffersonville Telephone Center. Please return our call at 1-888-595-1334. Refer to CASE ID (*number printed in label area*). Thank you. (Go To Call Record)

Q4 A few weeks ago we mailed you a letter requesting your participation in the Beginning Teacher Longitudinal Study. We see that you have accessed your online survey, but have not yet completed the questionnaire.

We would like to encourage you to respond to the Beginning Teacher Longitudinal Study as soon as possible. Which would be easier for you: giving me the information over the telephone or completing it yourself on the Internet?

- 1 Will give information over the phone – (Complete the interview. Upon completion, thank the respondent. Then Go To Call Log)
- 2 Prefer to complete the survey via Internet – (Go To Q5)
- 3 Refusal – READ: “Your response is very important to the success of this study. Your answers represent the answers of other teachers and cannot be replaced with those of another teacher.”
 - a. Still a refusal –
 - i. First Refusal? Thank respondent/End call – (Go To Call Log)
 - ii. Second Refusal? Attempt to obtain the items listed on the BTLS-28 Refusal Items form
 1. Still a refusal? Thank respondent/End call (Go To Call Log and refer to your supervisor)

Q5 When do you think you will be able to complete the survey?

Record date and outcome code = 16 on the Call Log – (Go To Q6)

Q6 Do you need the Internet address for the survey?

- 1 Yes – The Internet address is <http://surveys.nces.ed.gov/btls>
- 2 Yes – Username—verify the respondent's identity and provide Username
- 3 Yes – Password—provide instructions for the respondent to retrieve the password
- 4 No – Go To Q7

Q7 Do you have any questions about how to complete the survey over the web?

- 1 No, no questions – Thank you in advance for your participation. (Go To Call Log)
- 2 Yes, I have questions – Answer questions. Thank you in advance for your participation. (Go To Call Log)

SCRIPT #3

If status = 06

To be conducted by refusal conversion interviewer

Q1 Dial the telephone number in the label.

- 1 Someone Answers – (Go To Q2)
- 2 Answering Machine – (Go To Q3)
- 3 All Other Outcomes – (Go To Call Log)

Q2 Hello, this is _____ from the U.S. Census Bureau. May I please speak to (*respondent name printed in the label*)?

- 1 Yes – (Go To Q4)
- 2 Call back requested – Go To Call Log and record the appointment date and time. Record any other relevant information in the Outcome Notes section. Thank respondent and end call.
- 3 No – verify telephone number
 - a Wrong Number Dialed – Thank respondent/End call (Go To Q1)
 - b Correct Number Dialed – Probe to confirm that this is the number for the respondent. Record any new contact information on the label.

Q3 This is the United States Census Bureau's Jeffersonville Telephone Center. Please return our call at 1-888-595-1334. Refer to CASE ID (*number printed in label area*). Thank you. (Go To Call Log)

Q4 A few weeks ago we mailed you a letter requesting your participation in the Beginning Teacher Longitudinal Study. This year we are conducting the fourth round of the Beginning Teacher Longitudinal Study (BTLS) with a sample of teachers who began teaching in 2007 or 2008. Your contribution will help measure data regarding:

- Attitudes about the teaching profession and job satisfaction;
- Characteristics of those who stay in the teaching profession; move from one school to another, leave the profession temporarily, or leave permanently;
- The percentage of first-year teachers that leave the profession—and the percentage that later re-enter it;
- Career patterns of those who remain in teaching and, in the contrast, the career patterns of former teachers after they leave the profession; and
- Personal educational activities and plans for the future.

Continue – (Go To Q5)

Q5 Your response is very important to the success of this survey. Your answers represent the answers of other teachers and cannot be replaced with those of another teacher.

Interviewer: Attempt to address respondent's concerns and convert the refusal.

- 1 Still a refusal – Attempt to obtain the items listed on the BTLS-28 Refusal Items form. Thank respondent/End call – (Go To Call Log and refer case to supervisor)
 - 2 Will participate – (Go To Q6)
- Q6 We would like to encourage you to respond to the Beginning Teacher Longitudinal Study as soon as possible. Which would be easier for you: giving the information to me over the telephone or completing it yourself on the Internet?
- 1 Will give information over the phone – (Refer to *Respondent Identity Verification Job Aid* to verify respondent's identity; then complete the interview. Upon completion, thank the respondent. Then Go To Call Record)
 - 2 Prefer to complete the survey via Internet – Go To Q7
- Q7 When do you think you will be able to complete the survey?
- Record date and outcome code = 16 on the BTLS-26 Call Log – (Go To Q8)
- Q8 Do you need the Internet address for the survey?
- 1 Yes – The Internet address is <http://surveys.nces.ed.gov/tfs>
 - 2 Yes—Username—verify the respondent's identity and provide Username
 - 3 Yes – Password—provide instructions for the respondent to retrieve the password
 - 4 No – (Go To Q9)
- Q9 Do you have any questions about how to complete the survey over the web?
- 1 No, no questions – Thank you in advance for your participation. (Go To Call Log)
 - 2 Yes, I have questions – Answer questions. Thank you in advance for your participation. (Go To Call Log)

SCRIPT #4

If status = 99 and JTC Outcome = 16

Q1 Dial the telephone number in the label.

- 1 Someone Answers – (Go To Q2)
- 2 Answering Machine – (Go To Q3)
- 3 All Other Outcomes – (Go To Call Log)

Q2 Hello, this is _____ from the U.S. Census Bureau. May I please speak to (*respondent name printed in the label*)?

- 1 Yes – (Go To Q4)
- 2 Call back requested – Go To Call Log and record the appointment date and time. Record any other relevant information in the Outcome Notes section. Thank respondent and end call.
- 3 No – verify telephone number
 - a Wrong Number Dialed – Thank respondent/End call (Go To Q1)
 - b Correct Number Dialed – Probe to confirm that this is the number for the respondent. Record any new contact information on the label.

Q3 This is the United States Census Bureau's Jeffersonville Telephone Center. Please return our call at 1-888-595-1334. Refer to CASE ID (*number printed in label area*). Thank you. (Go To Call Log)

Q4 On {date from BTLS-26 when outcome = 16 was assigned}, you indicated that you would complete the Beginning Teacher Longitudinal Study online by {date from BTLS-26 Call Log that the respondent indicated that they would complete the survey}.

We would like to encourage you to respond to the Beginning Teacher Longitudinal Study. Your response is very important to the success of this survey. Your answers represent the answers of other teachers and cannot be replaced with those of another teacher. Which would be easier for you: giving the information to me over the telephone or completing it yourself on the Internet?

- 1 Will give information over the phone – (Conduct the interview. Upon completion, thank the respondent. Then Go To Call Log)
- 2 Prefer to complete the survey via Internet – (Go To Q5)
- 3 Refusal – READ: "Your response is very important to the success of this study. Your answers represent the answers of other teachers and cannot be replaced with those of another teacher."
 - A Still a refusal –
 - i. First Refusal? Thank respondent/End call – (Go To Call Log)
 - ii. Second Refusal? Attempt to obtain the items listed on the BTLS-28, Refusal Items form

- 1 Still a refusal? Thank respondent/End call (Go To Call Log and refer to your supervisor)

Q5 When do you think you will be able to complete the survey?

Record date and outcome code = 16 on the BTLS-26 Call Log – (Go To Q6)

Q6 Do you need the Internet address for the survey?

- 1 Yes – The Internet address is <http://surveys.nces.ed.gov>
- 2 Yes – Username—verify the respondent's identity and provide Username
- 3 Yes – Password—provide instructions for the respondent to retrieve the password
- 4 No – Go TO Q7

Q7 Do you have any questions about how to complete the survey over the web?

- 1 No, no questions – Thank you in advance for your participation. (Go To Call Log)
- 2 Yes, I have questions – Answer questions. Thank you in advance for your participation. (Go To Call Log)

Appendix J. Quality Assurance for BTLS First and Second Wave Keying and Mailout Operations

This appendix details the Beginning Teacher Longitudinal Study (BTLS) first wave and second wave quality assurance for both the data keying of paper questionnaires and the mailout operations for letters and questionnaires. “Data keying” is the method by which the BTLS data were captured and converted from paper to electronic format. (Since the BTLS third wave data were collected using only an internet instrument, the data were not keyed, as they were for the first two waves.) The “mailout operations” include all the procedures necessary for preparing the BTLS packages for distribution to respondents, including the printing of all forms (such as letters, questionnaires, and reminder postcards) and the assembly of packages for sampled teachers.

Quality Assurance for the BTLS First Wave Keying and Mailout Operations

This section details the BTLS first wave quality assurance for both the data keying of paper questionnaires and the mailout operations for letters and questionnaires. An overview of the data keying operations is provided in the BTLS first wave section of chapter 5, and the mailout procedures are covered in the BTLS first wave section of chapter 4.

The first section below, “Data Capture Operations,” describes the procedures for the data capture operations used by keying staff. The second section, “Cumulative Data Keying Verification Reports,” provides the results of the verification of the data capture of the BTLS questionnaires, and the third section, “Mailout Operations Quality Assurance Summary,” provides the detailed procedures for quality assurance of the mailout operations and the results.

Data Capture Operations

As discussed in the BTLS first wave section of chapter 5, the first wave data were captured, or converted from paper to electronic format, using a combination of manual data keying and imaging technology as part of the 2007–08 Schools and Staffing Survey (SASS). The data capture operations were facilitated by the integrated computer-assisted data entry (iCADE) system. For a detailed discussion of the data capture operations for SASS surveys, refer to appendix Q in the *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332).

Cumulative Data Keying Verification Reports

The data for the SASS data keying verification reports are included in appendix Q in the *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332). The total error rate for the BTLS first wave was not analyzed separately from the other 2007–08 SASS surveys. The total error rate for SASS was 0.75 percent, which is comparable to the 0.69 percent total error rate in the BTLS second wave.

Mailout Operations Quality Assurance Summary

This section details the quality assurance plan for the mailout operations for the BTLS first wave. All packages were mailed to respondents and field representatives by Census Bureau clerical processing staff in Jeffersonville, Indiana.

The BTLS first wave questionnaire (2007–08 SASS Teacher Questionnaire) was printed commercially, then went through a separate labeling process in Jeffersonville. All additional forms and materials were custom produced on “docuprint” equipment. The docuprint equipment allowed for printing and labeling questionnaires with variable data that are specific to a respondent on any page of the questionnaire.

Quality assurance of the printing was conducted by examining a sample of the work for errors once all sheets for a questionnaire booklet were completed. When an error was found, an expanded inspection examined the questionnaires that were produced before and after the detected questionnaire to determine if a systematic error had taken place. In addition, quality assurance was conducted for finished questionnaire booklets as well as for the douprioting of all letters, postcards, and other forms. For a detailed discussion of the mailout operations for the 2007–08 SASS, refer to appendix Q in the *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332).

The assembly of questionnaire packages for sampled teachers was inspected to assure that nothing was damaged, missing, contained undisclosed information, or was incorrectly presented. The results of the mailout quality assurance, including error remarks, for all SASS mailout operations can be found in appendix Q in the *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332).

Quality Assurance for the BTLS Second Wave Keying and Mailout Operations

This section details the 2008–09 BTLS second wave quality assurance for both the data keying of paper questionnaires and the mailout operations for letters and questionnaires, which were conducted together with the data keying and mailout of the 2008–09 Teacher Follow-up Survey (TFS). An overview of the data keying operations is provided in the BTLS second wave section of chapter 5, and the mailout procedures are covered in the BTLS second wave section of chapter 4.

The first section below, “Data Capture Operations,” describes the procedures for the data capture operations used by keying staff. The second section, “Cumulative Data Keying Verification Reports,” provides the results of the verification of the data capture of the BTLS questionnaires, and the third section, “Mailout Operations Quality Assurance Summary,” provides the detailed procedures for the quality assurance of the mailout operations and the results.

Data Capture Operations

As discussed in the BTLS second wave section of chapter 5, the second wave data from the paper questionnaires were captured, or converted from paper to electronic format, using manual data keying. Data for the BTLS internet questionnaires did not go through a separate data capture operation. Instead, the data were automatically captured and saved by the system as respondents completed questions on the BTLS website. For a detailed discussion of the data capture operations for the 2008–09 TFS, refer to appendix G in the *Documentation for the 2008–09 Teacher Follow-up Survey* (NCES 2011-304).

Cumulative Data Keying Verification Reports

This section details the results of the verification of the data keying of paper questionnaires in the BTLS second wave. Exhibit J-1 provides results of the verification of the BTLS second wave data keying. The total error rates in exhibit J-1 are computed by dividing the total number of keying errors by the total number of keyed fields. The total error rate was 0.39 percent for the Former Teacher Questionnaire and 0.72 percent for the Current Teacher Questionnaire, yielding an overall error rate of 0.69 percent for BTLS second wave data keying.

Table J-1. Cumulative key-from-paper (KFP) data keying verification report, by questionnaire, in the BTLS second wave: 2008–09

KFP data keying verification	Questionnaire for Former Teachers		Questionnaire for Current Teachers	
	Total	(100 percent verified)	(100 percent verified)	
Unit count	21	5		16
Accepted	0	0		0
Rejected	0	0		0
Keyed documents	220	20		200
Verified documents	220	20		200
Keyed fields	41,794	3,348		38,446
Verified fields	41,898	3,352		38,546
Charge field errors	247	11		236
Charge error rate	0.59%	0.33%		0.61%
Total errors	290	13		277
Total error rate	0.69%	0.39%		0.72%

SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2009.

Exhibit J-2 provides the distribution of keying errors (from exhibit J-1, above) by the type of error. Errors due to data omission (keying staff accidentally missing a field while keying), finger error (keying staff mistyping an entry), and procedure error (keying staff not following part of the keying procedure correctly) were the most common for the BTLS second wave.

Exhibit J-2. Distribution of keying errors, by questionnaire and type of error, in the BTLS second wave: 2008–09

Type of error (code and description)	Questionnaire for Former Teachers		Questionnaire for Current Teachers	
	Number of errors	Percent of errors	Number of errors	Percent of errors
Total errors	13	7.88	277	86.83
1 Other chargeable errors	0	0.00	0	0.00
2 Data omission	4	2.42	108	33.86
3 Duplicate data	0	0.00	0	0.00
4 Auto and manual duplication error	0	0.00	0	0.00
5 Respondent entered data outside recognition zone	0	0.00	0	0.00
6 Recognition misread	0	0.00	0	0.00
7 Recognition omission	0	0.00	0	0.00
8 Finger error	4	20.22	137	22.99
9 Procedure error	3	1.82	66	20.69
10 Undeterminable data	0	0.00	0	0.00
11 Keyer/verifier in error	0	0.00	0	0.00
12 Code error	2	1.21	41	12.85
13 Machine error	0	0.00	0	0.00
14 Supervisor error	0	0.00	0	0.00
15 Explain in remarks	0	0.00	0	0.00
16 Procedure modification	0	0.00	0	0.00

SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2009.

Mailout Operations Quality Assurance Summary

This section details the quality assurance plan for the mailout operations for the BTLS second wave. All packages were mailed to respondents and field representatives by Census Bureau clerical processing staff in Jeffersonville, Indiana.

All BTLS second wave forms and questionnaires were custom produced on docuprint equipment. The docuprint equipment allowed for printing and labeling questionnaires with variable data that are specific to a respondent on any page of the questionnaire.

Quality assurance of the printing was conducted by examining a sample of the work for errors once all sheets for a questionnaire booklet were completed. When an error was found, an expanded inspection examined the questionnaires that were produced before and after the detected questionnaire to determine if a systematic error had taken place. Quality assurance was also conducted for finished questionnaire booklets as well as for all letters, postcards, and other forms. For a detailed discussion of the mailout operations for the 2008–09 TFS, refer to appendix G in the *Documentation for the 2008–09 Teacher Follow-up Survey* (NCES 2011-304).

The assembly of questionnaire packages for sampled teachers was inspected to assure that nothing was damaged, missing, contained undisclosed information, or was incorrectly presented. The results of the mailout quality assurance, including error remarks, for all BTLS second wave mailout operations can be found in exhibits J-3 through J-5 below.

Exhibit J-3. Docuprint quality assurance summary, by type of inspection and form: 2008–09

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number Inspected	Number defective	Percent defective	Number Inspected	Number defective	Percent defective	
Printing total		58,966	1,098	0	0.00	0	0	0.00	
TFS-11(L)	Initial	10,650	15	0	0.00	0	0	0.00	08/19/08
TFS-13(L)	Advance letter	5,572	33	0	0.00	0	0	0.00	02/23/09
TFS-13(L)A	Initial	14	6	0	0.00	0	0	0.00	02/26/09
TFS-14L	Reminder	5,572	33	0	0.00	0	0	0.00	03/04/09
TFS-14L(A)	First follow-up	14	6	0	0.00	0	0	0.00	03/05/09
TFS-15L	Nonresponse follow-up	199	30	0	0.00	0	0	0.00	04/16/09
TFS-2L	Nonresponse follow-up	199	30	0	0.00	0	0	0.00	04/29/09
TFS-15L	Nonresponse follow-up	3,094	90	0	0.00	0	0	0.00	04/20/09
TFS-3L	Nonresponse follow-up	1,083	32	0	0.00	0	0	0.00	04/22/09
TFS-2L	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	04/23/09
TFS-3L	Nonresponse follow-up	2	2	0	0.00	0	0	0.00	04/23/09
TFS-13(L)A	Nonresponse follow-up	14	9	0	0.00	0	0	0.00	04/23/09
TFS-18(L)	Partial internet follow-up	55	3	0	0.0	0	0	0.00	05/05/09
TFS-2L	Nonresponse follow-up	7	3	0	0.00	0	0	0.00	05/28/09
TFS-3L	Nonresponse follow-up	48	3	0	0.00	0	0	0.00	05/28/09
TFS-19L(C)	Nonresponse follow-up	1,126	60	0	0.00	0	0	0.00	05/28/09
TFS-19L(F)	Nonresponse follow-up	561	60	0	0.00	0	0	0.00	05/28/09
TFS-19L(C)	Nonresponse follow-up	77	6	0	0.00	0	0	0.00	05/29/09
TFS-19L(F)	Nonresponse follow-up	37	6	0	0.00	0	0	0.00	05/29/09
TFS-2L	Nonresponse follow-up	116	30	0	0.00	0	0	0.00	06/01/09
TFS-3L	Nonresponse follow-up	502	31	0	0.00	0	0	0.00	06/01/09
TFS-2L	Nonresponse follow-up	2	2	0	0.00	0	0	0.00	06/03/09
TFS-3L	Nonresponse follow-up	2	2	0	0.00	0	0	0.00	06/03/09
TFS-19L(C)	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	06/03/09
TFS-19L(F)	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	06/03/09
TFS-2L	Switcher	1	1	0	0.00	0	0	0.00	06/03/09
TFS-3L	Switcher	4	3	0	0.00	0	0	0.00	06/03/09
TFS-17(L)	Switcher	19	19	0	0.00	0	0	0.00	06/03/09

SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S.Census Bureau, 2009.

Exhibit J-4. Duplo Booklet Maker inspection, by type of inspection and form: 2009–10

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number Inspected	Number defective	Percent defective	Number Inspected	Number defective	Percent defective	
Form assembly total		5,167	304	0	0.00	0	0	0.00	06/04/09
TFS-2L	Nonresponse follow-up	199	15	0	0.00	0	0	0.00	04/23/09
TFS-3L	Nonresponse follow-up	1,083	37	0	0.00	0	0	0.00	04/23/09
TFS-2L	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	04/22/09
TFS-3L	Nonresponse follow-up	2	2	0	0.00	0	0	0.00	04/22/09
TFS-2L	Nonresponse follow-up	7	7	0	0.00	0	0	0.00	05/28/09
TFS-3L	Nonresponse follow-up	48	15	0	0.00	0	0	0.00	05/28/09
TFS-2L	Nonresponse follow-up	116	15	0	0.00	0	0	0.00	05/29/09
TFS-3L	Nonresponse follow-up	501	30	0	0.00	0	0	0.00	05/29/09
TFS-2L	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	06/03/09
TFS-3L	Nonresponse follow-up	4	4	0	0.00	0	0	0.00	06/03/09
TFS-2L	Nonresp. FedEx foreign	1	1	0	0.00	0	0	0.00	06/03/09
TFS-3L	Nonresp. FedEx foreign	1	1	0	0.00	0	0	0.00	06/04/09

SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2009.

Exhibit J-5. Package assembly quality assurance, by type of inspection and form: 2008–09

Form	Mailout	Number printed	Sample inspection			Expanded inspection			Date
			Number Inspected	Number defective	Percent defective	Number Inspected	Number defective	Percent defective	
Package assembly total		28,557	18,375	11	0.06	3	0	0.00	
TFS-13(L)	Advance letter	5,572	5,572	2 ¹	0.04	0	0	0.00	02/24/09
TFS-14(L)	Reminder	5,572	5,572	0	0.00	0	0	0.00	03/05/09
TFS-2L	Nonresponse follow-up	199	199	0	0.00	0	0	0.00	04/21/09
TFS-3L	Nonresponse follow-up	1,081	1,081	0	0.00	0	0	0.00	04/22/09
TFS-2L	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	04/29/09
TFS-3L	Nonresponse follow-up	2	2	0	0.00	0	0	0.00	04/29/09
TFS-18(L)	Partial internet follow-up	55	55	0	0.00	0	0	0.00	05/05/09
TFS-2L	Nonresponse follow-up	7	7	0	0.00	0	0	0.00	06/01/09
TFS-3L	Nonresponse follow-up	48	48	0	0.00	0	0	0.00	06/01/09
TFS-2L	Nonresponse follow-up	116	116	0	0.00	0	0	0.00	06/01/09
TFS-3L	Nonresponse follow-up	501	501	7 ²	1.40	0	0	0.00	06/01/09
TFS-2L	Nonresponse follow-up	1	1	0	0.00	0	0	0.00	06/03/09
TFS-3L	Nonresponse follow-up	4	4	0	0.00	0	0	0.00	06/03/09
TFS-2L	Nonresp. FedEx foreign	1	1	0	0.00	0	0	0.00	06/04/09
TFS-3L	Nonresp. FedEx foreign	1	1	0	0.00	0	0	0.00	06/04/09

Package assembly errors and remarks

¹ One disclosure, 1 missing package.

² Six extra special notes; 1 missing special note.

SOURCE: *Quality Assurance for TFS Keying and Mailout Operations*, U.S. Census Bureau, 2009

Appendix K. Results of Incentive Experiment in the 2009–10 BTLS

This appendix summarizes the results of the incentive experiment conducted as part of the 2009–10 Beginning Teacher Longitudinal Study (BTLS), approved on October 20, 2009, under OMB# 1850-0868 v.1. In order to boost response rates in BTLS, the National Center for Education Statistics (NCES) gave noncontingent cash incentives to study participants in advance of the survey instrument. Because an optimal incentive amount had not been determined, NCES included an experimental design to test the effects of differential amounts on the response rates. This appendix explains the research questions and methodology, defines the population of analysis, and concludes that \$20 cash incentives were more effective than \$10 incentives in boosting final response rates, as well as early response rates before the start of the telephone follow-up operation. The appendix also includes a cost analysis of the incentive experiment.

Research Question and Methodology

In order to test the effectiveness of different cash incentives, the 2009–10 administration of BTLS contained an experiment to measure the impact on survey completion, completion date, and completeness of survey responses. The sampled cases in the BTLS cohort were randomly assigned to one of two experimental groups: a \$10 incentive group or a \$20 incentive group. Teachers were mailed a letter with the cash incentive 3 days before they received the e-mail to the online BTLS instrument. Teachers in each incentive group should have received the correspondence at about the same time.

The following research questions were explored:

- Is \$20 more effective than \$10 in increasing the number of interviews?
- Did a larger cash incentive amount increase the number of interviews completed before the start of the scheduled telephone follow-up date (February 1, 2010)?
- Did a larger cash incentive amount increase the number of completed surveys among interviews?

Comparisons were made between the two incentive groups on the number of interviews, the number of interviews before the telephone follow-up date, and the number of completed surveys using chi-square tests for association between incentive amounts and different outcome variables.

The 2009–10 BTLS data were collected primarily through a web instrument, with telephone follow-up. The first item and several of the following items in the instrument were designed as required questions; that is, a respondent could not proceed through the survey without supplying answers to them. These required questions were used to determine respondents' teaching status (current teacher vs. former teacher; stayers vs. movers), which, in turn, determined the path that respondents took in the survey. In addition to the web instrument, BTLS participants also had the option of completing the survey over the phone by calling a toll-free number. During the telephone follow-up period (starting in February), study participants who hadn't responded to the web instrument were called and offered the opportunity to answer the questions over the phone. The log data produced in the web instrument during the data collection contained dates and the following indicators of completion:

- complete (respondent/interviewer reached the last screen);
- partial complete, with required items (respondent/interviewer completed the required items);

- partial complete, without required items (respondent/interviewer didn't complete the required items); or
- opened with no answers (respondent/interviewer didn't answer any questions).

Based on the actual data collected, a final interview status recode (ISR) file was created containing information on case status: whether a case was an interview (i.e., respondent), nonrespondent, or out-of-scope. Both complete surveys and partial complete surveys (with required items answered) were considered to be study interviews in BTLS processing because they contain key information on teachers' status. The analysis below is conducted using the final ISR file.

Data

All first-year public school teachers who responded to the 2007–08 Schools and Staffing Survey (SASS) are included in the BTLS sample, and their SASS responses constitute the first wave data of BTLS. In 2008–09, the same teachers were asked to complete the longitudinal version of the Teacher Follow-up Survey (TFS)—their responses constitute the second wave data of BTLS. Prior to the 2009–10 BTLS data collection, a total of 1,980 current or former teachers⁴⁵ were randomly assigned to two groups—a \$10 incentive (group 1) vs. a \$20 incentive (group 2). Group 1 consisted of 980 people, and group 2 consisted of 990. Nevertheless, after the incentives were mailed out, a small number of people were deemed out-of-scope and 40 people didn't receive the incentives due to an undeliverable address. Because these people were either ineligible for BTLS or were never “treated,” they were excluded from the analysis. As a result, the sample size for the following analysis includes 1,930 current or former teachers who started teaching in 2007 or 2008.

Results

Table K-1 shows that among the 1,930 BTLS participants who actually received the incentive, 970 received \$10 and 960 received \$20. Forty-nine percent of participants (470 current or former teachers) in the \$10 incentive group and 56 percent (540 current or former teachers) in the \$20 incentive group completed the survey or the required items of the survey by the end of January (before the telephone follow-up period). The chi-square test result shows a significant relationship between the number of early study interviews and the incentive amount (chi-square with one degree of freedom = 10.3463, $p = .0013$). By the end of the data collection, 86 percent of the participants (830 current or former teachers) in the \$10 incentive group and 90 percent (870 current or former teachers) in the \$20 incentive group were counted as study interviews. The chi-square test result shows a significant relationship between the number of final study interviews and the incentive amount (chi-square with one degree of freedom = 7.6216, $p = .0058$).

⁴⁵ The treatment groups were originally assigned equally on $N = 1,990$. However after the groups were assigned, Census removed study refusals and out-of-scope teachers from the experiment, thus creating treatment groups of unequal size.

Table K-1. Response rates of BTLS third wave incentive experiment, by incentive amount: 2009–10

Incentive Amount	Number of teachers who received incentives	Early response rate ¹	Final response rate ²
Total	1,930	52.8	87.7
10 dollars	970	49.1	85.6
20 dollars	960	56.4	89.7

¹Early response rate is the percentage of study interviews before the follow-up date, 02/01/2010. Both complete surveys and partial complete surveys with required items answered are considered study interviews in BTLS processing.

²Final response rate is the percentage of study interviews by the end of data collection.

Note: Out-of-scope cases that did not receive an incentive due to any reason are excluded from this analysis. Details may not sum due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave, Final ISR File, 2009–10.”

Table K-2 shows the percentage of complete surveys among the study interviews in the BTLS third wave data collection. All together, 1,690 out of 1,930 current and former teachers who received a cash incentive were considered study interviews. Among them, 97 percent completed the survey, meaning a respondent reached the last page of the web instrument. However, the chi-square test result shows no significant association between the completeness of the BTLS survey and the incentive amount (chi-square with one degree of freedom = 0.0286, $p = .8658$).

Table K-2. Percentage of complete surveys among study interviews in BTLS third wave incentive experiment, by incentive amount: 2009–10

Incentive Amount	Number of survey interviews	Percentage of completed surveys
Total	1,690	96.9
10 dollars	830	96.9
20 dollars	860	97.0

NOTE: Both complete surveys and partial complete surveys with required items answered are considered study interviews in BTLS processing. Detail may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave, Final ISR File, 2009–10.”

Cost Analysis

Telephone follow-up costs \$39 per case on average, as estimated by Census. In this section, both the costs of the incentives and telephone follow-ups are taken consideration and the cost per respondent is calculated. Table K-3 shows the number of cases given incentives, the cost of the incentives, the number of cases followed up, the cost of the follow-up effort, the number of respondents, and the actual cost per respondent. The last column shows that the \$20 incentive group had a higher average cost per respondent than the \$10 incentive group (\$41 vs. \$35); the difference is only \$6, rather than \$10, after taking into account the savings from from the telephone follow-up effort. In addition, although more cases in the \$10 group were given telephone follow-up, this group still had a significantly lower response than the \$20 group.

Table K-3. Costs of BTLS third-wave incentive experiment and telephone follow-up, by incentive amount: 2009–10

Incentive Amount	Number of cases given incentives	Cost of incentives	Number of cases followed up	Cost of telephone follow up	Total number of respondents	Total cost per respondent
Total	1,930	\$28,930	910	\$35,529	1,690	\$38
10 dollars	970	\$9,650	490	\$19,149	830	\$35
20 dollars	960	\$19,280	420	\$16,380	870	\$41

NOTE: Out-of-scope cases that did not receive an incentive due to any reason are excluded from this analysis. Telephone follow-up costs \$39 per case on average (estimated by Census). Only non-early respondents were followed up by telephone. Detail may not sum due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Third Wave, Final ISR File, 2009–10."

In summary, a larger incentive amount (\$20) is associated with both a higher early survey response rate and a higher final response rate. As discussed earlier, a higher early response rate can also reduce the number of telephone follow-up cases, which can offset some of the cost of the extra incentives. At the same time, the incentive amount is not associated with the completeness of the survey.

Appendix L. Changes Made to Variables During the Consistency and Logic Edits, by BTLS Wave

The tables in this appendix show the number of edit changes made to responses for each of the variables within each Beginning Teacher Longitudinal Study (BTLS) wave data file during the consistency and logic edits. (See chapter 5 for more details about the consistency and logic edits.) The tables are as follows:

L-1.	Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08	L-2
L-2.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09	L-10
L-3.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave retrospective cases: 2008–09	L-17
L-4.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10	L-18
L-5.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave retrospective cases: 2009–10	L-25
L-6.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11	L-26
L-7.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave retrospective cases: 2010–11	L-33
L-8.	Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12	L-34

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0025	0	0.00
W1T0026	0	0.00
W1T0027	0	0.00
W1T0028	2	0.10
W1T0029	1	0.05
W1T0030	0	0.00
W1T0031	0	0.00
W1T0034	0	0.00
W1T0035	0	0.00
W1T0036	0	0.00
W1T0037	0	0.00
W1T0038	14	0.70
W1T0039	8	0.40
W1T0040	17	0.85
W1T0041	17	0.85
W1T0042	17	0.85
W1T0050	0	0.00
W1T0051	0	0.00
W1T0052	0	0.00
W1T0053	0	0.00
W1T0054	0	0.00
W1T0055	0	0.00
W1T0056	0	0.00
W1T0057	0	0.00
W1T0058	0	0.00
W1T0059	0	0.00
W1T0060	0	0.00
W1T0061	0	0.00
W1T0062	0	0.00
W1T0063	0	0.00
W1T0064	0	0.00
W1T0065	11	0.55
W1T0066	22	1.10
W1T0067	0	0.00
W1T0068	5	0.25
W1T0069	6	0.30
W1T0070	0	0.00
W1T0071	0	0.00
W1T0072	11	0.55
W1T0073	1	0.05
W1T0074	1	0.05
W1T0075	2	0.10
W1T0076	2	0.10

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0077	54	2.71
W1T0078	24	1.20
W1T0079	40	2.01
W1T0080	11	0.55
W1T0081	45	2.26
W1T0082	65	3.26
W1T0083	23	1.15
W1T0084	94	4.72
W1T0085	114	5.72
W1T0086	70	3.51
W1T0087	106	5.32
W1T0088	123	6.17
W1T0089	83	4.17
W1T0090	59	2.96
W1T0091	74	3.71
W1T0092	45	2.26
W1T0093	37	1.86
W1T0094	45	2.26
W1T0095	26	1.31
W1T0096	16	0.80
W1T0097	20	1.00
W1T0098	10	0.50
W1T0099	10	0.50
W1T0100	11	0.55
W1T0101	3	0.15
W1T0102	6	0.30
W1T0103	8	0.40
W1T0104	2	0.10
W1T0105	7	0.35
W1T0106	7	0.35
W1T0107	2	0.10
W1T0110	4	0.20
W1T0111	20	1.00
W1T0112	8	0.40
W1T0113	0	0.00
W1T0114	47	2.36
W1T0115	0	0.00
W1T0119	0	0.00
W1T0120	19	0.95
W1T0122	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0126	4	0.20
W1T0133	2	0.10
W1T0134	0	0.00
W1T0135	0	0.00
W1T0136	0	0.00
W1T0137	3	0.15
W1T0138	0	0.00
W1T0139	0	0.00
W1T0140	0	0.00
W1T0141	0	0.00
W1T0142	3	0.15
W1T0143	2	0.10
W1T0144	0	0.00
W1T0145	3	0.15
W1T0146	2	0.10
W1T0147	3	0.15
W1T0148	1	0.05
W1T0149	1	0.05
W1T0150	0	0.00
W1T0151	0	0.00
W1T0152	0	0.00
W1T0153	0	0.00
W1T0154	0	0.00
W1T0155	0	0.00
W1T0160	0	0.00
W1T0161	0	0.00
W1T0162	0	0.00
W1T0163	0	0.00
W1T0164	0	0.00
W1T0165	19	0.95
W1T0166	0	0.00
W1T0167	0	0.00
W1T0168	0	0.00
W1T0169	0	0.00
W1T0170	47	2.36
W1T0171	0	0.00
W1T0172	0	0.00
W1T0173	0	0.00
W1T0174	0	0.00
W1T0175	17	0.85
W1T0176	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0177	0	0.00
W1T0178	0	0.00
W1T0179	0	0.00
W1T0180	8	0.40
W1T0181	0	0.00
W1T0182	0	0.00
W1T0183	0	0.00
W1T0184	0	0.00
W1T0185	19	0.95
W1T0186	0	0.00
W1T0187	0	0.00
W1T0188	0	0.00
W1T0189	0	0.00
W1T0190	0	0.00
W1T0191	43	2.16
W1T0192	0	0.00
W1T0193	0	0.00
W1T0194	0	0.00
W1T0195	0	0.00
W1T0196	2	0.10
W1T0197	0	0.00
W1T0198	0	0.00
W1T0199	0	0.00
W1T0200	0	0.00
W1T0201	0	0.00
W1T0202	0	0.00
W1T0203	0	0.00
W1T0204	0	0.00
W1T0205	0	0.00
W1T0206	0	0.00
W1T0207	0	0.00
W1T0208	0	0.00
W1T0209	0	0.00
W1T0210	0	0.00
W1T0211	0	0.00
W1T0212	0	0.00
W1T0213	0	0.00
W1T0214	0	0.00
W1T0215	0	0.00
W1T0216	0	0.00
W1T0217	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0218	0	0.00
W1T0219	0	0.00
W1T0220	0	0.00
W1T0221	10	0.50
W1T0222	2	0.10
W1T0223	3	0.15
W1T0224	4	0.20
W1T0225	4	0.20
W1T0226	1	0.05
W1T0231	0	0.00
W1T0232	0	0.00
W1T0233	0	0.00
W1T0234	0	0.00
W1T0235	0	0.00
W1T0236	0	0.00
W1T0237	0	0.00
W1T0238	0	0.00
W1T0239	0	0.00
W1T0240	0	0.00
W1T0241	0	0.00
W1T0242	0	0.00
W1T0243	0	0.00
W1T0244	0	0.00
W1T0245	0	0.00
W1T0246	0	0.00
W1T0247	0	0.00
W1T0248	0	0.00
W1T0249	0	0.00
W1T0250	0	0.00
W1T0251	0	0.00
W1T0252	0	0.00
W1T0260	0	0.00
W1T0261	0	0.00
W1T0262	0	0.00
W1T0263	1	0.05
W1T0264	5	0.25
W1T0265	10	0.50
W1T0266	7	0.35
W1T0267	6	0.30
W1T0268	0	0.00
W1T0269	1	0.05
W1T0270	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0271	5	0.25
W1T0272	5	0.25
W1T0273	6	0.30
W1T0274	5	0.25
W1T0280	0	0.00
W1T0281	0	0.00
W1T0282	0	0.00
W1T0283	0	0.00
W1T0284	0	0.00
W1T0285	0	0.00
W1T0286	0	0.00
W1T0287	0	0.00
W1T0288	0	0.00
W1T0289	0	0.00
W1T0290	0	0.00
W1T0291	0	0.00
W1T0292	0	0.00
W1T0293	0	0.00
W1T0294	0	0.00
W1T0295	0	0.00
W1T0296	0	0.00
W1T0297	0	0.00
W1T0298	0	0.00
W1T0299	0	0.00
W1T0300	0	0.00
W1T0301	0	0.00
W1T0302	0	0.00
W1T0303	0	0.00
W1T0304	0	0.00
W1T0305	0	0.00
W1T0306	0	0.00
W1T0307	0	0.00
W1T0308	0	0.00
W1T0309	0	0.00
W1T0310	0	0.00
W1T0311	0	0.00
W1T0312	0	0.00
W1T0313	0	0.00
W1T0314	0	0.00
W1T0315	0	0.00
W1T0316	0	0.00
W1T0317	0	0.00
W1T0318	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T0319	0	0.00
W1T0320	0	0.00
W1T0321	0	0.00
W1T0322	0	0.00
W1T0323	0	0.00
W1T0324	0	0.00
W1T0325	0	0.00
W1T0326	0	0.00
W1T0327	0	0.00
W1T0335	2	0.10
W1T0336	0	0.00
W1T0337	0	0.00
W1T0338	2	0.10
W1T0339	0	0.00
W1T0340	0	0.00
W1T0341	2	0.10
W1T0342	0	0.00
W1T0343	0	0.00
W1T0344	2	0.10
W1T0345	0	0.00
W1T0346	2	0.10
W1T0347	0	0.00
W1T0348	0	0.00
W1T0349	0	0.00
W1T0350	0	0.00
W1T0351	0	0.00
W1T0352	0	0.00
W1T0353	0	0.00
W1T0354	0	0.00
W1T0355	0	0.00
W1T0356	0	0.00
W1T0357	0	0.00
W1T0358	0	0.00
W1T0359	0	0.00
W1T0360	0	0.00
W1T0361	0	0.00
W1T0362	0	0.00
W1T0363	0	0.00
W1T0364	0	0.00
W1T5030	0	0.00
W1T5032	0	0.00
W1T5033	0	0.00

See notes at end of table.

Table L-1. Number of logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS first wave: 2007–08—Continued

Variable	Logic edits	
	Number of changes	Percent of records affected
W1T5035	0	0.00
W1T5067	0	0.00
W1T5078	0	0.00
W1T5081	0	0.00
W1T5084	0	0.00
W1T5087	0	0.00
W1T5090	0	0.00
W1T5093	0	0.00
W1T5096	0	0.00
W1T5099	0	0.00
W1T5102	0	0.00
W1T5105	0	0.00
W1T5113	0	0.00
W1T5115	0	0.00
W1T5116	0	0.00
W1T5117	0	0.00
W1T5118	0	0.00
W1T5123	0	0.00
W1T5125	0	0.00
W1T5127	0	0.00
W1T5129	0	0.00
W1T5132	0	0.00
W1T5135	0	0.00
W1T5138	0	0.00
W1T5141	0	0.00
W1T5161	0	0.00
W1T5166	0	0.00
W1T5171	0	0.00
W1T5176	0	0.00
W1T5181	0	0.00
W1T5187	0	0.00
W1T5192	0	0.00
W1T5197	0	0.00
W1T5202	0	0.00
W1T5207	0	0.00
W1T5230	0	0.00
W1T5252	0	0.00

NOTE: The BTLS first wave file underwent consistency edits with the processing of the 2007–08 Schools and Staffing Survey (SASS). For detailed information (including counts) about the consistency edits performed on the BTLS first wave data file during the 2007–08 SASS, refer to chapter 7 of the *Documentation for the 2007–08 Schools and Staffing Survey* (NCES 2010-332) and related appendixes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Wave,” 2007–08.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09

Variable			Consistency edits		Logic edits	
	Total number of edit changes	Percent of records affected by all edits	Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2REGCL	0	0.00	0	0.00	0	0.00
W2POSSC	0	0.00	0	0.00	0	0.00
W2TCHFP	6	0.36	6	0.36	0	0.00
W2TEGPK	20	1.19	20	1.19	0	0.00
W2TEGKG	0	0.00	0	0.00	0	0.00
W2TEG01	0	0.00	0	0.00	0	0.00
W2TEG02	0	0.00	0	0.00	0	0.00
W2TEG03	0	0.00	0	0.00	0	0.00
W2TEG04	0	0.00	0	0.00	0	0.00
W2TEG05	0	0.00	0	0.00	0	0.00
W2TEG06	0	0.00	0	0.00	0	0.00
W2TEG07	0	0.00	0	0.00	0	0.00
W2TEG08	0	0.00	0	0.00	0	0.00
W2TEG09	0	0.00	0	0.00	0	0.00
W2TEG10	0	0.00	0	0.00	0	0.00
W2TEG11	0	0.00	0	0.00	0	0.00
W2TEG12	0	0.00	0	0.00	0	0.00
W2TEGUG	0	0.00	0	0.00	0	0.00
W2TEMAC	11	0.65	11	0.65	0	0.00
W2TECLD	29	1.72	8	0.47	21	1.24
W2TEHQT	0	0.00	0	0.00	0	0.00
W2THQTA	0	0.00	0	0.00	0	0.00
W2TCHMO	0	0.00	0	0.00	0	0.00
W2TCHYR	0	0.00	0	0.00	0	0.00
W2MNTYN	1	0.06	1	0.06	0	0.00
W2MNPRI	0	0.00	0	0.00	0	0.00
W2MNSUB	0	0.00	0	0.00	0	0.00
W2MNGRA	0	0.00	0	0.00	0	0.00
W2MNFRQ	0	0.00	0	0.00	0	0.00
W2MNOBS	0	0.00	0	0.00	0	0.00
W2MFSBJ	4	0.24	4	0.24	0	0.00
W2MISBJ	0	0.00	0	0.00	0	0.00
W2MFDIS	4	0.24	4	0.24	0	0.00
W2MIDIS	0	0.00	0	0.00	0	0.00
W2MFINS	0	0.00	0	0.00	0	0.00
W2MIINS	0	0.00	0	0.00	0	0.00
W2MFTEC	3	0.18	3	0.18	0	0.00
W2MITEC	0	0.00	0	0.00	0	0.00
W2MFSTA	5	0.30	5	0.30	0	0.00
W2MISTA	0	0.00	0	0.00	0	0.00
W2MFCUR	3	0.18	3	0.18	0	0.00

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2MICUR	0	0.00	0	0.00	0	0.00
W2MFPAR	7	0.41	7	0.41	0	0.00
W2MIPAR	0	0.00	0	0.00	0	0.00
W2MFREF	2	0.12	2	0.12	0	0.00
W2MIREF	0	0.00	0	0.00	0	0.00
W2MNIMP	0	0.00	0	0.00	0	0.00
W2ALTYN	62	3.68	3	0.18	59	3.50
W2ALTCP	0	0.00	0	0.00	0	0.00
W2ALTTPR	0	0.00	0	0.00	0	0.00
W2ALTLY	18	1.07	0	0.00	18	1.07
W2ALTTM	143	8.48	0	0.00	143	8.48
W2ALTTR	0	0.00	0	0.00	0	0.00
W2REGPR	0	0.00	0	0.00	0	0.00
W2MOVYN	1	0.06	1	0.06	0	0.00
W2STTYN	5	0.30	5	0.30	0	0.00
W2FORYN	0	0.00	0	0.00	0	0.00
W2SCGPK	4	0.24	4	0.24	0	0.00
W2SCGKG	1	0.06	1	0.06	0	0.00
W2SCG01	1	0.06	1	0.06	0	0.00
W2SCG02	1	0.06	1	0.06	0	0.00
W2SCG03	1	0.06	1	0.06	0	0.00
W2SCG04	2	0.12	2	0.12	0	0.00
W2SCG05	4	0.24	4	0.24	0	0.00
W2SCG06	5	0.30	5	0.30	0	0.00
W2SCG07	5	0.30	5	0.30	0	0.00
W2SCG08	5	0.30	5	0.30	0	0.00
W2SCG09	7	0.41	7	0.41	0	0.00
W2SCG10	6	0.36	6	0.36	0	0.00
W2SCG11	9	0.53	9	0.53	0	0.00
W2SCG12	8	0.47	8	0.47	0	0.00
W2SCGUG	1	0.06	1	0.06	0	0.00
W2MVTYP	2	0.12	0	0.00	2	0.12
W2SCREL	0	0.00	0	0.00	0	0.00
W2MCNYN	4	0.24	0	0.00	4	0.24
W2MCNRS	3	0.18	0	0.00	3	0.18
W2MVHOM	4	0.24	0	0.00	4	0.24
W2MVHEA	0	0.00	0	0.00	0	0.00
W2MVTES	0	0.00	0	0.00	0	0.00
W2MVITR	0	0.00	0	0.00	0	0.00
W2MVDES	0	0.00	0	0.00	0	0.00
W2MVGSU	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2MVSAL	0	0.00	0	0.00	0	0.00
W2MVBEN	0	0.00	0	0.00	0	0.00
W2MVLIV	0	0.00	0	0.00	0	0.00
W2MVSEC	0	0.00	0	0.00	0	0.00
W2MVAUT	0	0.00	0	0.00	0	0.00
W2MVNUM	0	0.00	0	0.00	0	0.00
W2MVMST	0	0.00	0	0.00	0	0.00
W2MVINT	0	0.00	0	0.00	0	0.00
W2MVDEV	0	0.00	0	0.00	0	0.00
W2MVCON	0	0.00	0	0.00	0	0.00
W2MVDIS	0	0.00	0	0.00	0	0.00
W2MVADM	0	0.00	0	0.00	0	0.00
W2MVSUP	0	0.00	0	0.00	0	0.00
W2MVNOI	0	0.00	0	0.00	0	0.00
W2MVAIM	0	0.00	0	0.00	0	0.00
W2MVARW	0	0.00	0	0.00	0	0.00
W2MVASP	0	0.00	0	0.00	0	0.00
W2MVACU	0	0.00	0	0.00	0	0.00
W2MVAOT	0	0.00	0	0.00	0	0.00
W2MVOTH	20	1.19	0	0.00	20	1.19
W2MVIMP	18	1.07	2	0.12	16	0.95
W2ADMCH	0	0.00	0	0.00	0	0.00
W2TPSAL	0	0.00	0	0.00	0	0.00
W2TPBEN	0	0.00	0	0.00	0	0.00
W2TPADV	0	0.00	0	0.00	0	0.00
W2TPDEV	0	0.00	0	0.00	0	0.00
W2TPLRN	0	0.00	0	0.00	0	0.00
W2TPREL	0	0.00	0	0.00	0	0.00
W2TPADM	0	0.00	0	0.00	0	0.00
W2TPSAF	0	0.00	0	0.00	0	0.00
W2TPINF	0	0.00	0	0.00	0	0.00
W2TPAUT	0	0.00	0	0.00	0	0.00
W2TPPRE	0	0.00	0	0.00	0	0.00
W2TPEVA	0	0.00	0	0.00	0	0.00
W2TPWLD	0	0.00	0	0.00	0	0.00
W2TPBAL	0	0.00	0	0.00	0	0.00
W2TPRES	0	0.00	0	0.00	0	0.00
W2TPCON	0	0.00	0	0.00	0	0.00
W2TPSEC	0	0.00	0	0.00	0	0.00
W2TPCHA	0	0.00	0	0.00	0	0.00
W2TPACC	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2TPDIF	0	0.00	0	0.00	0	0.00
W2TPTAS	0	0.00	0	0.00	0	0.00
W2SATIS	2	0.12	0	0.00	2	0.12
W2M08YN	4	0.24	4	0.24	0	0.00
W2M08IM	0	0.00	0	0.00	0	0.00
W2ERSSC	0	0.00	0	0.00	0	0.00
W2ERSSA	0	0.00	0	0.00	0	0.00
W2ERNTJ	0	0.00	0	0.00	0	0.00
W2ERNTA	0	0.00	0	0.00	0	0.00
W2ERNSJ	1	0.06	1	0.06	0	0.00
W2ERNSA	0	0.00	0	0.00	0	0.00
W2TCHSA	19	1.13	14	0.83	5	0.30
W2EREXC	3	0.18	3	0.18	0	0.00
W2EREXA	0	0.00	0	0.00	0	0.00
W2EROSS	2	0.12	2	0.12	0	0.00
W2EROSA	0	0.00	0	0.00	0	0.00
W2EROUT	6	0.36	6	0.36	0	0.00
W2EROUA	0	0.00	0	0.00	0	0.00
W2OUTSD	0	0.00	0	0.00	0	0.00
W2PENYN	99	5.87	41	2.43	58	3.44
W2PENAM	0	0.00	0	0.00	0	0.00
W2WHDES	2	0.12	2	0.12	0	0.00
W2WHYRS	0	0.00	0	0.00	0	0.00
W2CITZN	0	0.00	0	0.00	0	0.00
W2RESOR	0	0.00	0	0.00	0	0.00
W2HHINC	99	5.87	96	5.69	3	0.18
W2MARCUI	1	0.06	1	0.06	0	0.00
W2MARCH	5	0.30	4	0.24	1	0.06
W2MAR07	1	0.06	0	0.00	1	0.06
W2SPYOU	0	0.00	0	0.00	0	0.00
W2SPSPO	431	25.55	0	0.00	431	25.55
W2SPLT5	297	17.61	0	0.00	297	17.61
W2SP518	238	14.11	0	0.00	238	14.11
W2SP18P	375	22.23	0	0.00	375	22.23
W2ONLVE	0	0.00	0	0.00	0	0.00
W2FRPOP	0	0.00	0	0.00	0	0.00
W2OCCST	2	0.12	2	0.12	0	0.00
W2OCCYN	3	0.18	3	0.18	0	0.00
W2OCCCL	0	0.00	0	0.00	0	0.00
W2SCOCC	1	0.06	1	0.06	0	0.00
W2SCTYP	1	0.06	1	0.06	0	0.00

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2OCCFP	0	0.00	0	0.00	0	0.00
W2OCCSA	0	0.00	0	0.00	0	0.00
W2RINYN	15	0.89	0	0.00	15	0.89
W2RINST	0	0.00	0	0.00	0	0.00
W2LCNYN	4	0.24	0	0.00	4	0.24
W2LCNRS	4	0.24	0	0.00	4	0.24
W2LVHOM	1	0.06	0	0.00	1	0.06
W2LVCHI	1	0.06	0	0.00	1	0.06
W2LVHEA	0	0.00	0	0.00	0	0.00
W2LVRET	0	0.00	0	0.00	0	0.00
W2LVTES	0	0.00	0	0.00	0	0.00
W2LVITR	0	0.00	0	0.00	0	0.00
W2LVDES	0	0.00	0	0.00	0	0.00
W2LVGSU	0	0.00	0	0.00	0	0.00
W2LVSAL	0	0.00	0	0.00	0	0.00
W2LVBEN	0	0.00	0	0.00	0	0.00
W2LVLIV	0	0.00	0	0.00	0	0.00
W2LVSEC	1	0.06	0	0.00	1	0.06
W2LVNPO	1	0.06	0	0.00	1	0.06
W2LVDEV	0	0.00	0	0.00	0	0.00
W2LVWED	0	0.00	0	0.00	0	0.00
W2LVOED	0	0.00	0	0.00	0	0.00
W2LVTCH	0	0.00	0	0.00	0	0.00
W2LVAUT	0	0.00	0	0.00	0	0.00
W2LVNUM	0	0.00	0	0.00	0	0.00
W2LVMST	0	0.00	0	0.00	0	0.00
W2LVINT	0	0.00	0	0.00	0	0.00
W2LVCON	1	0.06	0	0.00	1	0.06
W2LVDIS	0	0.00	0	0.00	0	0.00
W2LVADM	0	0.00	0	0.00	0	0.00
W2LVSUP	0	0.00	0	0.00	0	0.00
W2LVNOI	0	0.00	0	0.00	0	0.00
W2LVAIM	0	0.00	0	0.00	0	0.00
W2LVARW	0	0.00	0	0.00	0	0.00
W2LVASP	0	0.00	0	0.00	0	0.00
W2LVACU	0	0.00	0	0.00	0	0.00
W2LVAOT	1	0.06	0	0.00	1	0.06
W2LVOTH	24	1.42	0	0.00	24	1.42
W2LVIMP	14	0.83	0	0.00	14	0.83
W2APPYN	1	0.06	1	0.06	0	0.00

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2APSUB	0	0.00	0	0.00	0	0.00
W2APNOI	0	0.00	0	0.00	0	0.00
W2APEDU	0	0.00	0	0.00	0	0.00
W2APRDY	0	0.00	0	0.00	0	0.00
W2APNPO	0	0.00	0	0.00	0	0.00
W2APNIN	0	0.00	0	0.00	0	0.00
W2APNCL	0	0.00	0	0.00	0	0.00
W2APNED	0	0.00	0	0.00	0	0.00
W2APTST	0	0.00	0	0.00	0	0.00
W2APOTH	24	1.42	24	1.42	0	0.00
W2OCCSH	1	0.06	0	0.00	1	0.06
W2OPSAL	0	0.00	0	0.00	0	0.00
W2OPBEN	0	0.00	0	0.00	0	0.00
W2OPADV	0	0.00	0	0.00	0	0.00
W2OPDEV	0	0.00	0	0.00	0	0.00
W2OPLRN	0	0.00	0	0.00	0	0.00
W2OPREL	0	0.00	0	0.00	0	0.00
W2OPADM	0	0.00	0	0.00	0	0.00
W2OPSAF	0	0.00	0	0.00	0	0.00
W2OPINF	0	0.00	0	0.00	0	0.00
W2OPAUT	0	0.00	0	0.00	0	0.00
W2OPPRE	0	0.00	0	0.00	0	0.00
W2OPEVA	0	0.00	0	0.00	0	0.00
W2OPWLD	0	0.00	0	0.00	0	0.00
W2OPBAL	0	0.00	0	0.00	0	0.00
W2OPRES	0	0.00	0	0.00	0	0.00
W2OPCON	0	0.00	0	0.00	0	0.00
W2OPSEC	0	0.00	0	0.00	0	0.00
W2OPCHA	0	0.00	0	0.00	0	0.00
W2OPACC	0	0.00	0	0.00	0	0.00
W2OPDIF	0	0.00	0	0.00	0	0.00
W2TEMAN	11	0.65	11	0.65	0	0.00
W2FORNM	0	0.00	0	0.00	0	0.00
W2SCNAM	0	0.00	0	0.00	0	0.00
W2SCSTR	0	0.00	0	0.00	0	0.00
W2SCCIT	0	0.00	0	0.00	0	0.00
W2SCSTA	0	0.00	0	0.00	0	0.00
W2SCZIP	0	0.00	0	0.00	0	0.00
W2SCDIS	0	0.00	0	0.00	0	0.00
W2SCCOU	0	0.00	0	0.00	0	0.00
W2MCNSP	1	0.06	0	0.00	1	0.06

See notes at end of table.

Table L-2. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave: 2008–09—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2MVOSP	0	0.00	0	0.00	0	0.00
W2OUTSP	0	0.00	0	0.00	0	0.00
W2WHPRI	0	0.00	0	0.00	0	0.00
W2WHACT	0	0.00	0	0.00	0	0.00
W2RESSP	0	0.00	0	0.00	0	0.00
W2TREXP	0	0.00	0	0.00	0	0.00
W2OCCSP	0	0.00	0	0.00	0	0.00
W2OCCTL	0	0.00	0	0.00	0	0.00
W2OCCAC	0	0.00	0	0.00	0	0.00
W2SCOSP	0	0.00	0	0.00	0	0.00
W2LCNSP	3	0.18	0	0.00	3	0.18
W2LVOSP	0	0.00	0	0.00	0	0.00
W2APOSF	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave,” 2008–09.

Table L-3. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS second wave retrospective cases: 2008–09

Variable	Consistency edits				Logic edits	
	Total number of edit changes	Percent of records affected by all edits	Number of changes	Percent of records affected	Number of changes	Percent of records affected
W2REGCL	0	0.00	0	0.00	0	0.00
W2POSSC	0	0.00	0	0.00	0	0.00
W2MOVYN	0	0.00	0	0.00	0	0.00
W2MVTYP	0	0.00	0	0.00	0	0.00
W2TREXP	0	0.00	0	0.00	0	0.00
W2OCCST	1	0.70	0	0.00	1	0.70
W2OCCSP	0	0.00	0	0.00	0	0.00
W2OCCYN	0	0.00	0	0.00	0	0.00
W2LCNYN	0	0.00	0	0.00	0	0.00
W2LCNRS	0	0.00	0	0.00	0	0.00
W2LCNSP	0	0.00	0	0.00	0	0.00
W2NRPER	0	0.00	0	0.00	0	0.00
W2NRSAL	0	0.00	0	0.00	0	0.00
W2NRCON	0	0.00	0	0.00	0	0.00
W2NRNPO	0	0.00	0	0.00	0	0.00
W2NRAED	0	0.00	0	0.00	0	0.00
W2NRADM	0	0.00	0	0.00	0	0.00
W2NRACC	0	0.00	0	0.00	0	0.00
W2NRGSU	0	0.00	0	0.00	0	0.00
W2NRTCH	0	0.00	0	0.00	0	0.00
W2NROTH	0	0.00	0	0.00	0	0.00
W2NROSP	0	0.00	0	0.00	0	0.00
W2NRIMP	1	0.70	0	0.00	1	0.70
W2FORYN	0	0.00	0	0.00	0	0.00
W2SCNAM	0	0.00	0	0.00	0	0.00
W2ELSEC SCHOOL	0	0.00	0	0.00	0	0.00
W2SCSTR	0	0.00	0	0.00	0	0.00
W2SCCIT	0	0.00	0	0.00	0	0.00
W2ELSECCITY	0	0.00	0	0.00	0	0.00
W2SCSTA	0	0.00	0	0.00	0	0.00
W2ELSECSTATE	0	0.00	0	0.00	0	0.00
W2SCZIP	0	0.00	0	0.00	0	0.00
W2SCDIS	0	0.00	0	0.00	0	0.00
W2SCCOU	0	0.00	0	0.00	0	0.00
W2ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3REGCL	1	0.06	0	0.00	1	0.06
W3POSSC	1	0.06	0	0.00	1	0.06
W3TCHFP	16	0.93	11	0.64	5	0.29
W3TEGPK	509	29.63	14	0.81	495	28.81
W3TEGKG	465	27.07	0	0.00	465	27.07
W3TEG01	453	26.37	0	0.00	453	26.37
W3TEG02	460	26.78	0	0.00	460	26.78
W3TEG03	454	26.43	0	0.00	454	26.43
W3TEG04	460	26.78	0	0.00	460	26.78
W3TEG05	459	26.72	0	0.00	459	26.72
W3TEG06	464	27.01	0	0.00	464	27.01
W3TEG07	444	25.84	0	0.00	444	25.84
W3TEG08	441	25.67	0	0.00	441	25.67
W3TEG09	324	18.86	0	0.00	324	18.86
W3TEG10	318	18.51	0	0.00	318	18.51
W3TEG11	325	18.92	0	0.00	325	18.92
W3TEG12	337	19.62	0	0.00	337	19.62
W3TEGUG	643	37.43	0	0.00	643	37.43
W3TEMAC	14	0.81	1	0.06	13	0.76
W3TECLD	11	0.64	7	0.41	4	0.23
W3TEHQT	1	0.06	0	0.00	1	0.06
W3TEQTA	0	0.00	0	0.00	0	0.00
W3ACTCO	69	4.02	0	0.00	69	4.02
W3ACTSG	63	3.67	0	0.00	63	3.67
W3ACTDP	104	6.05	0	0.00	104	6.05
W3ACTCM	81	4.71	0	0.00	81	4.71
W3ACTSU	106	6.17	0	0.00	106	6.17
W3ACTMN	113	6.58	0	0.00	113	6.58
W3ACTUN	120	6.98	0	0.00	120	6.98
W3ACTPR	108	6.29	0	0.00	108	6.29
W3ACTLD	88	5.12	0	0.00	88	5.12
W3CERTI	0	0.00	0	0.00	0	0.00
W3CERWN	0	0.00	0	0.00	0	0.00
W3ALTCT	0	0.00	0	0.00	0	0.00
W3CEREF	0	0.00	0	0.00	0	0.00
W3CERFI	20	1.16	0	0.00	20	1.16
W3CERGL	38	2.21	0	0.00	38	2.21
W3CERNB	125	7.28	0	0.00	125	7.28
W3CERBA	33	1.92	0	0.00	33	1.92
W3CEREX	38	2.21	0	0.00	38	2.21
W3CEREV	118	6.87	0	0.00	118	6.87
W3RENCT	17	0.99	0	0.00	17	0.99

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3ENDOR	34	1.98	0	0.00	34	1.98
W3ADDEG	37	2.15	14	0.81	23	1.34
W3DEOUS	0	0.00	0	0.00	0	0.00
W3ENCOU	0	0.00	0	0.00	0	0.00
W3REACO	0	0.00	0	0.00	0	0.00
W3DEGCA	0	0.00	0	0.00	0	0.00
W3MOVYN	2	0.12	0	0.00	2	0.12
W3STTYN	7	0.41	6	0.35	1	0.06
W3FORYN	3	0.17	3	0.17	0	0.00
W3SCGPK	64	3.73	0	0.00	64	3.73
W3SCGKG	52	3.03	0	0.00	52	3.03
W3SCG01	52	3.03	0	0.00	52	3.03
W3SCG02	52	3.03	0	0.00	52	3.03
W3SCG03	52	3.03	1	0.06	51	2.97
W3SCG04	57	3.32	0	0.00	57	3.32
W3SCG05	58	3.38	3	0.17	55	3.20
W3SCG06	67	3.90	0	0.00	67	3.90
W3SCG07	70	4.07	1	0.06	69	4.02
W3SCG08	69	4.02	0	0.00	69	4.02
W3SCG09	69	4.02	4	0.23	65	3.78
W3SCG10	71	4.13	2	0.12	69	4.02
W3SCG11	68	3.96	2	0.12	66	3.84
W3SCG12	70	4.07	2	0.12	68	3.96
W3SCGUG	150	8.73	3	0.17	147	8.56
W3MVTYP	13	0.76	0	0.00	13	0.76
W3MCNYN	4	0.23	0	0.00	4	0.23
W3MCNRS	6	0.35	0	0.00	6	0.35
W3MVHOM	1	0.06	0	0.00	1	0.06
W3MVHEA	2	0.12	0	0.00	2	0.12
W3MVTES	0	0.00	0	0.00	0	0.00
W3MVITR	0	0.00	0	0.00	0	0.00
W3MVDES	0	0.00	0	0.00	0	0.00
W3MVGSU	1	0.06	0	0.00	1	0.06
W3MVSAL	0	0.00	0	0.00	0	0.00
W3MVBEN	0	0.00	0	0.00	0	0.00
W3MVLIV	0	0.00	0	0.00	0	0.00
W3MVSEC	1	0.06	0	0.00	1	0.06
W3MVAUT	0	0.00	0	0.00	0	0.00
W3MVNUM	1	0.06	0	0.00	1	0.06
W3MVMST	0	0.00	0	0.00	0	0.00
W3MVINT	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3MVDEV	0	0.00	0	0.00	0	0.00
W3MVCON	0	0.00	0	0.00	0	0.00
W3MVDIS	0	0.00	0	0.00	0	0.00
W3MVADM	1	0.06	0	0.00	1	0.06
W3MVSUP	0	0.00	0	0.00	0	0.00
W3MVNOI	1	0.06	0	0.00	1	0.06
W3MVAIM	0	0.00	0	0.00	0	0.00
W3MVARW	1	0.06	0	0.00	1	0.06
W3MVASP	0	0.00	0	0.00	0	0.00
W3MVACU	0	0.00	0	0.00	0	0.00
W3MVAOT	1	0.06	0	0.00	1	0.06
W3MVOTH	23	1.34	0	0.00	23	1.34
W3MVIMP	10	0.58	0	0.00	10	0.58
W3ADMCH	1	0.06	0	0.00	1	0.06
W3SCCHA	1	0.06	0	0.00	1	0.06
W3PRMGT	0	0.00	0	0.00	0	0.00
W3PRPAR	0	0.00	0	0.00	0	0.00
W3PRAPR	0	0.00	0	0.00	0	0.00
W3PRLIS	0	0.00	0	0.00	0	0.00
W3PRDEV	0	0.00	0	0.00	0	0.00
W3PRTCH	0	0.00	0	0.00	0	0.00
W3PRSTU	0	0.00	0	0.00	0	0.00
W3PRFAR	0	0.00	0	0.00	0	0.00
W3PRCOL	0	0.00	0	0.00	0	0.00
W3PRSAT	0	0.00	0	0.00	0	0.00
W3MCRED	4	0.23	0	0.00	4	0.23
W3NRSAS	0	0.00	0	0.00	0	0.00
W3SATIS	0	0.00	0	0.00	0	0.00
W3M08YN	2	0.12	2	0.12	0	0.00
W3M08IM	0	0.00	0	0.00	0	0.00
W3MENTR	2	0.12	2	0.12	0	0.00
W3MENUM	0	0.00	0	0.00	0	0.00
W3MENRA	0	0.00	0	0.00	0	0.00
W3MENPR	0	0.00	0	0.00	0	0.00
W3ERSSC	8	0.47	0	0.00	8	0.47
W3ERSSA	2	0.12	0	0.00	2	0.12
W3ERNTJ	4	0.23	0	0.00	4	0.23
W3ERNTA	4	0.23	0	0.00	4	0.23
W3ERN SJ	9	0.52	0	0.00	9	0.52
W3ERN SA	4	0.23	0	0.00	4	0.23

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3TCHSA	9	0.52	0	0.00	9	0.52
W3EREXC	10	0.58	0	0.00	10	0.58
W3EREXA	3	0.17	0	0.00	3	0.17
W3EROSS	19	1.11	0	0.00	19	1.11
W3EROSA	3	0.17	0	0.00	3	0.17
W3EROUT	9	0.52	1	0.06	8	0.47
W3EROUA	0	0.00	0	0.00	0	0.00
W3OUTSD	1	0.06	0	0.00	1	0.06
W3CITZN	0	0.00	0	0.00	0	0.00
W3RESOR	4	0.23	0	0.00	4	0.23
W3HHINC	0	0.00	0	0.00	0	0.00
W3MARCU	0	0.00	0	0.00	0	0.00
W3SPYOU	48	2.79	48	2.79	0	0.00
W3SPSPO	373	21.71	0	0.00	373	21.71
W3SPLT5	309	17.99	0	0.00	309	17.99
W3SP518	283	16.47	0	0.00	283	16.47
W3SP18P	429	24.97	0	0.00	429	24.97
W3BIRTY	0	0.00	0	0.00	0	0.00
W3BIRTM	0	0.00	0	0.00	0	0.00
W3BIRTD	0	0.00	0	0.00	0	0.00
W3SPSYS	0	0.00	0	0.00	0	0.00
W3OCCST	12	0.70	0	0.00	12	0.70
W3OCCYN	0	0.00	0	0.00	0	0.00
W3OCCCL	0	0.00	0	0.00	0	0.00
W3SCOCC	3	0.17	0	0.00	3	0.17
W3SCTYP	0	0.00	0	0.00	0	0.00
W3OCCFP	0	0.00	0	0.00	0	0.00
W3OCCSA	11	0.64	8	0.47	3	0.17
W3ONLEA	0	0.00	0	0.00	0	0.00
W3ONSAB	0	0.00	0	0.00	0	0.00
W3SATJB	0	0.00	0	0.00	0	0.00
W3LCNYN	3	0.17	0	0.00	3	0.17
W3LCNRS	3	0.17	0	0.00	3	0.17
W3LVHOM	0	0.00	0	0.00	0	0.00
W3LVCHI	1	0.06	0	0.00	1	0.06
W3LVHEA	1	0.06	0	0.00	1	0.06
W3LVRET	0	0.00	0	0.00	0	0.00
W3LVTES	0	0.00	0	0.00	0	0.00
W3LVITR	0	0.00	0	0.00	0	0.00
W3LVDES	1	0.06	0	0.00	1	0.06

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3LVGSU	0	0.00	0	0.00	0	0.00
W3LVSAL	0	0.00	0	0.00	0	0.00
W3LVBEN	0	0.00	0	0.00	0	0.00
W3LVLIV	0	0.00	0	0.00	0	0.00
W3LVSEC	0	0.00	0	0.00	0	0.00
W3LVNPO	1	0.06	0	0.00	1	0.06
W3LVDEV	1	0.06	0	0.00	1	0.06
W3LVWED	0	0.00	0	0.00	0	0.00
W3LVOED	2	0.12	0	0.00	2	0.12
W3LVTCH	0	0.00	0	0.00	0	0.00
W3LVAUT	0	0.00	0	0.00	0	0.00
W3LVNUM	0	0.00	0	0.00	0	0.00
W3LVMST	0	0.00	0	0.00	0	0.00
W3LVINT	0	0.00	0	0.00	0	0.00
W3LVCON	0	0.00	0	0.00	0	0.00
W3LVDIS	0	0.00	0	0.00	0	0.00
W3LVADM	0	0.00	0	0.00	0	0.00
W3LVSUP	0	0.00	0	0.00	0	0.00
W3LVNOI	0	0.00	0	0.00	0	0.00
W3LVAIM	0	0.00	0	0.00	0	0.00
W3LVARW	0	0.00	0	0.00	0	0.00
W3LVASP	1	0.06	0	0.00	1	0.06
W3LVACU	0	0.00	0	0.00	0	0.00
W3LVAOT	0	0.00	0	0.00	0	0.00
W3LVOTH	14	0.81	0	0.00	14	0.81
W3LVIMP	2	0.12	0	0.00	2	0.12
W3APPYN	0	0.00	0	0.00	0	0.00
W3LCRED	1	0.06	0	0.00	1	0.06
W3RETYN	0	0.00	0	0.00	0	0.00
W3RETNW	0	0.00	0	0.00	0	0.00
W3RESAS	0	0.00	0	0.00	0	0.00
W3RECHA	0	0.00	0	0.00	0	0.00
W3RESST	0	0.00	0	0.00	0	0.00
W3REMTT	0	0.00	0	0.00	0	0.00
W3REHOM	0	0.00	0	0.00	0	0.00
W3RECHI	1	0.06	0	0.00	1	0.06
W3REHEA	1	0.06	0	0.00	1	0.06
W3RESAL	0	0.00	0	0.00	0	0.00
W3RELOA	1	0.06	0	0.00	1	0.06
W3REHBE	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3RERET	1	0.06	0	0.00	1	0.06
W3RERPG	1	0.06	0	0.00	1	0.06
W3REHOU	1	0.06	0	0.00	1	0.06
W3RELIV	1	0.06	0	0.00	1	0.06
W3RESEC	1	0.06	0	0.00	1	0.06
W3REPRF	0	0.00	0	0.00	0	0.00
W3REAED	2	0.12	0	0.00	2	0.12
W3REDIF	1	0.06	0	0.00	1	0.06
W3RETES	1	0.06	0	0.00	1	0.06
W3REGSU	1	0.06	0	0.00	1	0.06
W3REPTT	2	0.12	0	0.00	2	0.12
W3REDES	1	0.06	0	0.00	1	0.06
W3RESEN	1	0.06	0	0.00	1	0.06
W3RESCH	1	0.06	0	0.00	1	0.06
W3REOTH	6	0.35	0	0.00	6	0.35
W3REIMP	1	0.06	0	0.00	1	0.06
W3REINC	1	0.06	0	0.00	1	0.06
W3RECOM	1	0.06	0	0.00	1	0.06
W3TEMAN	4	0.23	1	0.06	3	0.17
W3ACTSP	0	0.00	0	0.00	0	0.00
W3DEGSP	0	0.00	0	0.00	0	0.00
W3DESCH	0	0.00	0	0.00	0	0.00
W3DECIT	0	0.00	0	0.00	0	0.00
W3DESTA	0	0.00	0	0.00	0	0.00
W3FORNM	0	0.00	0	0.00	0	0.00
W3SCNAM	0	0.00	0	0.00	0	0.00
W3SCSTR	0	0.00	0	0.00	0	0.00
W3SCCIT	0	0.00	0	0.00	0	0.00
W3SCSTA	0	0.00	0	0.00	0	0.00
W3SCZIP	0	0.00	0	0.00	0	0.00
W3SCDIS	1	0.06	0	0.00	1	0.06
W3SCCOU	0	0.00	0	0.00	0	0.00
W3MCNSP	2	0.12	0	0.00	2	0.12
W3MVOSP	0	0.00	0	0.00	0	0.00
W3MCRSP	1	0.06	0	0.00	1	0.06
W3OUTSP	0	0.00	0	0.00	0	0.00
W3RESSP	0	0.00	0	0.00	0	0.00
W3TREXP	0	0.00	0	0.00	0	0.00
W3OCCSP	0	0.00	0	0.00	0	0.00
W3OCCTL	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-4. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave: 2009–10—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3OCCAC	0	0.00	0	0.00	0	0.00
W3SCOSP	0	0.00	0	0.00	0	0.00
W3LCNSP	2	0.12	0	0.00	2	0.12
W3LVOSP	0	0.00	0	0.00	0	0.00
W3LCRSP	0	0.00	0	0.00	0	0.00
W3REOSP	0	0.00	0	0.00	0	0.00
W3POSTSECSCHOOL	0	0.00	0	0.00	0	0.00
W3POSTSECCITY	0	0.00	0	0.00	0	0.00
W3POSTSECSTATE	0	0.00	0	0.00	0	0.00
W3ELSECSCHOOL	0	0.00	0	0.00	0	0.00
W3ELSECCITY	0	0.00	0	0.00	0	0.00
W3ELSECSTATE	0	0.00	0	0.00	0	0.00
W3ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "Third Wave," 2009–10.

Table L-5. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS third wave retrospective cases: 2009–10

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3REGCL	0	0.00	0	0.00	0	0.00
W3POSSC	1	0.00	1	0.00	0	0.00
W3MOVYN	0	0.00	0	0.00	0	0.00
W3MVTYP	0	0.00	0	0.00	0	0.00
W3TREXP	0	0.00	0	0.00	0	0.00
W3OCCST	0	0.70	0	0.00	0	0.70
W3OCCSP	0	0.00	0	0.00	0	0.00
W3OCCFP	0	0.00	0	0.00	0	0.00
W3LCNYN	0	0.00	0	0.00	0	0.00
W3LCNRS	0	0.00	0	0.00	0	0.00
W3LCNSP	0	0.00	0	0.00	0	0.00
W3NRPER	0	0.00	0	0.00	0	0.00
W3NRSAL	0	0.00	0	0.00	0	0.00
W3NRCON	0	0.00	0	0.00	0	0.00
W3NRNPO	0	0.00	0	0.00	0	0.00
W3NRAED	0	0.00	0	0.00	0	0.00
W3NRADM	0	0.00	0	0.00	0	0.00
W3NRACC	0	0.00	0	0.00	0	0.00
W3NRGSU	0	0.00	0	0.00	0	0.00
W3NRTCH	0	0.00	0	0.00	0	0.00
W3NROTH	0	0.00	0	0.00	0	0.00
W3NROSP	0	0.00	0	0.00	0	0.00
W3NRIMP	0	0.70	0	0.00	0	0.70
W3FORYN	0	0.00	0	0.00	0	0.00
W3SCNAM	0	0.00	0	0.00	0	0.00
W3ELSECSCCHOOL	0	0.00	0	0.00	0	0.00
W3SCSTR	0	0.00	0	0.00	0	0.00
W3SCCIT	0	0.00	0	0.00	0	0.00
W3ELSECCITY	0	0.00	0	0.00	0	0.00
W3SCSTA	0	0.00	0	0.00	0	0.00
W3ELSECSTATE	0	0.00	0	0.00	0	0.00
W3SCZIP	0	0.00	0	0.00	0	0.00
W3SCDIS	0	0.00	0	0.00	0	0.00
W3SCCOU	0	0.00	0	0.00	0	0.00
W3ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fourth Wave,” 2010–11.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4REGCL	0	0.00	0	0.00	0	0.00
W4POSSC	0	0.00	0	0.00	0	0.00
W4TCHFP	15	0.80	15	0.75	0	0.00
W4TEGPK	472	23.72	19	0.95	453	22.76
W4TEGKG	419	21.06	0	0.00	419	21.06
W4TEG01	424	21.31	0	0.00	424	21.31
W4TEG02	424	21.31	0	0.00	424	21.31
W4TEG03	415	20.85	0	0.00	415	20.85
W4TEG04	419	21.06	0	0.00	419	21.06
W4TEG05	414	20.80	0	0.00	414	20.80
W4TEG06	408	20.50	0	0.00	408	20.50
W4TEG07	390	19.60	0	0.00	390	19.60
W4TEG08	388	19.50	0	0.00	388	19.50
W4TEG09	294	14.77	0	0.00	294	14.77
W4TEG10	277	13.92	0	0.00	277	13.92
W4TEG11	275	13.82	0	0.00	275	13.82
W4TEG12	288	14.47	0	0.00	288	14.47
W4TEGUG	568	28.54	0	0.00	568	28.54
W4TEMAC	5	0.25	4	0.20	1	0.05
W4TECLD	14	0.70	10	0.50	4	0.20
W4TEHQT	0	0.00	0	0.00	0	0.00
W4TEQTA	0	0.00	0	0.00	0	0.00
W4ACTCO	89	4.47	0	0.00	89	4.47
W4ACTSG	77	3.87	0	0.00	77	3.87
W4ACTDP	122	6.13	0	0.00	122	6.13
W4ACTCM	75	3.77	0	0.00	75	3.77
W4ACTSU	127	6.38	0	0.00	127	6.38
W4ACTMN	0	0.00	0	0.00	0	0.00
W4ACTUN	0	0.00	0	0.00	0	0.00
W4ACTPR	0	0.00	0	0.00	0	0.00
W4ACTLD	0	0.00	0	0.00	0	0.00
W4CERTI	0	0.00	0	0.00	0	0.00
W4CERWN	0	0.00	0	0.00	0	0.00
W4ALTCT	0	0.00	0	0.00	0	0.00
W4CEREF	0	0.00	0	0.00	0	0.00
W4CERFI	0	0.00	0	0.00	0	0.00
W4CERGL	0	0.00	0	0.00	0	0.00
W4CERNB	0	0.00	0	0.00	0	0.00
W4CERBA	0	0.00	0	0.00	0	0.00
W4CEREX	0	0.00	0	0.00	0	0.00
W4CEREV	0	0.00	0	0.00	0	0.00
W4RENCT	0	0.00	0	0.00	0	0.00
W4ENDOR	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4ADDEG	0	0.00	0	0.00	00	0.00
W4DEOUS	0	0.00	0	0.00	0	0.00
W4COURS	0	0.00	0	0.00	0	0.00
W4REACO	0	0.00	0	0.00	0	0.00
W4DEGCA	0	0.00	0	0.00	0	0.00
W4MOVYN	0	0.00	0	0.00	0	0.00
W4STTYN	5	0.25	0	0.00	0	0.00
W4FORYN	5	0.25	4	0.20	0	0.00
W4SCGPK	307	15.43	11	0.55	296	14.87
W4SCGKG	245	12.31	2	0.10	243	12.21
W4SCG01	241	12.11	2	0.10	239	12.01
W4SCG02	241	12.11	1	0.05	240	12.06
W4SCG03	243	12.21	1	0.05	242	12.16
W4SCG04	249	12.51	1	0.05	248	12.46
W4SCG05	248	12.46	4	0.20	244	12.26
W4SCG06	276	13.87	7	0.35	269	13.52
W4SCG07	280	14.07	8	0.40	272	13.67
W4SCG08	281	14.12	7	0.35	274	13.77
W4SCG09	220	11.06	17	0.85	203	10.20
W4SCG10	205	10.30	10	0.50	195	9.80
W4SCG11	207	10.40	10	0.50	197	9.90
W4SCG12	206	10.35	9	0.45	197	9.90
W4SCGUG	569	28.59	12	0.60	557	27.99
W4MVTYP	4	0.20	0	0.00	4	0.20
W4MCNYN	0	0.00	0	0.00	0	0.00
W4MCWHY	0	0.00	0	0.00	0	0.00
W4MVHOM	1	0.05	0	0.00	1	0.05
W4MVPER	0	0.00	0	0.00	0	0.00
W4MVJDA	0	0.00	0	0.00	0	0.00
W4MVHSA	0	0.00	0	0.00	0	0.00
W4MVBEN	3	0.15	0	0.00	3	0.15
W4MVSEC	3	0.15	0	0.00	3	0.15
W4MVAUT	0	0.00	0	0.00	0	0.00
W4MVNUM	3	0.15	0	0.00	3	0.15
W4MVINT	3	0.15	0	0.00	3	0.15

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4MVDEV	4	0.20	0	0.00	0	0.00
W4MVCON	4	0.20	0	0.00	0	0.00
W4MVDIS	3	0.15	0	0.00	0	0.00
W4MVADM	0	0.06	0	0.00	1	0.06
W4MVSUP	0	0.00	0	0.00	0	0.00
W4MVNOI	3	0.15	0	0.00	1	0.06
W4MVAIM	0	0.00	0	0.00	0	0.00
W4MVARW	3	0.15	0	0.00	1	0.06
W4MVASP	3	0.15	0	0.00	0	0.00
W4MVACC	0	0.00	0	0.00	0	0.00
W4MVOTH	1	1.05	0	0.00	23	1.34
W4MVIMP	3	0.15	0	0.00	10	0.58
W4ADMCH	0	0.00	0	0.00	1	0.06
W4SCCHA	0	0.00	0	0.00	1	0.06
W4PRMGT	0	0.00	0	0.00	0	0.00
W4PRPAR	0	0.00	0	0.00	0	0.00
W4PRAPR	0	0.00	0	0.00	0	0.00
W4PRLIS	0	0.00	0	0.00	0	0.00
W4PRDEV	0	0.00	0	0.00	0	0.00
W4PRTCH	0	0.00	0	0.00	0	0.00
W4PRSTU	0	0.00	0	0.00	0	0.00
W4PRFAR	0	0.00	0	0.00	0	0.00
W4PRCOL	1	0.05	0	0.00	0	0.00
W4PRSAT	0	0.00	0	0.00	0	0.00
W4NRSAS	0	0.00	0	0.00	0	0.00
W4SATIS	1	0.05	0	0.00	0	0.00
W4M08YN	0	0.00	0	0.00	0	0.00
W4M08IM	0	0.00	0	0.00	0	0.00
W4MENTR	0	0.00	0	0.00	0	0.00
W4MENUM	0	0.00	0	0.00	0	0.00
W4MENRA	0	0.00	0	0.00	0	0.00
W4MENPR	0	0.00	0	0.00	0	0.00
W4ERSSC	0	0.00	0	0.00	0	0.00
W4ERSSA	0	0.00	0	0.00	0	0.00
W4ERN TJ	0	0.00	0	0.00	0	0.00
W4ERN TA	0	0.00	0	0.00	0	0.00
W4ERN SJ	0	0.00	0	0.00	0	0.00
W4ERN SA	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4TCHSA	0	0.00	0	0.00	0	0.00
W4EREXC	0	0.00	0	0.00	0	0.00
W4EREXA	0	0.00	0	0.00	0	0.00
W4EROSS	0	0.00	0	0.00	0	0.00
W4EROSA	0	0.00	0	0.00	0	0.00
W4EROUT	0	0.00	0	0.00	0	0.00
W4EROUA	0	0.00	0	0.00	0	0.00
W4OUTSD	0	0.00	0	0.00	0	0.00
W4CITZN	0	0.00	0	0.00	0	0.00
W4RESOR	0	0.00	0	0.00	0	0.00
W4HHINC	0	0.00	0	0.00	0	0.00
W4MARCUS	0	0.00	0	0.00	0	0.00
W4BIRTY	0	0.00	0	0.00	0	0.00
W4SPSYS	0	0.00	0	0.00	0	0.00
W4OCCST	0	0.00	0	0.00	0	0.00
W4OCCYN	7	0.35	7	0.00	0	0.00
W4OCCCL	0	0.00	0	0.00	0	0.00
W4SCOCC	0	0.00	0	0.00	0	0.00
W4SCTYP	0	0.00	0	0.00	0	0.00
W4OCCFP	0	0.00	0	0.00	0	0.00
W4OCCSA	0	0.00	0	0.00	0	0.00
W4ONLEA	0	0.00	0	0.00	0	0.00
W4ONSAB	0	0.00	0	0.00	0	0.00
W4SATJB	0	0.00	0	0.00	0	0.00
W4LVHOM	0	0.00	0	0.00	0	0.00
W4LVPER	0	0.00	0	0.00	0	0.00
W4LVRET	0	0.00	0	0.00	0	0.00
W4LVTES	0	0.00	0	0.00	0	0.00
W4LVJDA	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4LVHSA	0	0.00	0	0.00	0	0.00
W4LVBEN	0	0.00	0	0.00	0	0.00
W4LVMST	0	0.00	0	0.00	0	0.00
W4LVSEC	0	0.00	0	0.00	0	0.00
W4LVNPO	0	0.00	0	0.00	0	0.00
W4LVDEB	0	0.00	0	0.00	0	0.00
W4LVWED	1	0.05	0	0.00	1	0.05
W4LVOED	1	0.05	0	0.00	1	0.05
W4LVTCH	0	0.00	0	0.00	0	0.00
W4LVAUT	0	0.00	0	0.00	0	0.00
W4LVNUM	0	0.00	0	0.00	0	0.00
W4LVMST	0	0.00	0	0.00	0	0.00
W4LVINT	0	0.00	0	0.00	0	0.00
W4LVCON	0	0.00	0	0.00	0	0.00
W4LVDIS	0	0.00	0	0.00	0	0.00
W4LVADS	0	0.00	0	0.00	0	0.00
W4LVNOI	0	0.00	0	0.00	0	0.00
W4LVARW	0	0.00	0	0.00	0	0.00
W4LVASP	0	0.00	0	0.00	0	0.00
W4LVACC	0	0.00	0	0.00	0	0.00
W4LVASP	0	0.00	0	0.00	0	0.00
W4LVOTH	0	0.00	0	0.00	0	0.00
W4LVIMP	0	0.00	0	0.00	0	0.00
W4APPYN	0	0.00	0	0.00	0	0.00
W4RETYN	0	0.00	0	0.00	0	0.00
W4RETWN	0	0.00	0	0.00	0	0.00
W4RECHA	0	0.00	0	0.00	0	0.00
W4REHOM	0	0.00	0	0.00	0	0.00
W4REPER	0	0.00	0	0.00	0	0.00
W4REHSA	0	0.00	0	0.00	0	0.00
W4REHBE	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4RERPG	0	0.00	0	0.00	0	0.00
W4RESEC	0	0.00	0	0.00	0	0.00
W4REPRF	0	0.00	0	0.00	0	0.00
W4REAED	0	0.00	0	0.00	0	0.00
W4REDIF	0	0.00	0	0.00	0	0.00
W4RETES	0	0.00	0	0.00	0	0.00
W4REGSU	0	0.00	0	0.00	0	0.00
W4RESEN	0	0.00	0	0.00	0	0.00
W4RESCH	0	0.00	0	0.00	0	0.00
W4REOTH	1	0.05	0	0.00	1	0.05
W4REIMP	0	0.00	0	0.00	0	0.00
W4REINC	0	0.00	0	0.00	0	0.00
W4RECOM	0	0.00	0	0.00	0	0.00
W4TEMAN	5	0.25	4	0.20	1	0.05
W4ACTSP	0	0.00	0	0.00	0	0.00
W4DEGSP	0	0.00	0	0.00	0	0.00
W4DESCH	0	0.00	0	0.00	0	0.00
W4DECIT	0	0.00	0	0.00	0	0.00
W4DESTA	0	0.00	0	0.00	0	0.00
W4FORNM	0	0.00	0	0.00	0	0.00
W4SCNAM	0	0.00	0	0.00	0	0.00
W4SCSTR	0	0.00	0	0.00	0	0.00
W4SCCIT	0	0.00	0	0.00	0	0.00
W4SCSTA	0	0.00	0	0.00	0	0.00
W4SCZIP	0	0.00	0	0.00	0	0.00
W4SCDIS	0	0.06	0	0.00	0	0.00
W4SCCOU	0	0.00	0	0.00	0	0.00
W4MCOPS	0	0.00	0	0.00	0	0.00
W4MVOSP	0	0.00	0	0.00	0	0.00
W4OUTSP	0	0.00	0	0.00	0	0.00
W4RESSP	0	0.00	0	0.00	0	0.00
W4TREXP	0	0.00	0	0.00	0	0.00
W4OCCSP	0	0.00	0	0.00	0	0.00
W4OCCTL	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-6. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave: 2010–11—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4OCCAC	0	0.00	0	0.00	0	0.00
W4SCOSP	0	0.00	0	0.00	0	0.00
W4LCINV	0	0.00	0	0.00	0	0.00
W4LVOSP	0	0.00	0	0.00	0	0.00
W4LCWHY	0	0.00	0	0.00	0	0.00
W4LCOPS	0	0.00	0	0.00	0	0.00
W4REOSP	0	0.00	0	0.00	0	0.00
W4POSTSECSCHOOL	0	0.00	0	0.00	0	0.00
W4POSTSECCITY	0	0.00	0	0.00	0	0.00
W4POSTSECSTATE	0	0.00	0	0.00	0	0.00
W4ELSECSCHOOL	0	0.00	0	0.00	0	0.00
W4ELSECCITY	0	0.00	0	0.00	0	0.00
W4ELSECSTATE	0	0.00	0	0.00	0	0.00
W4ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fourth Wave,” 2010–11.

Table L-7. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fourth wave retrospective cases: 2011–12

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4REGCL	0	0.00	0	0.00	0	0.00
W4POSSC	0	0.00	0	0.00	0	0.00
W4MOVYN	0	0.00	0	0.00	0	0.00
W4MVTYP	0	0.00	0	0.00	0	0.00
W4TREXP	0	0.00	0	0.00	0	0.00
W4OCCST	0	0.00	0	0.00	0	0.00
W4OCCSP	0	0.00	0	0.00	0	0.00
W4OCCYN	2	0.10	0	0.00	2	0.10
W4LCNYN	0	0.00	0	0.00	0	0.00
W4LCNRS	0	0.00	0	0.00	0	0.00
W4LCNSP	0	0.00	0	0.00	0	0.00
W4NRPER	0	0.00	0	0.00	0	0.00
W4NRSAL	0	0.00	0	0.00	0	0.00
W4NRCON	0	0.00	0	0.00	0	0.00
W4NRNPO	0	0.00	0	0.00	0	0.00
W4NRAED	0	0.00	0	0.00	0	0.00
W4NRADM	0	0.00	0	0.00	0	0.00
W4NRACC	0	0.00	0	0.00	0	0.00
W4NRGSU	0	0.00	0	0.00	0	0.00
W4NRTCH	0	0.00	0	0.00	0	0.00
W4NROTH	0	0.00	0	0.00	0	0.00
W4NROSP	0	0.00	0	0.00	0	0.00
W4NRIMP	0	0.00	0	0.00	0	0.00
W4FORYN	0	0.00	0	0.00	0	0.00
W4SCNAM	0	0.00	0	0.00	0	0.00
W4ELSECSCHOOL	0	0.00	0	0.00	0	0.00
W4SCSTR	0	0.00	0	0.00	0	0.00
W4SCCIT	0	0.00	0	0.00	0	0.00
W4ELSECCITY	0	0.00	0	0.00	0	0.00
W4SCSTA	0	0.00	0	0.00	0	0.00
W4ELSECSTATE	0	0.00	0	0.00	0	0.00
W4SCZIP	0	0.00	0	0.00	0	0.00
W4SCDIS	0	0.00	0	0.00	0	0.00
W4SCCOU	0	0.00	0	0.00	0	0.00
W4ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave,” 2009–10.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5REGCL	0	0.00	0	0.00	0	0.00
W5POSSC	0	0.00	0	0.00	0	0.00
W5TCHFP	10	0.50	8	0.64	2	0.29
W5TEGPK	389	19.55	8	0.40	381	19.15
W5TEGKG	355	17.84	0	0.00	355	17.84
W5TEG01	361	18.14	0	0.00	361	18.14
W5TEG02	358	17.99	0	0.00	358	17.99
W5TEG03	356	17.89	0	0.00	356	17.89
W5TEG04	350	17.59	0	0.00	350	17.59
W5TEG05	354	17.79	0	0.00	354	17.79
W5TEG06	355	17.84	0	0.00	355	17.84
W5TEG07	333	16.73	0	0.00	333	16.73
W5TEG08	326	16.38	0	0.00	326	16.38
W5TEG09	250	12.56	0	0.00	250	12.56
W5TEG10	237	11.91	0	0.00	237	11.91
W5TEG11	227	11.41	0	0.00	227	11.41
W5TEG12	236	11.86	0	0.00	236	11.86
W5TEGUG	469	23.57	0	0.00	469	23.57
W5TEMAC	6	0.30	3	0.15	3	0.15
W5TECLD	11	0.55	9	0.45	2	0.10
W5HQTTE	0	0.06	0	0.00	0	0.06
W5ACTCO	50	2.51	0	0.00	50	2.51
W5ACTSG	36	1.81	0	0.00	36	1.81
W5ACTDP	65	3.27	0	0.00	65	3.27
W5ACTCM	34	1.71	0	0.00	34	1.71
W5ACTSU	68	3.42	0	0.00	68	3.42
W5ACTMN	73	3.67	0	0.00	73	3.67
W5ACTUN	66	3.32	0	0.00	66	3.32
W5ACTPR	66	3.32	0	0.00	66	3.32
W5ACTLD	56	2.81	0	0.00	56	2.81
W5CERTI	0	0.00	0	0.00	0	0.00
W5CERWN	0	0.00	0	0.00	0	0.00
W5ALTCT	0	0.00	0	0.00	0	0.00
W5CEREF	0	0.00	0	0.00	0	0.00
W5CERFI	0	0.00	0	0.00	0	0.00
W5CERGL	0	0.00	0	0.00	0	0.00
W5CERNB	0	0.00	0	0.00	0	0.00
W5CERBA	0	0.00	0	0.00	0	0.00
W5CEREX	0	0.00	0	0.00	0	0.00
W5CEREV	0	0.00	0	0.00	0	0.00
W5RENCT	0	0.00	0	0.00	0	0.00
W5ENDOR	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5ADDEG	0	0.00	0	0.00	0	0.00
W5DEOUS	0	0.00	0	0.00	0	0.00
W5COURS	0	0.00	0	0.00	0	0.00
W5REACO	0	0.00	0	0.00	0	0.00
W5DEGCA	0	0.00	0	0.00	0	0.00
W5STTYN	0	0.00	0	0.00	0	0.00
W5FORYN	0	0.00	0	0.00	0	0.00
W5SCGPK	250	12.56	3	0.15	247	12.41
W5SCGKG	202	10.15	3	0.15	199	10.00
W5SCG01	198	9.95	3	0.15	195	9.80
W5SCG02	203	10.20	4	0.20	199	10.00
W5SCG03	204	10.25	3	0.15	201	10.10
W5SCG04	210	10.55	3	0.15	207	10.40
W5SCG05	214	10.75	3	0.15	211	10.60
W5SCG06	240	12.06	2	0.10	238	11.96
W5SCG07	231	11.61	6	0.30	225	11.31
W5SCG08	233	11.71	7	0.35	226	11.36
W5SCG09	179	8.99	13	0.65	166	8.34
W5SCG10	182	9.15	14	0.70	168	8.44
W5SCG11	174	8.74	15	0.75	159	7.99
W5SCG12	178	8.94	14	0.70	164	8.24
W5SCGUG	468	23.52	8	0.40	460	23.12
W5MVTYP	2	0.10	0	0.00	2	0.10
W5MCWHY	0	0.00	0	0.00	0	0.00
W5MVHOM	0	0.00	0	0.00	0	0.00
W5MVPER	0	0.00	0	0.00	0	0.00
W5MVJDA	0	0.00	0	0.00	0	0.00
W5MVHSA	0	0.00	0	0.00	0	0.00
W5MVBEN	0	0.00	0	0.00	0	0.00
W5MVSEC	0	0.00	0	0.00	0	0.00
W5MVAUT	0	0.00	0	0.00	0	0.00
W5MVNUM	0	0.00	0	0.00	0	0.00
W5MVINT	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5MVDEV	0	0.00	0	0.00	0	0.00
W5MVCON	0	0.00	0	0.00	0	0.00
W5MVDIS	0	0.00	0	0.00	0	0.00
W5MVADM	0	0.00	0	0.00	0	0.00
W5MVSUP	0	0.00	0	0.00	0	0.00
W5MVNOI	0	0.00	0	0.00	0	0.00
W5MVAIM	0	0.00	0	0.00	0	0.00
W5MVARW	0	0.00	0	0.00	0	0.00
W5MVASP	0	0.00	0	0.00	0	0.00
W5MVACC	0	0.00	0	0.00	0	0.00
W5MVOTH	0	0.00	0	0.00	0	0.00
W5MVIMP	0	0.00	0	0.00	0	0.00
W5ADMCH	0	0.00	0	0.00	0	0.00
W5SCCHA	0	0.00	0	0.00	0	0.00
W5PRMGT	0	0.00	0	0.00	0	0.00
W5PRPAR	0	0.00	0	0.00	0	0.00
W5PRAPR	0	0.00	0	0.00	0	0.00
W5PRLIS	0	0.00	0	0.00	0	0.00
W5PRDEV	0	0.00	0	0.00	0	0.00
W5PRTCH	0	0.00	0	0.00	0	0.00
W5PRSTU	0	0.00	0	0.00	0	0.00
W5PRFAR	0	0.00	0	0.00	0	0.00
W5PRCOL	0	0.00	0	0.00	0	0.00
W5PRSAT	0	0.00	0	0.00	0	0.00
W5NRSAS	0	0.00	0	0.00	0	0.00
W5SATIS	0	0.00	0	0.00	0	0.00
W5M08YN	2	0.10	2	0.10	0	0.00
W5M08IM	0	0.00	0	0.00	0	0.00
W5MENTR	2	0.10	2	0.10	0	0.00
W5MENUM	0	0.00	0	0.00	0	0.00
W5MENRA	0	0.00	0	0.00	0	0.00
W5MENPR	0	0.00	0	0.00	0	0.00
W5ERSSC	0	0.00	0	0.00	0	0.00
W5ERSSA	0	0.00	0	0.00	0	0.00
W5ERNTJ	0	0.00	0	0.00	0	0.00
W5ERNTA	0	0.00	0	0.00	0	0.00
W5ERNSJ	1	0.05	1	0.05	0	0.00
W5ERNSA	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable			Consistency edits		Logic edits	
	Total number of edit changes	Percent of records affected by all edits	Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5TCHSA	0	0.00	0	0.00	0	0.00
W5EREXC	1	0.05	1	0.05	0	0.00
W5EREXA	0	0.00	0	0.00	0	0.00
W5EROSS	0	0.00	0	0.00	0	0.00
W5EROSA	0	0.00	0	0.00	0	0.00
W5EROUT	3	0.15	3	0.15	0	0.00
W5EROUA	0	0.00	0	0.00	0	0.00
W5OUTSD	0	0.00	0	0.00	0	0.00
W5CITZN	0	0.00	0	0.00	0	0.00
W5RESOR	0	0.00	0	0.00	0	0.00
W5HHINC	49	2.46	47	2.36	2	0.10
W5MARCU	0	0.00	0	0.00	0	0.00
W5BIRTY	0	0.00	0	0.00	0	0.00
W5GENDR	0	0.00	0	0.00	0	0.00
W5SPSYS	0	0.00	0	0.00	0	0.00
W5OCCST	0	0.00	0	0.00	0	0.00
W5OCCYN	2	0.10	2	0.10	0	0.00
W5OCCCL	0	0.00	0	0.00	0	0.00
W5SCOCC	0	0.00	0	0.00	0	0.00
W5SCTYP	0	0.00	0	0.00	0	0.00
W5OCCFP	0	0.00	0	0.00	0	0.00
W5OCCSA	1	0.05	0	0.00	1	0.05
W5ONLEA	0	0.00	0	0.00	0	0.00
W5ONSAB	0	0.00	0	0.00	0	0.00
W5SATJB	0	0.00	0	0.00	0	0.00
W5LVHOM	0	0.00	0	0.00	0	0.00
W5LVRET	0	0.00	0	0.00	0	0.00
W5LVTES	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5LVGSU	0	0.00	0	0.00	0	0.00
W5LVHSA	0	0.00	0	0.00	0	0.00
W5LVBEN	0	0.00	0	0.00	0	0.00
W5LVMST	0	0.00	0	0.00	0	0.00
W5LVSEC	0	0.00	0	0.00	0	0.00
W5LVNPO	0	0.00	0	0.00	0	0.00
W5LVDEV	0	0.00	0	0.00	0	0.00
W5LVWED	0	0.00	0	0.00	0	0.00
W5LVOED	0	0.00	0	0.00	0	0.00
W5LVTCH	0	0.00	0	0.00	0	0.00
W5LVAUT	0	0.00	0	0.00	0	0.00
W5LVNUM	0	0.00	0	0.00	0	0.00
W5LVMST	0	0.00	0	0.00	0	0.00
W5LVINT	0	0.00	0	0.00	0	0.00
W5LVCON	0	0.00	0	0.00	0	0.00
W5LVDIS	0	0.00	0	0.00	0	0.00
W5LVADS	0	0.00	0	0.00	0	0.00
W5LVNOI	0	0.00	0	0.00	0	0.00
W5LVARW	0	0.00	0	0.00	0	0.00
W5LVASP	0	0.00	0	0.00	0	0.00
W5LVACC	0	0.00	0	0.00	0	0.00
W5LVASP	0	0.00	0	0.00	0	0.00
W5LVOTH	0	0.00	0	0.00	0	0.00
W5LVIMP	0	0.00	0	0.00	0	0.00
W5APPYN	0	0.00	0	0.00	0	0.00
W5RETYN	0	0.00	0	0.00	0	0.00
W5RETWN	0	0.00	0	0.00	0	0.00
W5RECHA	0	0.00	0	0.00	0	0.00
W5REHOM	0	0.00	0	0.00	0	0.00
W5REPER	0	0.00	0	0.00	0	0.00
W5REHSA	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5RERPG	0	0.00	0	0.00	0	0.00
W5RESEC	0	0.00	0	0.00	0	0.00
W5REPRF	0	0.00	0	0.00	0	0.00
W5REAED	0	0.00	0	0.00	0	0.00
W5REDIF	0	0.00	0	0.00	0	0.00
W5RETES	0	0.00	0	0.00	0	0.00
W5REGSU	0	0.00	0	0.00	0	0.00
W5RESEN	0	0.00	0	0.00	0	0.00
W5RESCH	0	0.00	0	0.00	0	0.00
W5REOTH	0	0.00	0	0.00	0	0.00
W5REIMP	0	0.00	0	0.00	0	0.00
W5REINC	0	0.00	0	0.00	0	0.00
W5RECOM	0	0.00	0	0.00	0	0.00
W5TEMAN	6	0.30	3	0.15	3	0.15
W5ACTSP	0	0.00	0	0.00	0	0.00
W5DEGSP	0	0.00	0	0.00	0	0.00
W5DESCH	0	0.00	0	0.00	0	0.00
W5DECIT	0	0.00	0	0.00	0	0.00
W5DESTA	0	0.00	0	0.00	0	0.00
W5FORNM	0	0.00	0	0.00	0	0.00
W5SCNAM	0	0.00	0	0.00	0	0.00
W5SCSTR	0	0.00	0	0.00	0	0.00
W5SCCIT	0	0.00	0	0.00	0	0.00
W5SCSTA	0	0.00	0	0.00	0	0.00
W5SCZIP	0	0.00	0	0.00	0	0.00
W5SCDIS	0	0.00	0	0.00	0	0.00
W5SCCOU	0	0.00	0	0.00	0	0.00
W5MCOPS	0	0.00	0	0.00	0	0.00
W5MVOSP	0	0.00	0	0.00	0	0.00
W5OUTSP	0	0.00	0	0.00	0	0.00
W5RESSP	0	0.00	0	0.00	0	0.00
W5TREXP	0	0.00	0	0.00	0	0.00
W5OCCSP	0	0.00	0	0.00	0	0.00
W5OCCTL	0	0.00	0	0.00	0	0.00

See notes at end of table.

Table L-8. Number of consistency and logic edit changes and percentage of records affected during the computer edits, by variable, in the BTLS fifth wave: 2011–12—Continued

Variable	Total number of edit changes	Percent of records affected by all edits	Consistency edits		Logic edits	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5OCCAC	0	0.00	0	0.00	0	0.00
W5SCOSP	0	0.00	0	0.00	0	0.00
W5LVOSP	0	0.00	0	0.00	0	0.00
W5REOSP	0	0.00	0	0.00	0	0.00
W5POSTSECSCHOOL	0	0.00	0	0.00	0	0.00
W5POSTSECCITY	0	0.00	0	0.00	0	0.00
W5POSTSECSTATE	0	0.00	0	0.00	0	0.00
W5ELSECSCHOOL	0	0.00	0	0.00	0	0.00
W5ELSECCITY	0	0.00	0	0.00	0	0.00
W5ELSECSTATE	0	0.00	0	0.00	0	0.00
W5ELSECCOUNTY	0	0.00	0	0.00	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Appendix M. Imputation Changes to Variables, by BTLS Wave

The tables in this appendix contain the total number of imputations applied in all stages of imputation in the five waves of the Beginning Teacher Longitudinal Study (BTLS) as well as the percentage of records that were imputed for each source code in the data files. (See chapter 5 for more details about imputation procedures.) The tables are as follows:

Table	Page
M-1. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS first wave: 2007–08.....	M-2
M-2. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS second wave: 2008–09	M-3
M-3. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS third wave: 2009–10.....	M-3
M-4. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS fourth wave: 2010–11.....	M-4
M-5. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS fifth wave: 2011–12	M-4

Table M-1. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS first wave: 2007–08

Variable	Total number of imputation changes	Percent of records affected by imputation	Cross-wave imputation		Hot-deck imputation		Mean or mode imputation	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected	Number of changes	Percent of records affected
T0028	14	0.70	1	0.05	13	0.65	0	0.00
T0038	93	4.67	37	1.86	56	2.81	0	0.00
T0039	95	4.77	37	1.86	58	2.91	0	0.00
T0068	1	0.05	0	0.00	1	0.05	0	0.00
T0110	0	0.00	0	0.00	0	0.00	0	0.00
T0120	1	0.05	0	0.00	0	0.00	1	0.05
T0124	9	0.45	0	0.00	9	0.45	0	0.00
T0153	22	1.10	16	0.80	6	0.30	0	0.00
T0160	18	0.90	0	0.00	18	0.90	0	0.00
T0343	291	14.61	149	7.48	142	7.13	0	0.00
T0352	10	0.50	10	0.50	0	0.00	0	0.00
T0353	25	1.26	0	0.00	25	1.26	0	0.00
T0354	72	3.61	0	0.00	72	3.61	0	0.00
T0355	72	3.61	0	0.00	72	3.61	0	0.00
T0356	72	3.61	0	0.00	72	3.61	0	0.00
T0357	72	3.61	0	0.00	72	3.61	0	0.00
T0358	72	3.61	0	0.00	72	3.61	0	0.00
T0360	25	1.26	17	0.85	8	0.40	0	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), "First Wave," 2007–08.

Table M-2. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS second wave: 2008–09

Variable	Total number of imputation changes	Percent of records affected by imputation	Cross-wave imputation		Weighted sequential hot-deck imputation	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
TCHFP	133	7.27	95	5.19	38	2.08
OCCFP	16	0.87	0	0.00	16	0.87
TECLD	146	7.98	2	0.11	144	7.87
MNTYN	197	10.77	160	8.75	37	2.02
M08YN	172	9.40	0	0.00	172	9.40
ALTYN	142	7.76	139	7.60	3	0.16
MVTYP	5	0.27	0	0.00	5	0.27
MCNYN	38	2.08	0	0.00	38	2.08
LCNYN	3	0.16	0	0.00	3	0.16
TCHSA	205	11.21	126	6.89	79	4.32
OCCSA	21	1.15	0	0.00	21	1.15

NOTE: Counts include the BTLS second wave retrospective respondents. The BTLS second wave retrospective respondents underwent imputation with the BTLS second wave data, where all second wave key variables were imputed for the retrospective respondents regardless of whether the variables were asked.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Second Wave,” 2008–09.

Table M-3. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS third wave: 2009–10

Variable	Total number of imputation changes	Percent of records affected by imputation	Cross-wave imputation		Weighted sequential hot-deck imputation	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W3TCHFP	27	1.57	12	0.70	15	0.87
W3OCCFP	11	0.64	0	0.00	11	0.64
W3TECLD	36	2.10	0	0.00	36	2.10
W3M08YN	40	2.33	0	0.00	40	2.33
W3CERTI	49	2.85	31	1.80	18	1.05
W3CERWN	46	2.68	31	1.80	15	0.87
W3ALTCT	9	0.52	0	0.00	9	0.52
W3REMT	0	0.00	0	0.00	0	0.00
W3MVTYP	5	0.29	0	0.00	5	0.29
W3MCNYN	0	0.00	0	0.00	0	0.00
W3LCNYN	0	0.00	0	0.00	0	0.00
W3TCHSA	80	4.66	51	2.97	29	1.69
W3OCCSA	16	0.93	1	0.06	15	0.87

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Third Wave,” 2009–10.

Table M-4. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS fourth wave: 2010–11

Variable	Total number of imputation changes	Percent of records affected by imputation	Cross-wave imputation		Weighted sequential hot-deck imputation	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W4TCHFP	22	1.30	8	0.47	14	0.83
W4OCCFP	16	0.94	0	0.00	16	0.94
W4TECLD	50	2.97	0	0.00	50	2.97
W4M08YN	42	2.49	0	0.00	42	2.49
W4CERTI	0	0.00	0	0.00	0	0.00
W4CERWN	0	0.00	0	0.00	0	0.00
W4ALTCT	0	0.00	0	0.00	0	0.00
W4MVTYP	3	0.18	0	0.00	3	0.18
W4LCINV	3	0.18	0	0.00	3	0.18
W4MCINV	4	0.24	0	0.00	4	0.24
W4TCHSA	77	4.57	17	1.01	60	3.56
W4OCCSA	19	1.13	0	0.00	19	1.13

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fourth Wave,” 2010–11.

Table M-5. Number of changes and percentage of records affected during imputation, by type of imputation and variable, in the BTLS fifth wave: 2011–12

Variable	Total number of imputation changes	Percent of records affected by imputation	Cross-wave imputation		Weighted sequential hot-deck imputation	
			Number of changes	Percent of records affected	Number of changes	Percent of records affected
W5TCHFP	10	0.65	1	0.07	9	0.59
W5OCCFP	8	0.52	0	0.00	8	0.52
W5TECLD	17	1.11	1	0.07	16	1.04
W5M08YN	19	1.24	0	0.00	19	1.24
W5CERTI	38	2.47	28	1.82	10	0.65
W5CERWN	38	2.47	30	1.95	8	0.52
W5ALTCT	10	0.65	1	0.07	9	0.59
W5MVTYP	6	0.39	4	0.26	2	0.13
W5MCINV	4	0.26	0	0.00	4	0.26
W5LCINV	4	0.26	0	0.00	4	0.26
W5TCHSA	50	3.26	35	2.28	15	0.98
W5OCCSA	17	1.11	2	0.13	15	0.98
W5SALAT	24	1.56	17	1.11	7	0.46
W5SALAR	11	0.73	0	0.00	11	0.73

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “Fifth Wave,” 2011–12.

Appendix N. BTLS Items With a Base-Weighted Response Rate of Less Than 75 percent, by BTLS Wave

This appendix contains a list of the BTLS survey items with item response rates of 75 percent or below.

Table N-1. BTLS items with a final-weighted response rate of 75 percent or below, by wave: 2007–08 through 2011–12

Variable Name	Item Description	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5 ²
W5ERNTA, W2ERNTA, W1T0339 W5DESCH, W4DESCH	Summer - non-teach, earning amount	59.80	61.16	†	†	71.55
W5DECIT, W4DECIT	Additional degree - institution name - coder	—	—	†	66.68	68.79
W5DESTA, W4DESTA	Additional degree - city - coder	—	—	†	66.55	68.26
W5LCOPS, W4LCOPS	Additional degree - state - coder	—	—	†	66.55	68.26
W5MVWHY	Leave - involuntarily, reason, specify	—	—	—	48.75	66.03
W5ACTSP, W4ACTSP, W3ACTSP	Move - most important reason, specify	—	—	—	—	60.34
W5RESSP, W4RESSP, W3RESSP, W2RESSP	Activity - other leadership activity	—	—	52.81	47.88	53.09
W5MVOSP, W4MVOSP, W2MVOSP	Rent or own - specify	—	68.25	54.98	59.74	50.83
W5LVOSP, W2LVOSP	Move - other, specify	—	62.14	†	70.80	0.00
W5MVOPP	Decision to leave - other, specify	—	37.45	†	†	0.00
W5MVSEC	Decision to move - opportunities at current school	—	—	—	—	0.00
W5MVPER	Decision to move - job security	†	†	†	†	0.00
W5MVOTH	Decision to move - personal life	†	†	†	†	0.00
W5MVNUM	Decision to move - other factors not included	†	†	†	†	0.00
W5MVNOI	Decision to move - number of students	†	†	†	†	0.00
W5MVJDA	Decision to move - lack of influence	†	†	†	†	0.00
W5MVINT	Decision to move - job description or assignment	†	†	†	†	0.00
W5MVIMP	Decision to move - too many intrusions	†	†	†	†	0.00
W5MVHSA	Decision to move - most important reason	†	†	†	†	0.00
W5MVHOM	Decision to move - higher salary	†	†	†	†	0.00
W5MVDIS	Decision to move - change in residence	†	†	†	†	0.00
W5MVDEV	Decision to move - students discipline	†	†	†	†	0.00
W5MVCON	Decision to move - professional development	†	†	†	†	0.00
W5VMBEN	Decision to move - workplace conditions	†	†	†	†	0.00
W5MVAUT	Decision to move - better benefits	†	†	†	†	0.00
W5MVASP	Decision to move - autonomy over classroom	†	†	†	†	0.00
W5MVARW	Decision to move - student assessments support	†	†	†	†	0.00
W5MVADS	Decision to move - benefits tied to students' performance	†	†	†	†	0.00
W5MVACC	Decision to move - administration	†	†	†	†	0.00
W5LVWED	Decision to move - assessments/accountability	†	†	†	†	0.00
W5LVTCH	Decision to leave - improve in the field of edu.	†	†	†	†	0.00
W5LVSEC	Decision to leave - teaching as a career	†	†	†	†	0.00
W5LVRET	Decision to leave - job security	†	†	†	†	0.00
W5LVPER	Decision to leave - to retire	†	†	†	†	0.00
W5LVOTH	Decision to leave - personal life	†	†	†	†	0.00
	Decision to leave - other factors not included	†	†	†	†	0.00

See notes at end of table.

Table N-1. BTLS items with a final-weighted response rate of 75 percent or below, by wave: 2007–08 through 2011–12—Continued

Variable Name	Item Description	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5 ²
W5LVOED	Decision to leave - improve outside the field of edu.	†	†	†	†	0.00
W5LVNUM	Decision to leave - number of students	†	†	†	†	0.00
W5LVNPO	Decision to leave - position other than a teacher	†	†	†	†	0.00
W5LVNOI	Decision to leave - lack of influence	†	†	†	†	0.00
W5LVJDA	Decision to leave - job description or assignment	†	†	†	†	0.00
W5LVINT	Decision to leave - too many intrusions	†	†	†	†	0.00
W5LVIMP	Decision to leave - most important reason	†	†	†	†	0.00
W5LVHSA	Decision to leave - higher salary	†	†	†	†	0.00
W5LVHOM	Decision to leave - change in residence	†	†	†	†	0.00
W5LVDIS	Decision to leave - students discipline	†	†	†	†	0.00
W5LVDEV	Decision to leave - professional development	†	†	†	†	0.00
W5LVCON	Decision to leave - workplace conditions	†	†	†	†	0.00
W5LVBEN	Decision to leave - better benefits	†	†	†	†	0.00
W5LVAUT	Decision to leave - autonomy over classroom	†	†	†	†	0.00
	Decision to leave - benefits tied to students' performance	†	†	†	†	0.00
W5LVARW	Decision to leave - administration	†	†	†	†	0.00
W5LVADS	Decision to leave - assessments/accountability	†	†	†	†	0.00
W4OCCSP	Main occupation status, other, specify	—	†	†	57.96	†
W4MCOPS	Reason for move - involuntary, reason, specify	—	—	—	51.89	†
W3POSTSECCITY	Additional degree - city	—	—	74.89	†	†
W3SCDIS	School district - coder	—	†	74.81	†	†
W3MENRA	Mentoring training	—	—	58.87	†	†
W3MENUM	Number of mentees	—	—	58.61	†	†
W3MENPR	Mentoring preparation, self assessment	—	—	56.97	†	†
W3DEGSP	Additional degree - graduate field	—	—	34.75	†	†
W2SCZIP	School ZIP - coder	—	73.67	†	†	†
W2APEDU	Didn't Apply K12 - More Edu	—	72.36	—	—	—
W2APNOI	Didn't Apply K12 - No interest in teaching	—	71.49	—	—	—
W2APNPO	Didn't Apply K12 - No positions were available	—	70.72	—	—	—
W2APSUB	Didn't Apply K12 - Already had Sub or aide pos	—	70.47	—	—	—
W2APRDY	Didn't Apply K12 - Not ready	—	70.47	—	—	—
W2APNIN	Didn't Apply K12 - No pos interested me	—	70.47	—	—	—
	Didn't Apply K12 - Wanted pos outside classroom	—	70.47	—	—	—
W2APNCL	Didn't Apply K12 - Wanted pos outside K12	—	70.47	—	—	—
W2APTST	Didn't Apply K12 - Because of Required Tests	—	70.47	—	—	—
W2ERSSA	Summer - teaching, earning amount	†	68.29	†	†	†
W2MAR07	Marital Status - 2007	—	68.00	—	—	—
W2EROUA	Sch Yr - any job outside school, pay amount	†	63.83	†	†	†
W2EROSA	Sch Yr - Bonus Earned Amount	†	62.43	†	†	†
W2APOSP	Didn't Apply K12 - other, specify	—	53.92	—	—	—
W1T0180	Teacher State Cert - Additional content area	74.11	—	—	—	—
	Other Teacher state cert -Grades -(K–5) (6–8)					
W1T0188–W1T0190	(9–12)	73.71	—	—	—	—
W1T0100	Grade of 8th class taught	72.93	—	—	—	—
W1T0187	Other Teacher state cert - Content area - code	72.48	—	—	—	—
W1T0191	Other Teacher state cert – Content—other area	71.66	—	—	—	—
W1T0196	Other Teacher state cert - Content - other area	71.58	—	—	—	—
W1T0101	Enrollment of 8th class taught	70.65	—	—	—	—

See notes at end of table.

Table N-1. BTLS items with a final-weighted response rate of 75 percent or below, by wave: 2007–08 through 2011–12—Continued

Variable Name	Item Description	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5 ²
W1T0182-W1T0184	Teacher state cert—Grades (K–5) (6–8) (9–12)	70.03	—	—	—	—
W1T0102	Subject of 9th class taught	64.25	—	—	—	—
W1T0143	PhD - What year	60.58	—	—	—	—
W1T0340	Summer earning- nonteaching, school or district	58.22	—	—	—	—
W1T0105	Subject of 10th class taught	56.59	—	—	—	—
W1T0197	Other Teacher state cert—Content - code	55.57	—	—	—	—
	Other Teacher state cert—Grades (K–5) (6–8)					
W1T0198-W1T0200	(9–12)	55.57	—	—	—	—
W1T0201	Other Teacher state cert—Content - other area	55.57	—	—	—	—
W1T0142	PhD awarded by—Dept. of Education or other	50.77	—	—	—	—
W1T0103	Grade of 9th class taught	50.58	—	—	—	—
W1T0104	Enrollment of 9th class taught	50.43	—	—	—	—
W1T0106	Grade of 10th class taught	44.21	—	—	—	—
W1T0107	Enrollment of 10th class taught	43.59	—	—	—	—
W1T0041 ¹	Yrs teaching in private school—FT	4.41	—	—	—	—
W1T0042 ¹	Yrs teaching in private school—PT	4.41	—	—	—	—

— Not available; variable was not included in this wave.

† Not applicable; response rate was greater than 75 percent.

¹ Only 34 (unweighted) respondents were asked these questions.

² The response rates of zero resulted from two series of yes/no items pertaining to reasons that a former teacher left teaching or a current teacher moved to a different school. These items were only asked if a respondent failed to answer an open-ended item asking for the reasons. This resulted in very small numbers of eligible respondents for these item series and zero respondents actually reporting data for these yes/no items.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Beginning Teacher Longitudinal Study (BTLS), “First Through Fifth Waves Data File,” 2007–08, 2008–09, 2009–10, 2010–11, and 2011–12.

Appendix O. Frame and Created Variables

Variables were classified as frame variables if they were drawn from or based on the Beginning Teacher Longitudinal Study (BTLS) sampling frame, which was created from the Common Core of Data (CCD)-Public Elementary/Secondary School Universe Survey Data. Frame variables may or may not have been used for sampling. Selected variables from these sources were included in the restricted-use data files if they provided potentially valuable information to the user that was not available in the survey.

Created variables are based on survey variables, frame variables, other created variables, or a combination of these. These variables are frequently used in National Center for Education Statistics (NCES) publications and have been added to the data files to facilitate data analysis.

The frame and created variables included in the first through third wave data of BTLS are listed below, along with a brief description. The code used to produce the created variables is also detailed.

Variable name	Variable type	Description and specifications
CNTLNUMD	Frame	District control number. Digits 1–2: State FIPS code. Digits 3–5: District number (101–899 - All public schools except public schools with no districts, state-run schools, one-school districts, and some charter schools; 901–999 - public schools with no districts, state-run schools, one-school districts, and some charter schools). Digit 6: Check digit - Computed from other parts of control number. Note: the first five digits are the same as the first five digits of the associated schools' control numbers. Use this number to merge to 2007–08 SASS data files.
CNTLNUMS	Frame	School control number. Use this number to merge to 2007–08 SASS data files. Digits 1–2: State FIPS code. Digits 3–5: District number (101–899 - All public schools except public schools with no districts, state-run schools, one-school districts, and some charter schools; 901–999 - public schools with no districts, state-run schools, one-school districts, and some charter schools). Digit 6: Type of school (1 = Regular public school; 2 = DoD school; 3 = BIE school; 7 = One-school district; 8 = Charter school operated by regular district; 9 = Charter school operated by an entity other than a school district; 0 = Independent charter school). Digits 7–9: School number (101–999 - Schools are numbered sequentially starting with 101 within each state and each district). Digit 10: Space holder (0 for all schools). Digit 11: Questionnaire identifier (3 = public school; 7 = public school with district items). Digit 12: Check digit - Computed from other parts of control number. Private school control number. Digits 1–2: State FIPS code. Digits 3–5: District number - 000 for all private schools. Digit 6: Type of school (4 = Catholic list frame private school; 5 = Non-Catholic list frame private school; 6 = Area frame private school). Digits 7–9: School number (101–999 - Schools are numbered sequentially starting with 101 within each state and school type). Digit 10: Space holder (0 for all schools). Digit 11: Questionnaire identifier (7 = private school). Digit 12: Check digit - Computed from other parts of control number.
CNTLNUMT	Frame	Teacher control number. Digits 1–2: State FIPS code. Digits 3–5: District number (101–899 - All public schools except public schools with no districts, state-run schools, one-school districts, and some charter schools; 901–999 - Public schools with no districts, state-run schools, one-school districts, and some charter schools). Digit 6: (1 = Regular public school; 2 = DoD school; 3 = BIE school; 7 = One-school districts; 8 = Charter school operated by a regular district; 9 = Charter school operated by an entity other than a school district; 0 = Independent charter school). Digits 7–9: School number (101–999 - Schools are

Variable name	Variable type	Description and specifications
LONGSTS	Created	<p>numbered sequentially starting with 101 within each state and each district). Digit 10: Space holder (0 for all schools). Digits 11–13: Teacher number (Teachers are numbered sequentially within each school beginning at 101). Digit 14: Check digit - Computed from other parts of control number.</p> <p>Private teacher control number: Digits 1–2: State FIPS code. Digits 3–5: District number - 000 for all private schools. Digit 6: Type of school (4 = Catholic list frame private school; 5 = Non-Catholic list frame private school; 6 = Area frame private school). Digits 7–9: School number (101–999 - Schools are numbered sequentially starting with 101 within each type of school and each state). Digit 10: Space holder (0 for all schools). Digits 11–13: Teacher number (Teachers are numbered sequentially within each school beginning at 101). Digit 14: Check digit - Computed from other parts of control number.</p> <p>The tracked longitudinal status of teachers. Each digit in the variable represents a teacher's status in a respective wave. Its length is the same as wave number</p> <p>Coded as follows:</p> <p>1=Former 2=Current 0=Nonrespondent</p>
W1AGE_T	Created	<p>Age of teacher in 2007–08.</p> <p>Coded as follows:</p> <p>W1AGE_T = sum (2007, -W1T0360);</p>
W1AIFLAG	Created	<p>Flag identifying BIE-funded schools and proportion of American Indian students enrolled in non-BIE-funded schools. Categories include:</p> <p>1 = BIE-funded school; 2 = Non-BIE-funded school, 20 percent or more American Indian enrollment; 3 = Non-BIE-funded school, less than 20 percent American Indian enrollment.</p> <p>Coded as follows:</p> <p>If BIEFLAG=1 then AIFLAG=1; If BIEFLAG=2 and S0421/ENRK12UG ge .2 then AIFLAG=2; If BIEFLAG=2 and S0421/ENRK12UG lt .2 then AIFLAG=3;</p>
W1ASSIGN03	Created	<p>General field of main teaching assignment in 2007–08. Categories include:</p> <p>1 = Early Childhood or General Elementary; 2 = Special Education; 3 = Arts or Music; 4 = English and Language Arts; 5 = ESL or Bilingual Education; 6 = Foreign Languages; 7 = Health or Physical Education; 8 = Mathematics; 9 = Natural Sciences; 10 = Social Sciences; 11 = Vocational, Career, or Technical Education; 12 = All Others.</p> <p>Coded as follows:</p> <p>if W1T0067 = -9 then W1ASSIGN03 = -9; else do; if W1T0067 in (101,102) then W1ASSIGN03 = 1; if W1T0067 = 110 then W1ASSIGN03 = 2; if W1T0067 in (141, 143, 144, 145) then W1ASSIGN03 = 3; if W1T0067 in (151, 152, 153, 154, 155, 158, 159) then W1ASSIGN03 = 4; if W1T0067 in (160, 161, 162) then W1ASSIGN03 = 5; if 171 le W1T0067 le 175 then W1ASSIGN03 = 6; if W1T0067 in (181, 182) then W1ASSIGN03 = 7;</p>

Variable name	Variable type	Description and specifications
		<p>if W1T0067 in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then W1ASSIGN03 = 8; if W1T0067 in (210, 211, 212, 213, 215, 216, 217) then W1ASSIGN03 = 9; if W1T0067 in (220, 221, 225, 226, 227, 228, 231, 233, 234) then W1ASSIGN03 = 10; if 241 ≤ W1T0067 ≤ 256 then W1ASSIGN03 = 11; if W1T0067 in (197, 262, 264, 265, 266, 267, 268) then W1ASSIGN03 = 12; end;</p>
W1BIEFLAG	Frame	<p>Flag that indicates whether a school is operated or funded by the Bureau of Indian Education (BIE). Origin: BIEFLAG in SASS sampling file. Categories include: 1 = School is operated or funded by BIE; 2 = School is not operated or funded by BIE.</p>
W1CHARFLAG	Created	<p>Flag that indicates whether or not a school is a charter school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Copied from s0230 in the SASS public school and BIE-funded school files. Categories include: 1 = School is a public charter school; 2 = School is not a public charter school;</p>
W1CHARTYPE	Frame	<p>Flag indicating whether a charter school is independent or is governed by a public school district. An independent charter school is operated by a state education agency (SEA), a chartering organization, or a public school district that includes only charter schools. A charter school governed by a regular public school district operates within a school district that also includes traditional public schools. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded from CHTTYP in the SASS sample file. Categories include: 1 = Independent charter school; 2 = Charter school governed by regular public school district; -8 = Valid skip.</p>
W1CLASSZ_D	Created	<p>Average size of the classes taught by the teacher, if the teacher had departmentalized classes; i.e., he or she instructed several classes of different students most or all of the day in one or more subjects. Value is continuous unless the teacher is not departmentalized (-8, valid skip). Coded as follows: Array M1 (*) W1T0080 W1T0083 W1T0086 W1T0089 W1T0092 W1T0095 W1T0098 W1T0101 W1T0104 W1T0107; if W1T0068 = 1 then do; do i = 1 to dim(M1); if M1(i) = -8 then M1(i) = .; end; if W1T0080 = -9 or W1T0083 = -9 or W1T0086 = -9 or W1T0089 = -9 or W1T0092 = -9 or W1T0095 = -9 or W1T0098 = -9 or W1T0101 = -9 or W1T0104 = -9 or W1T0107 = -9 then W1CLASSZ_D = -9; else W1CLASSZ_D = (int((mean(W1T0080, W1T0083, W1T0086, W1T0089, W1T0092, W1T0095, W1T0098, W1T0101, W1T0104, W1T0107))*10e3)/10e3);</p>

Variable name	Variable type	Description and specifications
W1CLASSZ_S	Created	<pre> do i = 1 to dim(M1); if M1(i) = . then M1(i) = -8; end; end; drop i; else W1CLASSZ_D = -8; Average size of the classes taught by the teacher, if the teacher had self-contained classes; i.e., he or she taught the same group of students all or most of the day in multiple subjects. Value is continuous unless the teacher is not self-contained (-8, valid skip). Coded as follows: if W1T0068 = 3 then do; if W1T0070 = -9 then W1CLASSZ_S = -9; else W1CLASSZ_S = W1T0070; end; else W1CLASSZ_S = -8; </pre>
W1EARNALL	Created	<pre> Teacher's total earnings for the summer of 2007 and the 2007–08 school year. Includes base salary for 2007–08 school year, any pay for teaching summer school, additional compensation from the school system, working in a nonteaching job in a school or working at any nonschool job. Coded as follows: Array M2 (*) W1T0336 W1T0339 W1T0342 W1T0343 W1T0345 W1T0347 W1T0349; if W1T0336 = -9 or W1T0339 = -9 or W1T0342 = -9 or W1T0343 = -9 or W1T0345 = -9 or W1T0347 = -9 or W1T0349 = -9 then W1EARNALL = -9; else do; do i = 1 to dim(M2); if M2(i) = -8 then M2(i) = .; end; drop i; W1EARNALL = sum(W1T0336, W1T0339, W1T0342, W1T0343, W1T0345, W1T0347, W1T0349); do i = 1 to dim(M2); if M2(i) = . then M2(i) = -8; end; drop i; end; </pre>
W1EARNSCH	Created	<pre> Teacher's total yearly earnings from all school-related jobs for the summer of 2007 and the 2007–08 school year. Coded as follows: Array M3 (*) W1T0336 W1T0339 W1T0343 W1T0345 W1T0347; if W1T0336 = -9 or W1T0339 = -9 or W1T0343 = -9 or W1T0345 = -9 or W1T0347 = -9 then W1EARNSCH = -9; else do; do i = 1 to dim(M3); if M3(i) = -8 then M3(i) = .; end; drop i; W1EARNSCH = sum(W1T0336, W1T0339, W1T0343, W1T0345, W1T0347); do i = 1 to dim(M3); if M3(i) = . then M3(i) = -8; end; if W1EARNSCH = . then W1EARNSCH = -8; end; drop i; </pre>

Variable name	Variable type	Description and specifications
WIENRK12UG	Created	Total K–12 and ungraded student enrollment in the school. Copied from s0047 in the SASS school files. For cases where the school was a noninterview, sample file or other information was used to impute (if available).
WIENRLEA	Created	Total K–12 and ungraded student enrollment in the district. Copied from d0276 in the SASS district file. For cases where the district was a noninterview, sample file or other information was used to impute (if available).
W1FL_SLC	Frame	2000 Census school locale code assignment flag for SLOCP8. Designates whether the school's address provided enough information to assign it to a specific Census block. Addresses that could be matched to a Census block could be coded with 100 percent accuracy. These cases were assigned using the new methodology. The remaining addresses could not be assigned Census block information, and, thus, their associated locale codes had to be calculated using the old methodology matching by zip codes. Source: ILOCAL05 in the 2005–06 CCD. Categories include: O = old methodology was used to determine locale code; W = new methodology was used to determine locale code;
W1FTPT	Created	Two-level teaching status variable that shows whether the respondent is teaching full-time or part-time in the 2007–08 school year. Categories include: 1 = full-time; 2 = part-time. Coded as follows: if W1T0025 = 1 or W1T0028 = 1 then W1FTPT = 1; else W1FTPT = 2;
W1HIDEGR	Created	Highest degree held by the teacher. Categories include: 1 = Associate's degree or no college degree; 2 = Bachelor's degree; 3 = Master's degree; 4 = Education specialist or Certificate of Advanced Graduate Studies; 5 = Doctorate or Professional degree. Coded as follows: If W1T0141 >= 0 or W1T0142 in (1,2) or W1T0143 >=0 then W1HIDEGR = 5; Else if (W1T0135 >=0 or W1T0136 in (1,2) or W1T0137 >=0) or (W1T0138 >=0 or W1T0139 in (1,2) or W1T0140 >=0) then W1HIDEGR = 4; Else if W1T0132 =-9 and W1T0133 =-9 and W1T0134=-9 and W1T0129=-9 and W1T0130=-9 and W1T0131=-9 and W1T0127=-9 and W1T0128 =-9 and W1T0125=-9 and W1T0126=-9 then W1HIDEGR = -9; else if W1T0120=1 then W1HIDEGR=3; else if W1T0110=1 then W1HIDEGR=2; else if W1T0110=2 then W1HIDEGR=1;
W1IEP_T	Created	Percentage of students who had an Individualized Education Program (IEP) taught by teachers of self-contained or departmentalized classes. Value is continuous unless the teacher is not departmentalized or self-contained (-8, valid skip). Coded as follows: if W1T0068 = 1 then do; if W1T0065 = 0 and W1PUPILS_D = -9 then W1IEP_T = 0; else if W1T0065 = -9 or W1PUPILS_D = -9 then W1IEP_T = -9; else W1IEP_T = (INT((W1T0065/W1PUPILS_D)*10e5)/10e3); end; if W1T0068 = 3 then do; if W1T0065 = 0 and W1PUPILS_S = -9 then W1IEP_T = 0; else if W1T0065 = -9 or W1PUPILS_S = -9 then W1IEP_T = -9;

Variable name	Variable type	Description and specifications
W1LEP_T	Created	<p>else W1IEP_T = (INT((W1T0065/W1PUPILS_S)*10e5)/10e3); end; if W1IEP_T gt 100 then W1IEP_T = 100; if W1T0068 not in (1,3) then W1IEP_T = -8; Percentage of students who were of limited English proficiency (LEP) taught by teachers of self-contained or departmentalized classes. Value is continuous unless the teacher is not departmentalized or self-contained (-8, valid skip). Coded as follows: if W1T0068 = 1 then do; if W1T0066 = 0 and W1PUPILS_D = -9 then W1LEP_T = 0; else if W1T0066 = -9 or W1PUPILS_D = -9 then W1LEP_T = -9; else W1LEP_T = (INT((W1T0066/W1PUPILS_D)*10e5)/10e3); end; if W1T0068 = 3 then do; if W1T0066 = 0 and W1PUPILS_S = -9 then W1LEP_T = 0; else if W1T0066 = -9 or W1PUPILS_S = -9 then W1LEP_T = -9; else W1LEP_T = (INT((W1T0066/W1PUPILS_S)*10e5)/10e3); end; if W1LEP_T gt 100 then W1LEP_T = 100; if W1T0068 not in (1, 3) then W1LEP_T = -8;</p>
W1MINENR	Created	<p>Percentage of enrolled students who are of a racial/ethnic minority. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows: W1MINENR = (INT((W1NMINST_S/W1ENRK12UG)*10e5/10e3);</p>
W1MINTCH	Created	<p>Percentage of teachers at the school who are of a racial/ethnic minority. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows: MINTCH = (INT((sum(s0122, s0124, s0125, s0126)/s0127)*10e5)/10e3);</p>
W1NEWTCH	Created	<p>Flag that identifies teachers who have 3 or fewer years of experience, including full- and part-time teaching experience in public and private schools. Coded as follows: if W1TOTYREXP le 3 then W1NEWTCH = 1; else W1NEWTCH = 2;</p>
W1NSLAPP_S	Created	<p>Of schools that participate in the National School Lunch Program (NSLP), the percentage of their K–12 enrollment that was approved for free or reduced-price lunches. Value is continuous unless school does not participate in the NSLP (-8, valid skip). For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows: if s0215 = 2 then W1NSLAPP_S = -8; else W1NSLAPP_S = (INT((S0217/S0047)*10e5)/10e3); if W1NSLAPP_S gt 100 then W1NSLAPP_S = 100; For all other files: if s0215 = 2 then W1NSLAPP_S = -8; else W1NSLAPP_S = (INT((s0217/W1ENRK12UG)*10e5)/10e3); if W1NSLAPP_S gt 100 then W1NSLAPP_S = 100;</p>
W1NUMSTATE	Frame	<p>Numeric recode of the state with administrative control over the district and the schools within that district. Identical to STATE and STAT_ABB. Origin: STATE in the SASS sampling frame. Categories include: 1 = Alabama; 2 = Alaska; 3 = Arizona; 4 = Arkansas;</p>

Variable name	Variable type	Description and specifications
		5 = California; 6 = Colorado; 7 = Connecticut; 8 = Delaware; 9 = District of Columbia; 10 = Florida; 11 = Georgia; 12 = Hawaii; 13 = Idaho; 14 = Illinois; 15 = Indiana; 16 = Iowa; 17 = Kansas; 18 = Kentucky; 19 = Louisiana; 20 = Maine; 21 = Maryland; 22 = Massachusetts; 23 = Michigan; 24 = Minnesota; 25 = Mississippi; 26 = Missouri; 27 = Montana; 28 = Nebraska; 29 = Nevada; 30 = New Hampshire; 31 = New Jersey; 32 = New Mexico; 33 = New York; 34 = North Carolina; 35 = North Dakota; 36 = Ohio; 37 = Oklahoma; 38 = Oregon; 39 = Pennsylvania; 40 = Rhode Island; 41 = South Carolina; 42 = South Dakota; 43 = Tennessee; 44 = Texas; 45 = Utah; 46 = Vermont; 47 = Virginia; 48 = Washington; 49 = West Virginia; 50 = Wisconsin; 51 = Wyoming. Coded as follows: if W1STATE = '01' then W1NUMSTATE = 1; if W1STATE = '02' then W1NUMSTATE = 2; if W1STATE = '04' then W1NUMSTATE = 3; if W1STATE = '05' then W1NUMSTATE = 4; if W1STATE = '06' then W1NUMSTATE = 5; if W1STATE = '08' then W1NUMSTATE = 6; if W1STATE = '09' then W1NUMSTATE = 7; if W1STATE = '10' then

Variable name	Variable type	Description and specifications
		<p>WINUMSTATE = 8; if W1STATE = '11' then WINUMSTATE = 9; if W1STATE = '12' then WINUMSTATE = 10; if W1STATE = '13' then WINUMSTATE = 11; if W1STATE = '15' then WINUMSTATE = 12; if W1STATE = '16' then WINUMSTATE = 13; if W1STATE = '17' then WINUMSTATE = 14; if W1STATE = '18' then WINUMSTATE = 15; if W1STATE = '19' then WINUMSTATE = 16; if W1STATE = '20' then WINUMSTATE = 17; if W1STATE = '21' then WINUMSTATE = 18; if W1STATE = '22' then WINUMSTATE = 19; if W1STATE = '23' then WINUMSTATE = 20; if W1STATE = '24' then WINUMSTATE = 21; if W1STATE = '25' then WINUMSTATE = 22; if W1STATE = '26' then WINUMSTATE = 23; if W1STATE = '27' then WINUMSTATE = 24; if W1STATE = '28' then WINUMSTATE = 25; if W1STATE = '29' then WINUMSTATE = 26; if W1STATE = '30' then WINUMSTATE = 27; if W1STATE = '31' then WINUMSTATE = 28; if W1STATE = '32' then WINUMSTATE = 29; if W1STATE = '33' then WINUMSTATE = 30; if W1STATE = '34' then WINUMSTATE = 31; if W1STATE = '35' then WINUMSTATE = 32; if W1STATE = '36' then WINUMSTATE = 33; if W1STATE = '37' then WINUMSTATE = 34; if W1STATE = '38' then WINUMSTATE = 35; if W1STATE = '39' then WINUMSTATE = 36; if W1STATE = '40' then WINUMSTATE = 37; if W1STATE = '41' then WINUMSTATE = 38; if W1STATE = '42' then WINUMSTATE = 39; if W1STATE = '44' then WINUMSTATE = 40; if W1STATE = '45' then WINUMSTATE = 41; if W1STATE = '46' then WINUMSTATE = 42; if W1STATE = '47' then WINUMSTATE = 43; if W1STATE = '48' then WINUMSTATE = 44; if W1STATE = '49' then WINUMSTATE = 45; if W1STATE = '50' then WINUMSTATE = 46; if W1STATE = '51' then WINUMSTATE = 47; if W1STATE = '53' then WINUMSTATE = 48; if W1STATE = '54' then WINUMSTATE = 49; if W1STATE = '55' then WINUMSTATE = 50; if W1STATE = '56' then WINUMSTATE = 51;</p>
WINUMTCH	Created	<p>Estimated number of full-time-equivalent teachers in the school. This variable uses an estimate of the average percentage of time part-time teachers taught in school (.5272); public school calculation is based on preliminary 2007–08 SASS data using the teacher basic weight. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows:</p>
W1OCC_CODE	Created	<p>WINUMTCH = (INT((sum(s0120, (.5145*s0121)))*10e3)/10e3); 2002 NAICS Occupation Classification. Origin: T5032 in the 2007–08 SASS Teacher file.</p>
W1OP_YRS	Created	<p>Number of years the school has operated as a public charter school. Value is continuous unless the school is not a public charter school (-8, valid skip). For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows:</p>
W1PGMTYPE	Created	<p>if W1CHARFLAG = 2 then W1OP_YRS = -8; else W1OP_YRS = sum(2007, -S0231); School program type. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Categories include: 1 = Regular; 2 = Montessori; 3 = Special program emphasis; 4 = Special Education; 5 = Career/Technical/Vocational Education;</p>

Variable name	Variable type	Description and specifications
W1PUPILS_D	Created	<p>6 = Alternative; 7 = Early Childhood Program/Daycare Center. Copied from variable s0048 in SASS public, BIE and private school files. Total number of students taught by the teacher. For teachers of departmentalized classes. Value is continuous unless the teacher is not departmentalized (-8, valid skip). Coded as follows: Array M4 (*) W1T0080 W1T0083 W1T0086 W1T0089 W1T0092 W1T0095 W1T0098 W1T0101 W1T0104 W1T0107; if W1T0080 = -9 or W1T0083 = -9 or W1T0086 = -9 or W1T0089 = -9 or W1T0092 = -9 or W1T0095 = -9 or W1T0098 = -9 or W1T0101 = -9 or W1T0104 = -9 or W1T0107 = -9 then W1PUPILS_D = -9; else do; do i = 1 to dim(M4); if M4(i) = -8 then M4(i) = .; end; if W1T0068 = 1 then W1PUPILS_D = sum(W1T0080, W1T0083, W1T0086, W1T0089, W1T0092, W1T0095, W1T0098, W1T0101, W1T0104, W1T0107); else W1PUPILS_D = -8; do i = 1 to dim(M4); if M4(i) = . then M4(i) = -8; end; end;</p>
W1PUPILS_S	Created	<p>Number of students taught by the teacher. For teachers of self-contained classes. Value is continuous unless the teacher is not self-contained (-8, valid skip). Coded as follows: if W1T0070 = -9 then W1PUPILS_S = -9; else do; if W1T0068 = 3 then W1PUPILS_S = W1T0070; else W1PUPILS_S = -8; end;</p>
W1RACETH_T	Created	<p>Teacher's race/ethnicity. Coded as follows: Array Races (5) W1T0358 W1T0357 W1T0356 W1T0355 W1T0354; Racenum = 0; Do i = 1 to 5; If Races(i) = 1 then Racenum = Racenum + 10**(i-1); End;</p> <p>If W1T0353=1 and Racenum=1 then W1RACETH_T=1; /* Hispanic, American Indian */ If W1T0353=1 and Racenum=10 then W1RACETH_T=2; /* Hispanic, Hawaiian Native */ If W1T0353=1 and Racenum=11 then W1RACETH_T=3; /* Hispanic, Hawaiian Native, American Indian */ If W1T0353=1 and Racenum=100 then W1RACETH_T=4; /* Hispanic, Asian */ If W1T0353=1 and Racenum=101 then W1RACETH_T=5; /* Hispanic, Asian, American Indian */ If W1T0353=1 and Racenum=110 then W1RACETH_T=6; /* Hispanic, Asian, Hawaiian Native */ If W1T0353=1 and Racenum=111 then W1RACETH_T=7; /* Hispanic, Asian,</p>

Variable name	Variable type	Description and specifications
		Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=1000 then W1RACETH_T=8; /* Hispanic, Black */
		If W1T0353=1 and Racenum=1001 then W1RACETH_T=9; /* Hispanic, Black, American Indian */
		If W1T0353=1 and Racenum=1010 then W1RACETH_T=10; /* Hispanic, Black, Hawaiian Native */
		If W1T0353=1 and Racenum=1011 then W1RACETH_T=11; /* Hispanic, Black, Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=1100 then W1RACETH_T=12; /* Hispanic, Black, Asian */
		If W1T0353=1 and Racenum=1101 then W1RACETH_T=13; /* Hispanic, Black, Asian, American Indian */
		If W1T0353=1 and Racenum=1110 then W1RACETH_T=14; /* Hispanic, Black, Asian, Hawaiian Native */
		If W1T0353=1 and Racenum=1111 then W1RACETH_T=15; /* Hispanic, Black, Asian, Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=10000 then W1RACETH_T=16; /* Hispanic, White */
		If W1T0353=1 and Racenum=10001 then W1RACETH_T=17; /* Hispanic, White, American Indian */
		If W1T0353=1 and Racenum=10010 then W1RACETH_T=18; /* Hispanic, White, Hawaiian Native */
		If W1T0353=1 and Racenum=10011 then W1RACETH_T=19; /* Hispanic, White, Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=10100 then W1RACETH_T=20; /* Hispanic, White, Asian */
		If W1T0353=1 and Racenum=10101 then W1RACETH_T=21; /* Hispanic, White, Asian, American Indian */
		If W1T0353=1 and Racenum=10110 then W1RACETH_T=22; /* Hispanic, White, Asian, Hawaiian Native */
		If W1T0353=1 and Racenum=10111 then W1RACETH_T=23; /* Hispanic, White, Asian, Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=11000 then W1RACETH_T=24; /* Hispanic, White, Black */
		If W1T0353=1 and Racenum=11001 then W1RACETH_T=25; /* Hispanic, White, Black, American Indian */
		If W1T0353=1 and Racenum=11010 then W1RACETH_T=26; /* Hispanic, White, Black, Hawaiian Native */
		If W1T0353=1 and Racenum=11011 then W1RACETH_T=27; /* Hispanic, White, Black, Hawaiian Native, American Indian */
		If W1T0353=1 and Racenum=11100 then W1RACETH_T=28; /* Hispanic, White, Black, Asian */
		If W1T0353=1 and Racenum=11101 then W1RACETH_T=29; /* Hispanic, White, Black, Asian, American Indian */
		If W1T0353=1 and Racenum=11110 then W1RACETH_T=30; /* Hispanic, White, Black, Asian, Hawaiian Native */
		If W1T0353=1 and Racenum=11111 then W1RACETH_T=31; /* Hispanic, White, Black, Asian, Hawaiian Native, American Indian */

Variable name	Variable type	Description and specifications
		<p>If W1T0353=2 and Racenum=1 then W1RACETH_T=32; /* non-Hispanic, American Indian */</p> <p>If W1T0353=2 and Racenum=10 then W1RACETH_T=33; /* non-Hispanic, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=11 then W1RACETH_T=34; /* non-Hispanic, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=100 then W1RACETH_T=35; /* non-Hispanic, Asian */</p> <p>If W1T0353=2 and Racenum=101 then W1RACETH_T=36; /* non-Hispanic, Asian, American Indian */</p> <p>If W1T0353=2 and Racenum=110 then W1RACETH_T=37; /* non-Hispanic, Asian, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=111 then W1RACETH_T=38; /* non-Hispanic, Asian, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=1000 then W1RACETH_T=39; /* non-Hispanic, Black */</p> <p>If W1T0353=2 and Racenum=1001 then W1RACETH_T=40; /* non-Hispanic, Black, American Indian */</p> <p>If W1T0353=2 and Racenum=1010 then W1RACETH_T=41; /* non-Hispanic, Black, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=1011 then W1RACETH_T=42; /* non-Hispanic, Black, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=1100 then W1RACETH_T=43; /* non-Hispanic, Black, Asian */</p> <p>If W1T0353=2 and Racenum=1101 then W1RACETH_T=44; /* non-Hispanic, Black, Asian, American Indian */</p> <p>If W1T0353=2 and Racenum=1110 then W1RACETH_T=45; /* non-Hispanic, Black, Asian, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=1111 then W1RACETH_T=46; /* non-Hispanic, Black, Asian, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=10000 then W1RACETH_T=47; /* non-Hispanic, White */</p> <p>If W1T0353=2 and Racenum=10001 then W1RACETH_T=48; /* non-Hispanic, White, American Indian */</p> <p>If W1T0353=2 and Racenum=10010 then W1RACETH_T=49; /* non-Hispanic, White, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=10011 then W1RACETH_T=50; /* non-Hispanic, White, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=10100 then W1RACETH_T=51; /* non-Hispanic, White, Asian */</p> <p>If W1T0353=2 and Racenum=10101 then W1RACETH_T=52; /* non-Hispanic, White, Asian, American Indian */</p> <p>If W1T0353=2 and Racenum=10110 then W1RACETH_T=53; /* non-Hispanic, White, Asian, Hawaiian Native */</p> <p>If W1T0353=2 and Racenum=10111 then W1RACETH_T=54; /* non-Hispanic, White, Asian, Hawaiian Native, American Indian */</p> <p>If W1T0353=2 and Racenum=11000 then W1RACETH_T=55; /* non-Hispanic, White, Black */</p> <p>If W1T0353=2 and Racenum=11001 then W1RACETH_T=56; /* non-Hispanic, White, Black, American Indian */</p> <p>If W1T0353=2 and Racenum=11010 then W1RACETH_T=57; /* non-</p>

Variable name	Variable type	Description and specifications
WIREGION	Frame	<p>Hispanic, White, Black, Hawaiian Native */ If W1T0353=2 and Racenum=11011 then W1RACETH_T=58; /* non-Hispanic, White, Black, Hawaiian Native, American Indian */ If W1T0353=2 and Racenum=11100 then W1RACETH_T=59; /* non-Hispanic, White, Black, Asian */ If W1T0353=2 and Racenum=11101 then W1RACETH_T=60; /* non-Hispanic, White, Black, Asian, American Indian */ If W1T0353=2 and Racenum=11110 then W1RACETH_T=61; /* non-Hispanic, White, Black, Asian, Hawaiian Native */ If W1T0353=2 and Racenum=11111 then W1RACETH_T=62; /* non-Hispanic, White, Black, Asian, Hawaiian Native, American Indian */ drop i; drop racenum;</p> <p>Census region where the district is located. Origin: REGION from the SASS sampling frame. Categories include: 1 = Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; 2 = Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; 3 = South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; 4 = West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.</p>
WISC_NCSID	Frame	<p>NCES school identification number. Origin: NCESSCH from the 2005–06 CCD and PPIN from the 2005–06 PSS. For public and BIE schools: Digits 1–2: FIPS state code. Digits 3–7: District code. Digits 8–12: School code. For a complete list of FIPS codes, reference http://www.itl.nist.gov/fipspubs/fip5-2.htm. Note that this variable has been altered for cases in New England and Nebraska, and some charter schools, where the CCD definition of a school district did not match the SASS definition of a school district. For these cases, district-level data were collected from an entity other than the CCD district. Digits 1–7 were edited to refer to the entity interviewed in SASS.</p>
WISC_ORGID	Frame	<p>Original NCES school ID for select Nebraska, New England, and charter schools. For some Nebraska, New England, and charter schools, associated district-level data were collected from an entity other than the district identified in the CCD. Digits 1–7 refer to the district as identified by the CCD rather than the entity interviewed in SASS. A valid skip (-8) is applied if no changes were made to the NCES ID. Origin: SC_ORGID in the SASS sampling frame. Digits 1–2: FIPS state code. Digits 3–7: District code. Digits 8–12: School code.</p>
WISC_ZIP	Frame	<p>Five-digit zip code for the physical location of the school. Origin: SC_ZIP in the SASS sampling frame.</p>
WISCH_ISR	Created	<p>Interview status of school where principal/teacher/library was selected for sample. Categories include: 1 = Interview; 2 = Noninterview.</p>
WISCHLEVE2	Created	<p>Four-category level of school based on grade levels offered as reported by the school. Categories include: 1 = primary: schools with at least one grade lower than 5 and no grade higher than 8;</p>

Variable name	Variable type	Description and specifications
		<p>2 = middle: schools with no grade lower than 5 and no grade higher than 8; 3 = high: schools with no grade lower than 7 and at least one grade higher than 8; and 4 = combined: schools with at least one grade lower than 7 and at least one grade higher than 8. Schools with only ungraded classes were included with combined schools. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows: W1SCHLEVE2 = 1 if the lowest grade is any of grades K–4 and the highest grade is any of grades 1–8; W1SCHLEVE2 = 2 if the lowest grade is any of grades 5–8 and the highest grade is any of grades 5–8; W1SCHLEVE2 = 3 if the lowest grade is any of grades 7–12 and the highest grade is any of grades 9–12; W1SCHLEVE2 = 4 for all other cases (e.g., all ungraded, K–12, 5–12, etc.).</p> <p>Public and BIE code: if s0037 = 1 then LOWEST = 12; if s0036 = 1 then LOWEST = 11; if s0035 = 1 then LOWEST = 10; if s0034 = 1 then LOWEST = 9; if s0033 = 1 then LOWEST = 8; if s0032 = 1 then LOWEST = 7; if s0031 = 1 then LOWEST = 6; if s0030 = 1 then LOWEST = 5; if s0029 = 1 then LOWEST = 4; if s0028 = 1 then LOWEST = 3; if s0027 = 1 then LOWEST = 2; if s0026 = 1 then LOWEST = 1; if s0025 = 1 then LOWEST = 0; if s0025 = 1 then HIGHEST = 0; if s0026 = 1 then HIGHEST = 1; if s0027 = 1 then HIGHEST = 2; if s0028 = 1 then HIGHEST = 3; if s0029 = 1 then HIGHEST = 4; if s0030 = 1 then HIGHEST = 5; if s0031 = 1 then HIGHEST = 6; if s0032 = 1 then HIGHEST = 7; if s0033 = 1 then HIGHEST = 8; if s0034 = 1 then HIGHEST = 9; if s0035 = 1 then HIGHEST = 10; if s0036 = 1 then HIGHEST = 11; if s0037 = 1 then HIGHEST = 12; If LOWEST le 4 and HIGHEST le 8 then SCHLEVE2 = 1; If LOWEST ge 7 and HIGHEST ge 9 then SCHLEVE2 = 3; If LOWEST ge 5 and HIGHEST le 8 then SCHLEVE2 = 2; If LOWEST le 6 and HIGHEST ge 9 then SCHLEVE2 = 4; if S0038 = 1 and LOWEST lt 1 and HIGHEST lt 1 then W1SCHLEVE2 = 4;</p> <p>Private code: if s0432 = 1 then LOWEST = 12; if s0430 = 1 then LOWEST = 11; if s0428 = 1 then LOWEST = 10; if s0426 = 1 then LOWEST = 9; if s0424 = 1 then LOWEST = 8;</p>

Variable name	Variable type	Description and specifications
W1SCHLEVEL	Created	<p> if s0422 = 1 then LOWEST = 7; if s0420 = 1 then LOWEST = 6; if s0418 = 1 then LOWEST = 5; if s0416 = 1 then LOWEST = 4; if s0414 = 1 then LOWEST = 3; if s0412 = 1 then LOWEST = 2; if s0410 = 1 or s0408 = 1 then LOWEST = 1; if s0404 = 1 or s0406 = 1 then LOWEST = 0; if s0404 = 1 or s0406 = 1 then HIGHEST = 0; if s0410 = 1 or s0408 = 1 then HIGHEST = 1; if s0412 = 1 then HIGHEST = 2; if s0414 = 1 then HIGHEST = 3; if s0416 = 1 then HIGHEST = 4; if s0418 = 1 then HIGHEST = 5; if s0420 = 1 then HIGHEST = 6; if s0422 = 1 then HIGHEST = 7; if s0424 = 1 then HIGHEST = 8; if s0426 = 1 then HIGHEST = 9; if s0428 = 1 then HIGHEST = 10; if s0430 = 1 then HIGHEST = 11; if s0432 = 1 then HIGHEST = 12; If LOWEST le 4 and HIGHEST le 8 then W1SCHLEVE2 = 1; If LOWEST ge 7 and HIGHEST ge 9 then W1SCHLEVE2 = 3; If LOWEST ge 5 and HIGHEST le 8 then W1SCHLEVE2 = 2; If LOWEST le 6 and HIGHEST ge 9 then W1SCHLEVE2 = 4; if s0400 = 1 and LOWEST lt 1 and HIGHEST lt 1 then W1SCHLEVE2 = 4; Three-category level of school based on grade levels offered as reported by the school. Categories include: 1 = Elementary; 2 = Secondary; 3 = Combined. Coded as follows: W1SCHLEVEL = 1 if school has any of grades K–6 and none of grades 9–12 (elementary); W1SCHLEVEL = 2 if school has any of grades 7–12 and none of grades K–6 (secondary); W1SCHLEVEL = 3 for all other cases (combined). For cases where the school was a noninterview, sample file or other information was used to impute (if available). Public and BIE code: EDKG6 = sum(of s0025 s0026 s0027 s0028 s0029 s0030 s0031); ED912 = sum(of s0034 s0035 s0036 s0037); ED712 = sum(of s0032 s0033 s0034 s0035 s0036 s0037); if EDKG6 >= 1 and ED912 < 1 and s0038 < 1 THEN W1SCHLEVEL = 1; *ELEMENTARY; else if s0038 = 1 and EDKG6 >= 1 and ED912 < 1 THEN W1SCHLEVEL = 1; else if s0038 < 1 and EDKG6 < 1 THEN W1SCHLEVEL = 2; *SECONDARY; else if s0038 = 1 and EDKG6 < 1 and ED712 >= 1 THEN W1SCHLEVEL = 2; else W1SCHLEVEL = 3; *COMBINED; Private Code: EDKG6 = 0; ED912 = 0; ED712 = 0; ARRAY elem[9] s0404 s0406 s0408 s0410 s0412 s0414 s0416 s0418 s0420; </p>

Variable name	Variable type	Description and specifications
WISCHSIZE	Created	<p>do i = 1 to 9; If elem [i] = 1 then EDKG6 + 1; drop i; end; ARRAY sec[4] s0426 s0428 s0430 s0432; do i = 1 to 4; if sec[i] = 1 then ED912 + 1; drop i; end; ARRAY comb[6] s0422 s0424 s0426 s0428 s0430 s0432; do i = 1 to 6; if comb[i] = 1 then ED712 + 1; drop i; end; if EDKG6 >= 1 and ED912 < 1 and s0400 = 2 then W1SCHLEVEL = 1; *ELEMENTARY; else if s0400 = 1 and EDKG6 >= 1 and ED912 < 1 then W1SCHLEVEL = 1; else if s0400 = 2 and EDKG6 < 1 then SCHLEVEL = 2; *SECONDARY; else if s0400 = 1 and EDKG6 < 1 and ED712 >= 1 then W1SCHLEVEL = 2; else W1SCHLEVEL = 3; COMBINED; end;</p> <p>Categorical measure of the total K–12 and ungraded enrollment in the school. Categories include: 1 = 1–49; 2 = 50–99; 3 = 100–149; 4 = 150–199; 5 = 200–349; 6 = 350–499; 7 = 500–749; 8 = 750–999; 9 = 1,000–1,199; 10 = 1,200–1,499; 11 = 1,500–1,999; 12 = 2,000 or more.</p> <p>For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows for school files: if 1 le W1ENRK12UG lt 50 then W1SCHSIZE = 1; if 50 le W1ENRK12UG le 99 then W1SCHSIZE = 2; if 100 le W1ENRK12UG le 149 then W1SCHSIZE = 3; if 150 le W1ENRK12UG le 199 then W1SCHSIZE = 4; if 200 le W1ENRK12UG le 349 then W1SCHSIZE = 5; if 350 le W1ENRK12UG le 499 then W1SCHSIZE = 6; if 500 le W1ENRK12UG le 749 then W1SCHSIZE = 7; if 750 le W1ENRK12UG le 999 then W1SCHSIZE = 8; if 1000 le W1ENRK12UG le 1199 then W1SCHSIZE = 9; if 1200 le W1ENRK12UG le 1499 then W1SCHSIZE = 10; if 1500 le W1ENRK12UG le 1999 then W1SCHSIZE = 11; if W1ENRK12UG ge 2000 then W1SCHSIZE = 12;</p>
WISECTOR	Frame	<p>School sector. Determined by classification in sampling frames and/or survey data. For more details, refer to chapter 4 in the <i>Documentation for the 2007–08 Schools and Staffing Survey</i> (NCES 2010-332). Categories include:</p>

Variable name	Variable type	Description and specifications
W1SLOCP12	Frame	<p>1 = Public; 2 = Private; 3 = BIE.</p> <p>Urban-centric locale code. This methodology was updated to incorporate 2000 Census population and geography information (e.g., using Consolidated Statistical Area/Core-Based Statistical Area—CSA/CBSA—geographical entities instead of Metropolitan Statistical Area, or MSA, entities). For more information, please see the <i>Documentation to the NCES Common Core of Data Public Elementary/Secondary School Locale Code File: School Year 2005–06</i> (NCES 2008-332) at http://nces.ed.gov/ccd/pdf/sl051bgen.pdf. Origin: LOCALE08 from the 2005–06 CCD Elementary/Secondary Locale Code file. Categories include:</p> <p>11 = City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more; 12 = City, Midsize: Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000; 13 = City, Small: Territory inside an urbanized area and inside a principal city with population less than 100,000; 21 = Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more; 22 = Suburb, Midsize: Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000; 23 = Suburb, Small: Territory outside a principal city and inside an urbanized area with population less than 100,000; 31 = Town, Fringe: Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area; 32 = Town, Distant: Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area; 33 = Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area; 41 = Rural, Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster; 42 = Rural, Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster; 43 = Rural, Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.</p>
		<p>2000 Decennial Census school locale code based on school's physical location relative to a populous area. Micropolitan areas are new, smaller designated metropolitan areas with populations as low as 10,000 residents. For more information on Core-Based Statistical Areas, see http://www.census.gov/population/www/estimates/aboutmetro.html. Origin: LOCALE05 from the 2005–06 CCD. Categories include:</p> <p>1 = Large City: A principal city of a metropolitan Core-Based Statistical Area (CBSA), with the city having a population greater than or equal to 250,000. 2 = Midsize City: A principal city of a metropolitan CBSA, with the city having a population less than 250,000. 3 = Urban Fringe of a Large City: Any incorporated place, Census-designated place, or nonplace territory within a metropolitan CBSA of a Large City and defined as urban by the Census Bureau.</p>

Variable name	Variable type	Description and specifications					
		4 = Urban Fringe of a Midsize City: Any incorporated place, Census designated place, or nonplace territory within a CBSA of a Midsize City and defined as urban by the Census Bureau.					
		5 = Large Town: An incorporated place or Census-designated place with a population greater than or equal to 25,000 and located outside a metropolitan CBSA or inside a micropolitan CBSA.					
		6 = Small Town: An incorporated place or Census-designated place with a population less than 25,000 and greater than or equal to 2,500 and located outside a metropolitan CBSA or inside a micropolitan CBSA.					
		7 = Rural, outside CBSA: Any incorporated place, Census-designated place, or nonplace territory not within a metropolitan CBSA or within a micropolitan CBSA and defined as rural by the Census Bureau.					
		8 = Rural, inside CBSA: Any incorporated place, Census-designated place, or nonplace territory within a metropolitan CBSA and defined as rural by the Census Bureau.					
W1STAT_ABB	Frame	Two-letter state abbreviation that identifies the state with administrative control over the district and the schools within that district. Recoded from STATE in the SASS sampling frame.					
		Categories include:					
		Alabama	AL	Kentucky	KY	North Dakota	ND
		Alaska	AK	Louisiana	LA	Ohio	OH
		Arizona	AZ	Maine	ME	Oklahoma	OK
		Arkansas	AR	Maryland	MD	Oregon	OR
		California	CA	Massachusetts	MA	Pennsylvania	PA
		Colorado	CO	Michigan	MI	Rhode Island	RI
		Connecticut	CT	Minnesota	MN	South Carolina	SC
		Delaware	DE	Mississippi	MS	South Dakota	SD
		District of Columbia	DC	Missouri	MO	Tennessee	TN
		Florida	FL	Montana	MT	Texas	TX
		Georgia	GA	Nebraska	NE	Utah	UT
		Hawaii	HI	Nevada	NV	Vermont	VT
		Idaho	ID	New Hampshire	NH	Virginia	VA
		Illinois	IL	New Jersey	NJ	Washington	WA
		Indiana	IN	New Mexico	NM	West Virginia	WV
		Iowa	IA	New York	NY	Wisconsin	WI
		Kansas	KS	North Carolina	NC	Wyoming	WY
W1STATE	Frame	FIPS state code that identifies the state with administrative control over the district and the schools within that district. Origin: STATE in the SASS sampling frame. DoD and BIE school locations are based on the physical location of the school. For a complete list of FIPS codes, reference http://www.itl.nist.gov/fipspubs/fip5-2.htm .					
		Alabama	01	Kentucky	21	North Dakota	
		Alaska	02	Louisiana	22	Ohio	
		Arizona	04	Maine	23	Oklahoma	
		Arkansas	05	Maryland	24	Oregon	
		California	06	Massachusetts	25	Pennsylvania	
		Colorado	08	Michigan	26	Rhode Island	
		Connecticut	09	Minnesota	27	South Carolina	
		Delaware	10	Mississippi	28	South Dakota	
		District of Columbia	11	Missouri	29	Tennessee	
		Florida	12	Montana	30	Texas	
		Georgia	13	Nebraska	31	Utah	

Variable name	Variable type	Description and specifications	
		Hawaii	15
		Idaho	16
		Illinois	17
		Indiana	18
		Iowa	19
		Kansas	20
		Nevada	32
		New Hampshire	33
		New Jersey	34
		New Mexico	35
		New York	36
		North Carolina	37
		Vermont	50
		Virginia	51
		Washington	53
		West Virginia	54
		Wisconsin	55
		Wyoming	56
W1STU_TCH	Created	Estimated number of students per full-time-equivalent (FTE) teacher in the school. For cases where the school was a noninterview, sample file or other information was used to impute (if available). Calculated as follows for school files: W1STU_TCH = (INT((W1ENRK12UG/W1NUMTCH)*10e3)/10e3);	
W1SURVEY	Frame	Name of questionnaire. District information collected in the SASS School District Questionnaire (1A) and Unified School Questionnaire (3Y). See chapter 5 of the <i>Documentation for the 2007–08 Schools and Staffing Survey</i> (NCES 2010-332) for details. Categories include: 1 = School District Questionnaire (1A), 2 = Principal Questionnaire (2A), 3 = Private School Principal Questionnaire (2B), 4 = School Questionnaire (3A), 5 = Private School Questionnaire (3B), 6 = Public School Questionnaire (With District Items) (3Y), 7 = Teacher Questionnaire (4A), 8 = Private School Teacher Questionnaire (4B), 9 = School Library Media Center Questionnaire (LS-1A).	
W1TLEVEL	Created	Grade level of students taught by teacher. Teachers are grouped into four categories based on the grade levels of students taught and the teacher's main assignment. Categories include: 1 = primary, 2 = middle, 3 = high, 4 = combined. Coded as follows: Array L (*) W1T0050-W1T0064; Do i= 1 to dim(L); If L(i)=-8 then L(i)=.; end; /*TRUE MISSINGS -9*/ if W1T0050 = -9 and W1T0051 = -9 and W1T0052 = -9 and W1T0053 = -9 and W1T0054 = -9 and W1T0055 = -9 and W1T0056 = -9 and W1T0057 = -9 and W1T0058 = -9 and W1T0059 = -9 and W1T0060 = -9 and W1T0061 = -9 and W1T0062 = -9 and W1T0063 = -9 and W1T0064 = -9 then ng=1; if ng=1 then do; if W1T0067 in (101, 102) then W1TLEVEL = 1; else if W1T0067 = 110 and W1T0068 = 3 then W1TLEVEL = 1; else if W1T0068 = 2 then W1TLEVEL = 1; else W1TLEVEL = -9; end; /*LEVELS 1 2 3 4*/	

Variable name	Variable type	Description and specifications
		<pre> if ng ne 1 then do; if n(of W1T0050-W1T0063) > 0 then do; if n(of W1T0060-W1T0063) > 0 and n(of W1T0050-W1T0059) = 0 then W1TLEVEL = 3; * Secondary; else if n(of W1T0050-W1T0055) > 0 and n(of W1T0056-W1T0063) = 0 then W1TLEVEL = 1; * Elementary; else if W1T0067 in (101, 102) then W1TLEVEL = 1; else if W1T0067 = 110 and W1T0068 = 3 then W1TLEVEL = 1; else if n(of W1T0056-W1T0059) > 0 and n(of W1T0061-W1T0063) = 0 and n(of W1T0050-W1T0055) = 0 then W1TLEVEL=2; *Middle; else W1TLEVEL=4; *Combined; end; else do; W1TLEVEL = 4; * Combined; end; end; do i=1 to dim(L); If L(i)=. then L(i)=-8; end; Drop i ng; </pre>
W1TLEV2_03	Created	<p>TLEV2_03 divides teachers into elementary or secondary based on a combination of the grades taught, main teaching assignment, and the structure of their classes. Those with only ungraded classes become elementary-level teachers if their main assignment is early childhood/pre-K or elementary, or if they teach either special education in a self-contained classroom or an elementary enrichment class. All other teachers with ungraded classes are classified as secondary level. Among teachers with regularly graded classes, elementary-level teachers generally teach any of grades pre-k–5; report an early childhood/pre-K, elementary, self-contained special education, or elementary enrichment main assignment; or the majority of grades taught are K–6. In general, secondary-level teachers instruct any of grades 7–12, but usually no grade lower than grade 5. They also teach more of grades 7–12 than lower level grades.</p> <p>Categories include:</p> <p>1 = elementary;</p> <p>2 = secondary.</p> <p>Coded as follows:</p> <pre> if W1T0050 = -9 and W1T0051 = -9 and W1T0052 = -9 and W1T0053 = -9 and W1T0054 = -9 and W1T0055 = -9 and W1T0056 = -9 and W1T0057 = -9 and W1T0058 = -9 and W1T0059 = -9 and W1T0060 = -9 and W1T0061 = -9 and W1T0062 = -9 and W1T0063 = -9 and W1T0064 = -9 then W1TLEV2_03= -9; array M6(*) W1T0050-W1T0064; do i = 1 to dim(M6); if M6(i) = -8 then M6(i) = .; end; IF W1T0064=1 AND SUM(OF W1T0050--W1T0063) < 1 THEN DO; /* UNGRADED, AND NO PRE--K -- 12 */ if (W1T0067=110 and W1T0068=3) or W1T0067 in (101,102) or W1T0068=2 THEN W1TLEV2_03=1; /*ELEMENTARY*/ </pre>

Variable name	Variable type	Description and specifications
		<pre> ELSE W1TLEV2_03=2; /*SECONDARY*/ END; ELSE IF SUM(OF W1T0050--W1T0056) > 0 AND /*PRE-K--5TH*/ SUM(OF W1T0061--W1T0063) < 1 /*NO 10TH--12TH*/ THEN W1TLEV2_03=1; ELSE IF SUM(OF W1T0050--W1T0056) < 1 AND /*NO PRE-K--5TH*/ SUM(OF W1T0060--W1T0063) > 0 /*9TH--12TH*/ THEN W1TLEV2_03=2; ELSE IF W1T0058 >= 1 OR W1T0059 >= 1 OR /*7TH OR 8TH*/ (SUM(OF W1T0050--W1T0057)>0 AND /*OR PRE-K--6TH AND 9TH-- 12TH*/ SUM(OF W1T0060--W1T0063)>0) THEN DO; IF (W1T0067 in (101,102) or W1T0068=2) or (W1T0067=110 and W1T0068 =3) THEN W1TLEV2_03=1; /*PRE-K,KG,GEN.ELEM or ELEM ENRICH*/ ELSE W1TLEV2_03=2; /*ALL OTHERS, SECONDARY*/ END; ELSE IF SUM(OF W1T0056--W1T0060)>0 AND /*5TH--9TH*/ SUM(OF W1T0064,W1T0050--W1T0055)<1 THEN W1TLEV2_03=2; /*UG-- 4TH*/ ELSE IF W1T0068=2 THEN W1TLEV2_03=1; /*ELEM ENRICHMENT*/ ELSE IF SUM(OF W1T0058--W1T0063)=6 AND /*7TH--12TH*/ W1T0067 >= 141 THEN W1TLEV2_03=2; ELSE IF SUM(OF W1T0052--W1T0057)=6 AND /*1ST--6TH*/ W1T0067 in (101,102) THEN W1TLEV2_03=1; ELSE IF SUM(OF W1T0052--W1T0057) > /*1ST--6TH*/ SUM(OF W1T0058--W1T0063) THEN W1TLEV2_03=1; /*7TH--12TH*/ ELSE IF SUM(OF W1T0052--W1T0057) < /*1ST--6TH*/ SUM(OF W1T0058--W1T0063) THEN W1TLEV2_03=2; /*7TH--12TH*/ ELSE IF SUM(OF W1T0052--W1T0057) = /*1ST--6TH*/ SUM(OF W1T0058--W1T0063) THEN DO; /*7TH--12TH*/ IF W1T0067 in (101,102,110) or W1T0068=2 THEN W1TLEV2_03=1; /*ELEMENTARY*/ ELSE W1TLEV2_03=2; /*SECONDARY*/ END; ELSE IF SUM(OF W1T0051--W1T0056) > /*K--5TH*/ SUM(OF W1T0058--W1T0063) THEN W1TLEV2_03=1; /*7TH--12TH*/ ELSE IF SUM(OF W1T0051--W1T0056) < /*K--5TH*/ SUM(OF W1T0058--W1T0063) THEN W1TLEV2_03=2; /*7TH--12TH*/ ELSE IF W1T0067=102 THEN W1TLEV2_03=1; /*KG & GENL ELEM*/ ELSE IF W1T0067=110 and /*special ed*/ W1T0068 = 3 then W1TLEV2_03=1; /*self-cont*/ Else if W1T0068=2 then W1TLEV2_03=1; /*elem enrich*/ Else W1TLEV2_03=2; do i = 1 to dim(M6); if M6(i) = . then M6(i) = -8; end; </pre>
W1TOTYREXP	Created	<p>Teacher's adjusted years of teaching experience. Experience is calculated as the sum of years taught full- or part-time in public and private schools. Teaching experience may overlap by sector (public and private) or status (full- or part-time). To adjust for this, TOTYREXP cannot sum to more than the number of years that have elapsed between the year the teacher began teaching (T0037) and the survey year (2008). Teachers who began teaching in the 2007–08 school</p>

Variable name	Variable type	Description and specifications
		year are assigned one year of experience. Coded as follows: W1TOTYREXP = sum (W1T0038, W1T0039); if W1TOTYREXP gt 2 then W1TOTYREXP = 2;
W1UNITID	Created	NCES identification number for the school where the respondent received his or her bachelor's degree. This variable is provided so that data can be linked to the Integrated Postsecondary Education Data System (IPEDS) or other data sources that use the postsecondary institution identifier UNITID. Copied from the 2006 IPEDS variable "UNITID" and matched to the name of the college or university where the teacher reported receiving his or her bachelor's degree (T5116). For more information on IPEDS, see http://nces.ed.gov/ipeds/ .
W1URBANS12	Frame	This is a four-level collapse of SLOCP12 (urban-centric school locale code). Methodology was updated to incorporate 2000 Census population and geography information. Categories include: 1 = City, 2 = Suburb, 3 = Town, 4 = Rural. Coded as follows: if W1SLOCP12 in(11, 12, 13) then W1URBANS12 = 1; if W1SLOCP12 in(21, 22, 23) then W1URBANS12 = 2; if W1SLOCP12 in(31, 32, 33) then W1URBANS12 = 3; if W1SLOCP12 in(41, 42, 43) then W1URBANS12 = 4.
W1URBANS8	Frame	This is a three-level collapse of SLOCP8 (school locale code). Code was assigned using 2000 Decennial Census data. Categories include: 1 = Large or midsize central city, 2 = Urban fringe, large town, or rural area inside a CBSA, 3 = Small town or rural area outside of a CBSA. Coded as follows: if W1SLOCP8 in (1, 2) then W1URBANS8 = 1; if W1SLOCP8 in (3, 4, 5, 8) then W1URBANS8 = 2; if W1SLOCP8 in (6, 7) then W1URBANS8 = 3.
W2AGE	Created	Age of teacher in 2008–09. Calculated by adding one year to age as reported in SASS (AGE_T). Coded as follows: W2AGE = sum (W1AGE_T, 1);
W2ASN03	Created	General field of main teaching assignment in 2007–08. Categories include: 1 = Early Childhood or General Elementary; 2 = Special Education; 3 = Arts or Music; 4 = English and Language Arts; 5 = ESL or Bilingual Education; 6 = Foreign Languages; 7 = Health or Physical Education; 8 = Mathematics; 9 = Natural Sciences; 10 = Social Sciences; 11 = Vocational, Career, or Technical Education; 12 = All Others. Coded as follows: If W2STTUS = 1 then W2ASN03 = -8; * Respondent is a former teacher; If W2STTUS in (2,3) then do; If W2TEMAC = -9 then W2ASN03=-9;

Variable name	Variable type	Description and specifications
		<p>ELSE If W2TEMAC in (101,102) then W2ASN03 = 1; *Early Childhood/General Elementary;</p> <p>ELSE if W2TEMAC = 110 then W2ASN03 = 2; *Special Education;</p> <p>ELSE if W2TEMAC in (141, 143, 144, 145) then W2ASN03 = 3; *Arts and Music;</p> <p>ELSE if W2TEMAC in (151, 152, 153, 154, 155, 158, 159) then W2ASN03 = 4; *English/Language Arts;</p> <p>ELSE if W2TEMAC in (160, 161, 162) then W2ASN03 = 5; *ESL/Bilingual Education;</p> <p>ELSE if 171 le W2TEMAC le 175 then W2ASN03 = 6; *Foreign Language;</p> <p>ELSE if W2TEMAC in (181, 182) then W2ASN03 = 7; *Health/Physical Education;</p> <p>ELSE if W2TEMAC in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then W2ASN03 = 8; *Mathematics;</p> <p>ELSE if W2TEMAC in (210, 211, 212, 213, 215, 216, 217) then W2ASN03 = 9; *Natural Sciences;</p> <p>ELSE if W2TEMAC in (220, 221, 225, 226, 227, 228, 231, 233, 234) then W2ASN03 = 10; *Social Sciences;</p> <p>ELSE if 241 le W2TEMAC le 256 then W2ASN03 = 11; *Vocational/Technical Education;</p> <p>ELSE if W2TEMAC in (197, 262, 264, 265, 266, 267, 268) then W2ASN03 = 12; *Other; End;</p>
W2BIEFLAG	Created	<p>Flag that indicates whether a school is operated or funded by the Bureau of Indian Education (BIE). Categories include:</p> <p>1 = School is operated or funded by BIE;</p> <p>2 = School is not operated or funded by BIE.</p> <p>Coded as follows:</p> <p>If W2FSECT in (1,2) then W2BIEFLAG = 2; *Not a BIE school;</p> <p>Else if W2FSECT = 3 then W2BIEFLAG = 1; *BIE school;</p> <p>Else W2BIEFLAG = W2FSECT;</p>
W2CHARFLAG	Created	<p>Flag that indicates whether or not the 2008–09 BTLs school is a charter school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school. Categories include:</p> <p>1 = School is a public charter school;</p> <p>2 = School is not a public charter school.</p> <p>Coded as follows:</p> <p>If W2STTUS in (2) then W2CHARFLAG=W1CHARFLAG; *Stayers' Charter status from SASS File;</p> <p>If W2STTUS in (3) then do;</p> <p>If W2FORYN = 1 then W2CHARFLAG = -8; *School outside US;</p> <p>Else if W2FSECT = 2 then W2CHARFLAG = -8; *Private school;</p> <p>Else W2CHARFLAG=CHARTR; *Movers charter status from CCD;</p> <p>end;</p> <p>Else if W2STTUS in (1) then W2CHARFLAG=-8; *Not applicable-Leavers;</p>
W2COUNTRY	Created	<p>Teacher's country of residence in 2008–09.</p> <p>Coded as follows:</p> <p>If W2OUT_OF_COUNTRY ne 1 then W2COUNTRY = "USA";</p> <p>If W2OUT_OF_COUNTRY = 1 then W2COUNTRY = W2OOC_COUNTRY;</p>
W2EARN\$	Created	<p>Teacher's total yearly earnings from all school-related jobs for the summer of 2008 and the 2008–09 school year.</p> <p>Coded as follows:</p>

Variable name	Variable type	Description and specifications
W2EARNT	Created	<p>Array M (*) W2ERSSA W2ERNTA W2TCHSA W2EREXA W2EROSA; count=0; DO i=1 to dim(M); if M (i) in (-8) then M (i)=.; if M (i) in (-9) then count+1; if M (i) in (-9) then M (i)=.N; END; If count gt 0 then W2EARNs = -9; else do; If W2STTUS = 1 then W2EARNs= -8; * Respondent is a former teacher; If W2STTUS in (2,3) then DO; W2EARNs=sum (W2ERSSA, W2ERNTA, W2TCHSA, W2EREXA, W2EROSA); End; end; DO I=1 to dim (M); if M (i) = .N then M(i)=-9; if M(i)=. then M(i)=-8; end; Drop i; Teacher's total earnings for the summer of 2008 and the 2008–09 school year. Includes base salary for 2008–09 school year, any pay for teaching summer school, additional compensation from the school system, working in a nonteaching job in a school, or working at any nonschool job. Coded as follows: Array P (*) W2ERSSA W2ERNTA W2TCHSA W2EREXA W2EROSA W2ERNSA W2EROUA; count=0; DO i=1 to dim(P); if P (i) in (-8) then P (i)=.; if P (i) in (-9) then count+1; if P (i) in (-9) then P (i)=.N; END; If count gt 0 then W2EARNT= -9; else do; If W2STTUS = 1 then W2EARNT = -8; * Respondent is a former teacher; If W2STTUS in (2,3) then DO; W2EARNT=sum (W2ERSSA, W2ERNTA, W2TCHSA, W2EREXA, W2EROSA, W2ERNSA, W2EROUA); End; end; DO I=1 to dim (P); if P (i) = .N then P (i)=-9; if P (i)=. then P (i)=-8; end; Drop i;</p>
W2FCSTS	Created	<p>Teacher's 2008–09 current or former teaching status. Categories include: 1 = Former teacher; 2 = Current teacher. Coded as follows: If W2ISRD in (1,2) then do; If W2STTUS in (2,3) then W2FCSTS = 2; * Current teacher;</p>

Variable name	Variable type	Description and specifications
W2FSECT	Created	<p>If W2STTUS = 1 then W2FCSTS = 1; * Former teacher; End; School sector for the 2008–09 BTLS school. Categories include: 1 = Public; 2 = Private; 3 = BIE. Coded as follows: If W2STTUS = 2 then W2FSECT = W1SECTOR; if W2STTUS = 1 then W2FSECT = -8; * Respondent is a leaver; If W2STTUS = 3 then do; If FIPST = 59 then W2FSECT=3; *BIE; Else if W2FORYN = 1 then W2FSECT = -8; *School outside US; Else if W2NCSID is from CCD then W2FSECT = 1; Public; Else if W2NCSID is from PSS then W2FSECT = 2; Private; End;</p>
W2ISR	Created	<p>Interview status for 2008–09. Categories include: 1 = respondent in-scope for 2008–09; 2 = nonrespondent for 2008–09; 3 = out-of-scope for 2008–09 (deceased).</p>
W2ISRD	Created	<p>Detailed interview status for 2008–09. Categories include: 1 = Wave respondent (ISR met); 2 = Retrospective respondent (e.g., if provided 2008–09 status in the 2009–10 collection, then the case’s detailed ISR category would change from one of the nonrespondent codes to this one); 9 = Nonrespondent, unable to locate; 10 = Nonrespondent, temporarily mentally or physically incapacitated; 11 = Nonrespondent, refusal; 12 = Nonrespondent, study refusal (case has requested removal from the study); 13 = Nonrespondent, no questionnaire completed and no other information available; 15 = Out-of-scope, deceased or permanently incapacitated; 16 = Out-of-scope, sampling error.</p>
W2NCSID	Frame	<p>NCES school identification number. Origin: NCESSCH from the 2008–09 CCD and PPIN from the 2008–09 PSS. For public and BIE schools: Digits 1–2: FIPS state code. Digits 3–7: District code. Digits 8–12: School code. For a complete list of FIPS codes, reference http://www.itl.nist.gov/fipspubs/fip5-2.htm. Coded as follows: If W2STTUS in (2) then do; W2NCSID=W1SC_NCSID; *Stayers; Else if W2STTUS=3 and W2FORYN = 1 then W2NCSID = -8; *School outside US; Else If W2STTUS=3 and W2FSECT in (1,3) then W2NCSID=NCESSCH; *Mover's new school ID from 2008-09 CCD; Else if W2STTUS=3 and W2FSECT = 2 then W2NCSID=PPIN ; * Mover's new school ID from 2008-09 PSS; Else if W2STTUS=1 then W2NCSID=-8; *Leavers- no school ID code;</p>
W2NSTATE	Created	<p>Numeric recode of state location of school for current teachers and location for former teachers. Identical to W2STABB. Categories include: 1 = Alabama; 2 = Alaska;</p>

Variable name	Variable type	Description and specifications
		3 = Arizona; 4 = Arkansas; 5 = California; 6 = Colorado; 7 = Connecticut; 8 = Delaware; 9 = District of Columbia; 10 = Florida; 11 = Georgia; 12 = Hawaii; 13 = Idaho; 14 = Illinois; 15 = Indiana; 16 = Iowa; 17 = Kansas; 18 = Kentucky; 19 = Louisiana; 20 = Maine; 21 = Maryland; 22 = Massachusetts; 23 = Michigan; 24 = Minnesota; 25 = Mississippi; 26 = Missouri; 27 = Montana; 28 = Nebraska; 29 = Nevada; 30 = New Hampshire; 31 = New Jersey; 32 = New Mexico; 33 = New York; 34 = North Carolina; 35 = North Dakota; 36 = Ohio; 37 = Oklahoma; 38 = Oregon; 39 = Pennsylvania; 40 = Rhode Island; 41 = South Carolina; 42 = South Dakota; 43 = Tennessee; 44 = Texas; 45 = Utah; 46 = Vermont; 47 = Virginia; 48 = Washington; 49 = West Virginia; 50 = Wisconsin; 51 = Wyoming. Coded as follows: if W2STTUS = 2 then W2NSTATE = W1NUMSTATE; if W2STTUS in (1,3) then do; if W2STABB = 'AL' then W2NSTATE = 1;

Variable name	Variable type	Description and specifications
		if W2STABB = 'AK' then W2NSTATE = 2; if W2STABB = 'AZ' then W2NSTATE = 3; if W2STABB = 'AR' then W2NSTATE = 4; if W2STABB = 'CA' then W2NSTATE = 5; if W2STABB = 'CO' then W2NSTATE = 6; if W2STABB = 'CT' then W2NSTATE = 7; if W2STABB = 'DE' then W2NSTATE = 8; if W2STABB = 'DC' then W2NSTATE = 9; if W2STABB = 'FL' then W2NSTATE = 10; if W2STABB = 'GA' then W2NSTATE = 11; if W2STABB = 'HI' then W2NSTATE = 12; if W2STABB = 'ID' then W2NSTATE = 13; if W2STABB = 'IL' then W2NSTATE = 14; if W2STABB = 'IN' then W2NSTATE = 15; if W2STABB = 'IA' then W2NSTATE = 16; if W2STABB = 'KS' then W2NSTATE = 17; if W2STABB = 'KY' then W2NSTATE = 18; if W2STABB = 'LA' then W2NSTATE = 19; if W2STABB = 'ME' then W2NSTATE = 20; if W2STABB = 'MD' then W2NSTATE = 21; if W2STABB = 'MA' then W2NSTATE = 22; if W2STABB = 'MI' then W2NSTATE = 23; if W2STABB = 'MN' then W2NSTATE = 24; if W2STABB = 'MS' then W2NSTATE = 25; if W2STABB = 'MO' then W2NSTATE = 26; if W2STABB = 'MT' then W2NSTATE = 27; if W2STABB = 'NE' then W2NSTATE = 28; if W2STABB = 'NV' then W2NSTATE = 29; if W2STABB = 'NH' then W2NSTATE = 30; if W2STABB = 'NJ' then W2NSTATE = 31; if W2STABB = 'NM' then W2NSTATE = 32; if W2STABB = 'NY' then W2NSTATE = 33; if W2STABB = 'NC' then W2NSTATE = 34; if W2STABB = 'ND' then W2NSTATE = 35; if W2STABB = 'OH' then W2NSTATE = 36; if W2STABB = 'OK' then W2NSTATE = 37; if W2STABB = 'OR' then W2NSTATE = 38; if W2STABB = 'PA' then W2NSTATE = 39; if W2STABB = 'RI' then W2NSTATE = 40; if W2STABB = 'SC' then W2NSTATE = 41; if W2STABB = 'SD' then W2NSTATE = 42; if W2STABB = 'TN' then W2NSTATE = 43; if W2STABB = 'TX' then W2NSTATE = 44; if W2STABB = 'UT' then W2NSTATE = 45; if W2STABB = 'VT' then W2NSTATE = 46; if W2STABB = 'VA' then W2NSTATE = 47; if W2STABB = 'WA' then W2NSTATE = 48; if W2STABB = 'WV' then W2NSTATE = 49; if W2STABB = 'WI' then W2NSTATE = 50; if W2STABB = 'WY' then W2NSTATE = 51; if W2STABB = '-8' then W2NSTATE = -8; if W2STABB = '-9' then W2NSTATE = -9; end;

Variable name	Variable type	Description and specifications
W2OCODE	Created	2002 NAICS Occupation Classification. Origin: W2OCCTL.
W2P_FCSTS	Created	Flag to identify whether proxy data, rather than respondent data, were used for survey item W2FCSTS. Categories include: 1= Respondent; 2= Parent; 3= Spouse/former spouse.
W2P_REGCL	Created	Flag to identify whether proxy data, rather than respondent data, were used for survey item W2REGCL. Categories include: 1= Respondent; 2= Parent; 3= Spouse/former spouse.
W2REGION	Created	Census region where school is located for current teachers and where respondent is located for former teachers. Categories include: 1 = Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; 2 = Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; 3 = South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; 4 = West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming. Coded as follows: if W2STTUS = 2 then W2REGION = W1REGION; else if W2STTUS in (1,3) then do; if W2STABB in ('CT', 'ME', 'MA', 'NH', 'NJ', 'NY', 'PA', 'RI', 'VT') then W2REGION = 1; *Northeast; if W2STABB in ('IL', 'IN', 'IA', 'KS', 'MI', 'MN', 'MO', 'NE', 'ND', 'OH', 'SD', 'WI') then W2REGION = 2; *Midwest; if W2STABB in ('AL', 'AR', 'DE', 'DC', 'FL', 'GA', 'KY', 'LA', 'MD', 'MS', 'NC', 'OK', 'SC', 'TN', 'TX', 'VA', 'WV') then W2REGION = 3; *South; if W2STABB in ('AK', 'AZ', 'CA', 'CO', 'HI', 'ID', 'MT', 'NV', 'NM', 'OR', 'UT', 'WA', 'WY') then W2REGION = 4; *West; end; If W2STABB = . then W2REGION = W2STABB;
W2RELIG	Created	Three-level private school typology. Categories include: 1 = Catholic; 2 = Other religious; 3 = Nonsectarian. Coded as follows: if TYPOLOGY in (1, 2, 3) then W2RELIG =1; if TYPOLOGY in (4, 5, 6) then W2RELIG =2; if TYPOLOGY gt 6 then W2RELIG =3; For cases where the school was a noninterview, sample file or other information was used to impute (if available). Coded as follows: if sector in(1,3) then do; if W2RELIG = . then W2RELIG = -8; end;
W2RSECT	Created	Respondent-reported 2008–09 school sector. Categories include: 1 = Public;

Variable name	Variable type	Description and specifications
W2SLOCP12	Created	<p>2 = Private; 3 = BIE. Coded as follows: If W2STTUS = 2 then W2RSECT = W1SECTOR; If W2STTUS = 1 then W2RSECT = -8; If W2STTUS = 3 then do; If W2FORYN = 1 then W2RSECT = -8; Else If W2MVTYP in (1,2,3) then W2RSECT=1; Else If W2MVTYP in (4,5) then W2RSECT=2; End;</p> <p>Urban-centric locale code. This methodology was updated to incorporate 2000 Census population and geography information (e.g., using Consolidated Statistical Area/Core-Based Statistical Area—CSA/CBSA—geographical entities instead of Metropolitan Statistical Area, or MSA, entities). For more information, please refer to the <i>Documentation to the NCES Common Core of Data Public Elementary/Secondary School Locale Code File: School Year 2005–06</i> (NCES 2008-332) at http://nces.ed.gov/ccd/pdf/sl051bgen.pdf. Origin: ULOCAL08 school locale code from the 2008–09 CCD.</p> <p>Categories include: 11 = City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more; 12 = City, Midsize: Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000; 13 = City, Small: Territory inside an urbanized area and inside a principal city with population less than 100,000; 21 = Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more; 22 = Suburb, Midsize: Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000; 23 = Suburb, Small: Territory outside a principal city and inside an urbanized area with population less than 100,000; 31 = Town, Fringe: Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area; 32 = Town, Distant: Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area; 33 = Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area; 41 = Rural, Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster; 42 = Rural, Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster; 43 = Rural, Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.</p> <p>Coded as follows: If W2STTUS=2 then W2SLOCP12=W1SLOCP12; *Stayer's SASS School locale code; Else If W2STTUS=3 and W2MVTYP in (1,2,3) then W2SLOCP12= ULOCAL08; *Mover's new school locale code from 2008-09 CCD; Else if W2STTUS=3 and W2MVTYP in (4,5) then W2SLOCP12=ULOCAL08; * Mover's new school locale code from 2008-09 PSS;</p>

Variable name	Variable type	Description and specifications																																																																																					
W2STABB	Created	Else if W2STTUS=1 then W2SLOCP12=-8; *Leavers- no locale code; Else if W2STTUS = 3 and W2FORYN = 1 then W2SLOCP12 = -8; *School outside US; FIPS state postal abbreviation for current teacher’s school or former teacher’s home. Categories include: <table><tr><td>Alabama</td><td>AL</td><td>Kentucky</td><td>KY</td><td>North Dakota</td></tr><tr><td>Alaska</td><td>AK</td><td>Louisiana</td><td>LA</td><td>Ohio</td></tr><tr><td>Arizona</td><td>AZ</td><td>Maine</td><td>ME</td><td>Oklahoma</td></tr><tr><td>Arkansas</td><td>AR</td><td>Maryland</td><td>MD</td><td>Oregon</td></tr><tr><td>California</td><td>CA</td><td>Massachusetts</td><td>MA</td><td>Pennsylvania</td></tr><tr><td>Colorado</td><td>CO</td><td>Michigan</td><td>MI</td><td>Rhode Island</td></tr><tr><td>Connecticut</td><td>CT</td><td>Minnesota</td><td>MN</td><td>South Carolina</td></tr><tr><td>Delaware</td><td>DE</td><td>Mississippi</td><td>MS</td><td>South Dakota</td></tr><tr><td>District of Columbia</td><td>DC</td><td>Missouri</td><td>MO</td><td>Tennessee</td></tr><tr><td>Florida</td><td>FL</td><td>Montana</td><td>MT</td><td>Texas</td></tr><tr><td>Georgia</td><td>GA</td><td>Nebraska</td><td>NE</td><td>Utah</td></tr><tr><td>Hawaii</td><td>HI</td><td>Nevada</td><td>NV</td><td>Vermont</td></tr><tr><td>Idaho</td><td>ID</td><td>New Hampshire</td><td>NH</td><td>Virginia</td></tr><tr><td>Illinois</td><td>IL</td><td>New Jersey</td><td>NJ</td><td>Washington</td></tr><tr><td>Indiana</td><td>IN</td><td>New Mexico</td><td>NM</td><td>West Virginia</td></tr><tr><td>Iowa</td><td>IA</td><td>New York</td><td>NY</td><td>Wisconsin</td></tr><tr><td>Kansas</td><td>KS</td><td>North Carolina</td><td>NC</td><td>Wyoming</td></tr></table> Coded as follows: if W2STTUS = 2 then W2STABB = W1STAT_ABB; *STAT_ABB variable from SASS; if W2STTUS = 3 then do; W2STABB = W2SCSTA; *Mover's current school address from survey; else if W2OUT_OF_COUNTRY = 1 then W2STABB = '-8'; *From master file. Respondent lives outside US; end; if W2STTUS = 1 then do; if W2USTAT ne '' then W2STABB = W2USTAT; *Leaver's current home address from survey; else if W2ST ne '' then W2STABB = W2ST; *From master file. Leaver's home address; else if W2OUT_OF_COUNTRY = 1 then W2STABB = '-8'; *From master file. Respondent lives outside US; end;	Alabama	AL	Kentucky	KY	North Dakota	Alaska	AK	Louisiana	LA	Ohio	Arizona	AZ	Maine	ME	Oklahoma	Arkansas	AR	Maryland	MD	Oregon	California	CA	Massachusetts	MA	Pennsylvania	Colorado	CO	Michigan	MI	Rhode Island	Connecticut	CT	Minnesota	MN	South Carolina	Delaware	DE	Mississippi	MS	South Dakota	District of Columbia	DC	Missouri	MO	Tennessee	Florida	FL	Montana	MT	Texas	Georgia	GA	Nebraska	NE	Utah	Hawaii	HI	Nevada	NV	Vermont	Idaho	ID	New Hampshire	NH	Virginia	Illinois	IL	New Jersey	NJ	Washington	Indiana	IN	New Mexico	NM	West Virginia	Iowa	IA	New York	NY	Wisconsin	Kansas	KS	North Carolina	NC	Wyoming
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Indiana	IN	New Mexico	NM	West Virginia																																																																																			
Iowa	IA	New York	NY	Wisconsin																																																																																			
Kansas	KS	North Carolina	NC	Wyoming																																																																																			
W2STTUS	Created	Teacher’s 2008–09 status as a stayer, mover, or leaver. Stayers are teachers who were teaching in the same school in the current school year as in the base year. Movers are teachers who were still teaching but had moved to a different school after the base year. Leavers are teachers who left the teaching profession after the base year. Categories include: 1 = Leaver; 2 = Stayer; 3 = Mover. Coded as follows: if W2MOVYN = 1 then W2STTUS = 2; *Stayer; if W2MOVYN = 2 then W2STTUS = 3; *Mover; if W2REGCL = 2 or (W2REGCL = 1 and W2POSSC in (8,9,10)) then W2STTUS = 1; *Leaver;																																																																																					

Variable name	Variable type	Description and specifications
W2SUBMT	Created	Interview submission method. Categories include: 1 = Submitted via mail; 2 = Submitted via Internet; 3 = Submitted via phone.
W2TEFRPL	Frame	Percentage of students eligible to participate in the National School Lunch Program in the 2008–09 BTLS school. Origin: MEMBER08 and TOTFRL08 in the 2008–09 CCD Public School Universe file.
W2TLEVEL	Created	2008–09 reported teaching level. Categories include: 1 = Primary; 2 = Middle; 3 = High; 4 = Combined. Coded as follows: Array L (*) W2TEGPK W2TEGKG W2TEG01 W2TEG02 W2TEG03 W2TEG04 W2TEG05 W2TEG06 W2TEG07 W2TEG08 W2TEG09 W2TEG10 W2TEG11 W2TEG12 W2TEGUG; Do i= 1 to dim(L); If L(i)=-8 then L(i)=.; end; /*VALID SKIPS -8*/ if W2FCSTS = 1 then W2TLEVEL = -8; * Respondent is a former teacher; /*TRUE MISSINGS -9*/ if W2TEGPK in (.n, -9) and W2TEGKG in (.n, -9) and W2TEG01 in (.n, -9) and W2TEG02 in (.n, -9) and W2TEG03 in (.n, -9) and W2TEG04 in (.n, -9) and W2TEG05 in (.n, -9) and W2TEG06 in (.n, -9) and W2TEG07 in (.n, -9) and W2TEG08 in (.n, -9) and W2TEG09 in (.n, -9) and W2TEG10 in (.n, -9) and W2TEG11 in (.n, -9) and W2TEG12 in (.n, -9) then nolev=1; if nolev=1 THEN DO; if W2TEGUG in (.n, -9) then ng=1; *No grades marked; else if W2TEGUG in (1) then ng=2; *Only ungraded marked; END; else ng=3; *Grades are marked; /*LEVELS 1 2 3 4*/ if W2FCSTS = 2 and ng=3 then do; if (W2TEGPK gt 0 or W2TEGKG gt 0 or W2TEG01 gt 0 or W2TEG02 gt 0 or W2TEG03 gt 0 or W2TEG04 gt 0 or W2TEG05 gt 0 or W2TEG06 gt 0 or W2TEG07 gt 0 or W2TEG08 gt 0 or W2TEG09 gt 0 or W2TEG10 gt 0 or W2TEG11 gt 0 or W2TEG12 gt 0) then do; if (W2TEG09 = 1 or W2TEG10 = 1 or W2TEG11 = 1 or W2TEG12 = 1) and (W2TEGPK ne 1 and W2TEGKG ne 1 and W2TEG01 ne 1 and W2TEG02 ne 1 and W2TEG03 ne 1 and W2TEG04 ne 1 and W2TEG05 ne 1 and W2TEG06 ne 1 and W2TEG07 ne 1 and W2TEG08 ne 1) then W2TLEVEL = 3; * Secondary; else if (W2TEGPK = 1 or W2TEGKG = 1 or W2TEG01 = 1 or W2TEG02 =

Variable name	Variable type	Description and specifications
		1 or W2TEG03 = 1 or W2TEG04 = 1) and (W2TEG06 ne 1 and W2TEG07 ne 1 and W2TEG08 ne 1 and W2TEG09 ne 1 and W2TEG10 ne 1 and W2TEG11 ne 1 and W2TEG12 ne 1) then W2TLEVEL = 1; * Elementary; else if (W2TEG05 = 1 or W2TEG06 = 1 or W2TEG07 = 1 or W2TEG08 = 1) and (W2TEGPK ne 1 and W2TEGKG ne 1 and W2TEG01 ne 1 and W2TEG02 ne 1 and W2TEG03 ne 1 and W2TEG04 ne 1 and W2TEG10 ne 1 and W2TEG11 ne 1 and W2TEG12 ne 1) then W2TLEVEL=2; *Middle; else W2TLEVEL=4; *Combined; end; end; /*CASES STILL NOT ASSIGNED go by MAIN ASSIGNMENT - ELEM., SPEC. ED., EARLY CHILD*/ ELSE if ng ne 3 then do; /*Added ELSE*/ if W2TEMAC in (101, 102) then W2TLEVEL = 1; else if W2TEMAC = 110 and W2TECLD = 3 then W2TLEVEL = 1; else if W2TECLD =2 then W2TLEVEL = 1; else if ng=2 then W2TLEVEL=4; else W2TLEVEL = -9; end; /*RETRO CASES RECIEVE a -8*/ if W2ISRD = 2 then W2TLEVEL = -8; do i=1 to dim(L); If L(i)=. then L(i)=-8; end; Drop i ng nolev; Teacher's total teaching experience in 2008–09. Coded as follows: If W2STTUS in (2,3) then do; If W2TCHYR=-9 then W2TTEXP=-9; Else if 1 le W2TCHMO le 6 then W2TTEXP=sum of (2009,-W2TCHYR,+5); Else W2TTEXP=sum of (2009,-W2TCHYR); end; If W2STTUS = 1 then do; If 1 le W2TCHMO le 6 then W2TTEXP=sum of (2008,-W2TCHYR,+5); Else W2TTEXP=sum of (2008,-W2TCHYR); If W2TTEXP = 0 then W2TTEXP = 1; end;
W2TTEXP	Created	
W2URBANS12	Created	This is a four-level collapse of W2SLOCP12 (urban-centric school locale code) for the 2008–09 BTLS school. Methodology was updated to incorporate 2000 Census population and geography information. Categories include: 1 = City; 2 = Suburb; 3 = Town; 4 = Rural. Coded as follows: If W2SLOCP12 in (11,12,13) then W2URBANS12=1;

Variable name	Variable type	Description and specifications
W3AGE	Created	<p>If W2SLOCP12 in (21,22,23) then W2URBANS12=2; If W2SLOCP12 in (31,32,33) then W2URBANS12=3; If W2SLOCP12 in (41,42,43) then W2URBANS12=4; If W2SLOCP12 in (-8, -9) then W2URBANS12 = W2SLOCP12; Age of teacher in 2009–10. Calculated by adding one year to age as reported in SASS (AGE_T). Coded as follows: If W3BIRTY > 1 then W3AGE = (2010-W3BIRTY); else W3AGE= sum (W1AGE_T, 2);</p>
W3ASN03	Created	<p>General field of main teaching assignment in 2009–10. Categories include: 1 = Early Childhood or General Elementary; 2 = Special Education; 3 = Arts or Music; 4 = English and Language Arts; 5 = ESL or Bilingual Education; 6 = Foreign Languages; 7 = Health or Physical Education; 8 = Mathematics; 9 = Natural Sciences; 10 = Social Sciences; 11 = Vocational, Career, or Technical Education; 12 = All Others. Coded as follows: If W3FCSTS = 1 then W3ASN03 = -8; * Respondent is a former teacher; If W3FCSTS =2 then do; If W3TEMAC =-9 then do; W3ASN03=-9; Else do; if W3TEMAC in (101,102) then W3ASN03 = 1; *Early Childhood/General Elementary; if W3TEMAC = 110 then W3ASN03 = 2; *Special Education; if W3TEMAC in (141, 143, 144, 145) then W3ASN03 = 3; *Arts and Music; if W3TEMAC in (151, 152, 153, 154, 155, 158, 159) then W3ASN03 = 4; *English/Language Arts; if W3TEMAC in (160, 161, 162) then W3ASN03 = 5; *ESL/Bilingual Education; if 171 le W3TEMAC le 175 then W3ASN03 = 6; *Foreign Language; if W3TEMAC in (181, 182) then W3ASN03 = 7; *Health/Physical Education; if W3TEMAC in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then W3ASN03 = 8; *Mathematics; if W3TEMAC in (210, 211, 212, 213, 215, 216, 217) then W3ASN03 = 9; *Natural Sciences; if W3TEMAC in (220, 221, 225, 226, 227, 228, 231, 233, 234) then W3ASN03 = 10; *Social Sciences; if 241 le W3TEMAC le 256 then W3ASN03 = 11; *Vocational/Technical Education; if W3TEMAC in (197, 262, 264, 265, 266, 267, 268) then W3ASN03 = 12; *Other; End; end;</p>
W3BIEFLAG	Created	<p>Flag that indicates whether a school is operated or funded by the Bureau of Indian Education (BIE). Categories include: 1 = School is operated or funded by BIE;</p>

Variable name	Variable type	Description and specifications
W3CHARFLAG	Created	<p>2 = School is not operated or funded by BIE. Coded as follows: If W3FSECT in (1,2) then W3BIEFLAG = 2; *Not a BIE school; Else if W3FSECT = 3 then W3BIEFLAG = 1; *BIE school; Else W3BIEFLAG = W3FSECT;</p> <p>Flag that indicates whether or not the 2009–10 BTLS school is a charter school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school. Categories include: 1 = School is a public charter school; 2 = School is not a public charter school. Coded as follows: If W3STTUS in (1) then W3CHARFLAG=-8; *Not applicable-Leavers; If W3STTUS in (2) and W2CHARFLAG ^= -4 then W3CHARFLAG=W2CHARFLAG; Else if W3STTUS in (2) and W2CHARFLAG = -4 then do; if W3NCSID = NCESSCH and CHARTR08 ^= 'N' then W3CHARFLAG=input(CHARTR08,1.); else W3CHARFLAG = -9; end; If W3STTUS = 4 and W3RESAS=1 then W3CHARFLAG=W1CHARFLAG; Else If W3STTUS in (-9, 3, 4) and W3RESAS ne 1 then do; If W3FORYN = 1 then W3CHARFLAG = -8; *School outside US; Else if W3FSECT = 2 then W3CHARFLAG = -8; *Private school; Else if W3FSECT in (1,3) then do; if CHARTR08 ^= 'N' then W3CHARFLAG=input(CHARTR08,1.); *Movers charter status from CCD; else W3CHARFLAG = -9; end; Else W3CHARFLAG = -9; end; end;</p>
W3COUNTRY	Created	<p>Teacher's country of residence in 2009–10. Coded as follows: If W3OUT_OF_COUNTRY ne 1 then W3COUNTRY = "USA"; If W3OUT_OF_COUNTRY = 1 then W3COUNTRY = W3OOC_COUNTRY;</p>
W3EARN\$	Created	<p>Teacher's total yearly earnings from all school-related jobs for the summer of 2009 and the 2009–10 school year. Coded as follows: Array M (5) W3ERSSA W3ERNTA W3TCHSA W3EREXA W3EROSA; count = 0; Do i=1 to 5; if M (i) in (-9,.n) then do; count + 1; end; end; Do i=1 to 5; if M (i) in (-8) then M (i)=.; if M (i) in (-9) then M (i)=.n; end; if count gt 0 then W3EARN\$ = -9; else If W3FCSTS = 1 then W3EARN\$ = -8; * Respondent is a former teacher;</p>

Variable name	Variable type	Description and specifications
W3EARNT	Created	<p>else if W3FCSTS =2 then W3EARNNS=sum (W3ERSSA, W3ERNNTA, W3TCHSA, W3EREXA, W3EROSA); do i = 1 to 5; if M (i) = .n then M (i)= -9; if M (i) = . then M (i)= -8; end; if W3EARNNS = . then W3EARNNS = -8; if W3EARNNS = .n then W3EARNNS = -9; Teacher's total earnings for the summer of 2009 and the 2009–10 school year. Includes base salary for 2009–10 school year, any pay for teaching summer school, additional compensation from the school system, working in a nonteaching job in a school, or working at any nonschool job. Coded as follows: Array MV(7) W3ERSSA W3ERNNTA W3TCHSA W3EREXA W3EROSA W3ERNNSA W3EROUA; count = 0; Do i=1 to 7; if MV(i) in (-9,.n) then do; count + 1; end; end; Do i=1 to 7; if MV(i) in (-8) then MV(i)=.; if MV(i) in (-9) then MV(i)=.n; end; if count gt 0 then W3EARNT = -9; else if W3FCSTS = 1 then W3EARNT = -8; * Respondent is a former teacher; else If W3FCSTS =2 then W3EARNT=sum (W3ERSSA, W3ERNNTA, W3TCHSA, W3EREXA, W3EROSA, W3ERNNSA, W3EROUA); Do i=1 to 7; if MV(i) = .n then MV(i)= -9; if MV(i) = . then MV(i)= -8; end; if W3EARNT = . then W3EARNT = -8; if W3EARNT = .n then W3EARNT = -9; drop count;</p>
W3FCSTS	Created	<p>Teacher's 2009–10 current or former teaching status. Categories include: 1 = Former teacher; 2 = Current teacher. Coded as follows: If W3ISRD in (1,2) then do; if W3REGCL=1 and W3POSSC in (1,2,3,4,5,6,7) then W3FCSTS=2; *Current; else if W3REGCL=2 or (W3REGCL=1 and W3POSSC in (8,9,10))then W3FCSTS=1; *Former; end;</p>
W3FSECT	Created	<p>School sector for the 2009–10 BTLS school. Categories include: 1 = Public; 2 = Private; 3 = BIE. Coded as follows:</p>

Variable name	Variable type	Description and specifications
W3ISR	Created	<p>If W3STTUS in (2) then do; if W2FSECT ^= -4 then W3FSECT = W2FSECT; else if W2FSECT = -4 then W3FSECT = -9; end; If W3STTUS in (4) and W3RESAS=1 then W3FSECT=W1SECTOR; if W3STTUS = 1 then W3FSECT = -8; * Respondent is a leaver; Else if W3STTUS in (-9,3,4) and W3RESAS ne 1 then do; If W3NCSID = '-9' then W3FSECT = -9; Else if W2NCSID ^= " and substr(W3NCSID, 1, 2) = '59' then W3FSECT = 3; *BIE; Else if W3FORYN = 1 then W3FSECT = -8; *School outside US; Else if W3NCSID = NCESSCH then W3FSECT = 1; Else if W3NCSID =ppin then W3FSECT = 2; Else if W3STTUS = 3 and W3MVTYP in (1,2,3) then W3FSECT = 1; *Public (using imputed MVTYP data when necessary); Else if W3STTUS = 3 and W3MVTYP in (4,5) then W3FSECT = 2; *Private (using imputed MVTYP data when necessary); End;</p> <p>Interview status for 2009–10. Categories include: 1 = respondent in-scope for 2009–10 BTLS; 2 = nonrespondent for 2009–10 BTLS; 3 = out-of-scope for 2009–10 BTLS (deceased). Coded as follows: If W3ISR in (1,2) then W3ISR = 1; * respondent in-scope for 2009-10 BTLS; If 9 <= W3ISR <= 13 then W3ISR = 2; * nonrespondent for 2009-10 BTLS; If W3ISR in (15, 16) then W3ISR = 3; * out-of-scope for 2009-10 BTLS;</p>
W3ISR	Created	<p>Detailed interview status for 2009–10. Categories include: 1 = Wave respondent (ISR met); 2 = Retrospective respondent (e.g., if provided 2009–10 status in the 2010–11 collection, then the case’s detailed ISR category would change from one of the nonrespondent codes to this one); 9 = Nonrespondent, unable to locate; 10 = Nonrespondent, temporarily mentally or physically incapacitated; 11 = Nonrespondent, refusal; 12 = Nonrespondent, study refusal (case has requested removal from the study); 13 = Nonrespondent, no questionnaire completed and no other information available; 15 = Out-of-scope, deceased or permanently incapacitated; 16 = Out-of-scope, sampling error.</p>
W3NCSID	Frame	<p>NCES school identification number. Origin: NCESSCH from the 2008–09 CCD and PPIN from the 2008–09 PSS. For public and BIE schools: Digits 1–2: FIPS state code. Digits 3–7: District code. Digits 8–12: School code. For a complete list of FIPS codes, reference http://www.itl.nist.gov/fipspubs/fip5-2.htm. Coded as follows: If W3STTUS=1 then W3NCSID = '-8'; *Leavers- no school ID code; Else If W3STTUS in (2) then do; if W2NCSID ne '-4' then W3NCSID=W2NCSID; *Stayers; else if W2NCSID = '-4' then W3NCSID='-9'; end; Else If W3STTUS in (4) and W3RESAS=1 then do; if W1SC_ORGID ne '-8' then W3NCSID = W1SC_ORGID; *Return to SASS</p>

Variable name	Variable type	Description and specifications
W3NSTATE	Created	<p>school; else W3NCSID=W1SC_NCSID; *Return to SASS school; end; Else If W3STTUS in (3,4, -9) then do; If W3FORYN = 1 then W3NCSID = '-8'; *School outside US; Else W3NCSID = left(W3SCHCOD); *New school ID from W3 New School Coder; if W3NCSID = " then W3NCSID = '-9'; end;</p> <p>Numeric recode of state location of school for current teachers and location for former teachers. Identical to W3STABB. Categories include: 1 = Alabama; 2 = Alaska; 3 = Arizona; 4 = Arkansas; 5 = California; 6 = Colorado; 7 = Connecticut; 8 = Delaware; 9 = District of Columbia; 10 = Florida; 11 = Georgia; 12 = Hawaii; 13 = Idaho; 14 = Illinois; 15 = Indiana; 16 = Iowa; 17 = Kansas; 18 = Kentucky; 19 = Louisiana; 20 = Maine; 21 = Maryland; 22 = Massachusetts; 23 = Michigan; 24 = Minnesota; 25 = Mississippi; 26 = Missouri; 27 = Montana; 28 = Nebraska; 29 = Nevada; 30 = New Hampshire; 31 = New Jersey; 32 = New Mexico; 33 = New York; 34 = North Carolina; 35 = North Dakota; 36 = Ohio; 37 = Oklahoma; 38 = Oregon; 39 = Pennsylvania; 40 = Rhode Island; 41 = South Carolina;</p>

Variable name	Variable type	Description and specifications
		42 = South Dakota; 43 = Tennessee; 44 = Texas; 45 = Utah; 46 = Vermont; 47 = Virginia; 48 = Washington; 49 = West Virginia; 50 = Wisconsin; 51 = Wyoming. Coded as follows: if W3STTUS = 2 then do; if W2NSTATE ^= -4 then W3NSTATE = W2NSTATE; else W3NSTATE = -9; end; if W3STTUS = 4 and W3RESAS = 1 then W3NSTATE=W1NUMSTATE; if W3STTUS in (1,3,4) then do; if W3STABB = 'AL' then W3NSTATE = 1; if W3STABB = 'AK' then W3NSTATE = 2; if W3STABB = 'AZ' then W3NSTATE = 3; if W3STABB = 'AR' then W3NSTATE = 4; if W3STABB = 'CA' then W3NSTATE = 5; if W3STABB = 'CO' then W3NSTATE = 6; if W3STABB = 'CT' then W3NSTATE = 7; if W3STABB = 'DE' then W3NSTATE = 8; if W3STABB = 'DC' then W3NSTATE = 9; if W3STABB = 'FL' then W3NSTATE = 10; if W3STABB = 'GA' then W3NSTATE = 11; if W3STABB = 'HI' then W3NSTATE = 12; if W3STABB = 'ID' then W3NSTATE = 13; if W3STABB = 'IL' then W3NSTATE = 14; if W3STABB = 'IN' then W3NSTATE = 15; if W3STABB = 'IA' then W3NSTATE = 16; if W3STABB = 'KS' then W3NSTATE = 17; if W3STABB = 'KY' then W3NSTATE = 18; if W3STABB = 'LA' then W3NSTATE = 19; if W3STABB = 'ME' then W3NSTATE = 20; if W3STABB = 'MD' then W3NSTATE = 21; if W3STABB = 'MA' then W3NSTATE = 22; if W3STABB = 'MI' then W3NSTATE = 23; if W3STABB = 'MN' then W3NSTATE = 24; if W3STABB = 'MS' then W3NSTATE = 25; if W3STABB = 'MO' then W3NSTATE = 26; if W3STABB = 'MT' then W3NSTATE = 27; if W3STABB = 'NE' then W3NSTATE = 28; if W3STABB = 'NV' then W3NSTATE = 29; if W3STABB = 'NH' then W3NSTATE = 30; if W3STABB = 'NJ' then W3NSTATE = 31; if W3STABB = 'NM' then W3NSTATE = 32; if W3STABB = 'NY' then W3NSTATE = 33; if W3STABB = 'NC' then W3NSTATE = 34; if W3STABB = 'ND' then W3NSTATE = 35; if W3STABB = 'OH' then W3NSTATE = 36;

Variable name	Variable type	Description and specifications
		if W3STABB = 'OK' then W3NSTATE = 37; if W3STABB = 'OR' then W3NSTATE = 38; if W3STABB = 'PA' then W3NSTATE = 39; if W3STABB = 'RI' then W3NSTATE = 40; if W3STABB = 'SC' then W3NSTATE = 41; if W3STABB = 'SD' then W3NSTATE = 42; if W3STABB = 'TN' then W3NSTATE = 43; if W3STABB = 'TX' then W3NSTATE = 44; if W3STABB = 'UT' then W3NSTATE = 45; if W3STABB = 'VT' then W3NSTATE = 46; if W3STABB = 'VA' then W3NSTATE = 47; if W3STABB = 'WA' then W3NSTATE = 48; if W3STABB = 'WV' then W3NSTATE = 49; if W3STABB = 'WI' then W3NSTATE = 50; if W3STABB = 'WY' then W3NSTATE = 51; if W3STABB = '-8' then W3NSTATE = -8; if W3STABB = '-9' then W3NSTATE = -9; end;
W3OCODE	Created	2002 NAICS Occupation Classification. Origin: W3OCCTL. Coded as follows: if W3FCSTS = 2 then W3OCODE = '-8'; * Respondent is a current teacher; else If W3FCSTS = 1 and IO1OCD ^= ' ' then W3OCODE = IO1OCD; else W3OCODE = '-9';
W3P_FCSTS	Created	Flag to identify whether proxy data, rather than respondent data, were used for survey item W3FCSTS. Categories include: 1= Respondent; 2= Parent; 3= Spouse/former spouse.
W3P_REGCL	Created	Flag to identify whether proxy data, rather than respondent data, were used for survey item W3REGCL. Categories include: 1= Respondent; 2= Parent; 3= Spouse/former spouse.
W3REGION	Created	Census region where school is located for current teachers and where respondent is located for former teachers. Categories include: 1 = Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; 2 = Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; 3 = South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; 4 = West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming. Coded as follows: if W3STTUS = 2 then do; if W2REGION ^= -4 then W3REGION = W2REGION; else W3REGION = -9; end;

Variable name	Variable type	Description and specifications
W3RELIG	Created	<p>else if W3STTUS = 4 and W3RESAS = 1 then W3REGION=W1REGION; else if W3STTUS in (1,3,4) then do; if W3STABB in ('CT', 'ME', 'MA', 'NH', 'NJ', 'NY', 'PA', 'RI', 'VT') then W3REGION = 1; *Northeast; if W3STABB in ('IL', 'IN', 'IA', 'KS', 'MI', 'MN', 'MO', 'NE', 'ND', 'OH', 'SD', 'WI') then W3REGION = 2; *Midwest; if W3STABB in ('AL', 'AR', 'DE', 'DC', 'FL', 'GA', 'KY', 'LA', 'MD', 'MS', 'NC', 'OK', 'SC', 'TN', 'TX', 'VA', 'WV') then W3REGION = 3; *South; if W3STABB in ('AK', 'AZ', 'CA', 'CO', 'HI', 'ID', 'MT', 'NV', 'NM', 'OR', 'UT', 'WA', 'WY') then W3REGION = 4; *West; end; else if W3STABB = '-8' then W3REGION = -8; else if W3STABB = '-9' then W3REGION = -9; Three-level private school typology. Categories include: 1 = Catholic; 2 = Other religious; 3 = Nonsectarian. Coded as follows: If W3FSECT in (1,3) then W3RELIG=-8; * Not a private school; Else if W3FSECT in (2, -9) then do; If W3STTUS = 2 then DO; IF W2RELIG ^= -4 THEN W3RELIG = W2RELIG; else IF W2RELIG= -4 and W3NCSID=ppin then W3RELIG=RELIG; *From PSS ELSE W3RELIG = -9; end; Else if W3STTUS in (-9, 3, 4) and W3RESAS ^= 1 and W3NCSID = ppin then W3RELIG=RELIG; *From PSS; Else W3RELIG = -9; end;</p>
W3SLOCP12	Created	<p>Urban-centric locale code. This methodology was updated to incorporate 2000 Census population and geography information (e.g., using Consolidated Statistical Area/Core-Based Statistical Area—CSA/CBSA—geographical entities instead of Metropolitan Statistical Area, or MSA, entities). For more information, please refer to the <i>Documentation to the NCES Common Core of Data Public Elementary/Secondary School Locale Code File: School Year 2005–06</i> (NCES 2008-332) at http://nces.ed.gov/ccd/pdf/sl051bgen.pdf. Origin: ULOCAL08 school locale code from 2008–09 CCD. Categories include: 11 = City, Large: Territory inside an urbanized area and inside a principal city with population of 250,000 or more; 12 = City, Midsize: Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000; 13 = City, Small: Territory inside an urbanized area and inside a principal city with population less than 100,000; 21 = Suburb, Large: Territory outside a principal city and inside an urbanized area with population of 250,000 or more; 22 = Suburb, Midsize: Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000; 23 = Suburb, Small: Territory outside a principal city and inside an urbanized area with population less than 100,000; 31 = Town, Fringe: Territory inside an urban cluster that is less than or equal to</p>

Variable name	Variable type	Description and specifications
W3STABB	Created	10 miles from an urbanized area; 32 = Town, Distant: Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area; 33 = Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area; 41 = Rural, Fringe: Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster; 42 = Rural, Distant: Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster; 43 = Rural, Remote: Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster. Coded as follows: If W3STTUS in (2) and W2SLOCP12 ^= -4 then W3SLOCP12=W2SLOCP12; Else if W3STTUS in (2) and W2SLOCP12=-4 then do; If W3FSECT in (1, 3) and W3NCSID=NCESSCH then W3SLOCP12=ULOCAL08; If W3FSECT in (2) and W3NCSID=PPIN then W3SLOCP12=ULOCAL; Else W3SLOCP12 = -9; end; *Stayer's SASS School locale code; If W3STTUS in (4) and W3RESAS=1 then W3SLOCP12=W1SLOCP12; If W3STTUS = 1 then W3SLOCP12=-8; *Leavers- no locale code; If W3STTUS in (-9,3,4) and W3RESAS ne 1 then do; If W3FSECT -9 then W3SLOCP12 = -9; If W3FORYN=1 then W3SLOCP12= -8; *School outside US; Else if W3FSECT in (1, 3) and W3NCSID = NCESSCH then W3SLOCP12=ULOCAL08; *Mover's new school locale code from 2008-09 CCD; Else if W3FSECT = 2 and W3NCSID =ppin then W3SLOCP12=ULOCAL ; * Mover's new school locale code from 2009-10 PSS; end; If W3ISR = 1 and W3SLOCP12 = . then W3SLOCP12 = -9; FIPS state postal abbreviation for current teacher's school or former teacher's home. Categories include: Alabama AL Kentucky KY North Dakota Alaska AK Louisiana LA Ohio Arizona AZ Maine ME Oklahoma Arkansas AR Maryland MD Oregon California CA Massachusetts MA Pennsylvania Colorado CO Michigan MI Rhode Island Connecticut CT Minnesota MN South Carolina Delaware DE Mississippi MS South Dakota District of Columbia DC Missouri MO Tennessee Florida FL Montana MT Texas Georgia GA Nebraska NE Utah Hawaii HI Nevada NV Vermont Idaho ID New Hampshire NH Virginia Illinois IL New Jersey NJ Washington Indiana IN New Mexico NM West Virginia

Variable name	Variable type	Description and specifications					
		Iowa Kansas	IA KS	New York North Carolina	NY NC	Wisconsin Wyoming	WI WY
		<p>Coded as follows:</p> <p>if W3OUT_OF_COUNTRY = 1 then W3STABB = '-8'; *From master file. Respondent lives or teach outside US;</p> <p>else if W3STTUS = 2 then do;</p> <p> if W2STABB not in('-4','-8','-9') then W3STABB = W2STABB;</p> <p> else if W3G9006 ne " then W3STABB = W3G9006; *Stayer's current home address from survey;</p> <p> else if W3ST ne '' then W3STABB = W3ST; *From master file. Stayer's home address;</p> <p> else W3STABB = '-9';</p> <p>end;</p> <p>else if W3STTUS=4 and W3RESAS =1 then W3STABB=W1STAT_ABB;</p> <p>else if W3STTUS in (3,4) then do;</p> <p> W3STABB = W3SCSTA; *Mover's current school address from survey;</p> <p> if W3G9006 ne " then W3STABB = W3G9006; *Returner's current home address from survey;</p> <p> else if W3ST ne '' then W3STABB = W3ST; *From master file. Returner's home address;</p> <p> else if W3FORYN = 1 then W3STABB = '-8'; *Respondent teaches outside US;</p> <p>end;</p> <p>else if W3STTUS = 1 then do;</p> <p> if W3G9006 ne " then W3STABB = W3G9006; *Leaver's current home address from survey;</p> <p> else if W3ST ne '' then W3STABB = W3ST; *From master file. Leaver's home address;</p> <p>end;</p>					
W3STTUS	Created	<p>Teacher's 2009–10 status as a stayer, mover, or leaver. "Stayers" are teachers who were teaching in the same school in the current school year as in the base year. "Movers" are teachers who were still teaching but had moved to a different school after the base year. "Leavers" are teachers who left the teaching profession after the base year.</p> <p>Categories include:</p> <p>1 = Leaver;</p> <p>2 = Stayer;</p> <p>3 = Mover;</p> <p>4 = Returner.</p> <p>Coded as follows:</p> <p>If (W3REGCL=1 and W3POSSC in (8,9,10) or W3REGCL=2) then W3STTUS=1; *Leaver;</p> <p>If (W3REGCL=1 and W3POSSC in (1,2,3,4,5,6,7)) then do;</p> <p> If W3NRSAS = 1 or W3MOVYN = 1 then W3STTUS = 2 ; *Stayer;</p> <p> ELSE if W3RESAS in (1,2) then W3STTUS=4; *Returner, If RESAS is answered then they are a returner;</p> <p> ELSE If W3NRSAS = 2 or W3MOVYN = 2 then W3STTUS = 3; *Mover;</p> <p>end;</p> <p>ELSE if W3ISR=1 and W2ISR =2 and W2ISRD ne 2 then W3STTUS=-9;</p> <p>ELSE if W3ISR=1 and W2ISR =2 then W3STTUS=-9;</p>					
W3SUBMT	Created	<p>Interview submission method.</p> <p>Categories include:</p> <p>1 = Submitted via mail;</p>					

Variable name	Variable type	Description and specifications
		<p>2 = Submitted via Internet; 3 = Submitted via phone. Coded as follows: if w3isr=1 then do; if W3net_code = '01' and W3WHO_COMPLETED = '1' then W3SUBMT = 2; *Submitted via Internet, respondent completed; if W3net_code = '01' and W3WHO_COMPLETED = '2' then W3SUBMT = 3; *Submitted via Internet, interviewer completed; if W3net_code = '15' then W3SUBMT = 2; *Submitted via Internet, respondent completed; end;</p>
W3TEFRPL	Frame	<p>Percentage of students eligible to participate in the National School Lunch Program in the 2008–09 BTLS school. Origin: MEMBER08 and TOTFRL08 in the 2008–09 CCD Public School Universe file. Coded as follows: If W3STTUS = 1 then W3TEFRPL = -8; *Not applicable - Leavers; else If W3FSECT in (1,3) then do; if MEMBER08 gt 0 and TOTFRL08 ge 0 then W3TEFRPL = (INT((TOTFRL08/MEMBER08)*10e5)/10e3); else if W3STTUS = 2 and W2TEFRPL ^= -9 then W3TEFRPL = W2TEFRPL; else W3TEFRPL = -9; If W3TEFRPL gt 100 then W3TEFRPL = 100; end; Else if W3FSECT = 2 then W3TEFRPL = -8; *Valid skip - private school; else if w3ncsid = '-9' then W3TEFRPL = -9; 2009–10 reported teaching level. Categories include: 1 = Primary; 2 = Middle; 3 = High; 4 = Combined. Coded as follows: Array L (*) W3TEGPK W3TEGKG W3TEG01 W3TEG02 W3TEG03 W3TEG04 W3TEG05 W3TEG06 W3TEG07 W3TEG08 W3TEG09 W3TEG10 W3TEG11 W3TEG12 W3TEGUG; Do i= 1 to dim(L); If L(i)=-8 then L(i)=.; If L(i)= 2 then L(i)=.T; end; /*VALID SKIPS -8*/ if W3FCSTS = 1 then W3TLEVEL = -8; * Respondent is a former teacher; /*TRUE MISSINGS -9*/ if W3TEGPK in (.n, .T, -9) and W3TEGKG in (.n, .T, -9) and W3TEG01 in (.n, .T, -9) and W3TEG02 in (.n, .T, -9) and W3TEG03 in (.n, .T, -9) and W3TEG04 in (.n, .T, -9) and W3TEG05 in (.n, .T, -9) and W3TEG06 in (.n, .T, -9) and W3TEG07 in (.n, .T, -9) and W3TEG08 in (.n, .T, -9) and W3TEG09 in (.n, .T, -9) and W3TEG10 in (.n, .T, -9) and W3TEG11 in (.n, .T, -9) and W3TEG12 in (.n, .T, -9) then nolev=1; if nolev=1 and W3TEGUG in (.n, .T, -9) then ng=1; *No grades marked; else if W3TEGUG in (1) then ng=2; *Only ungraded marked; else ng=3; *Grades are marked;</p>
W3TLEVEL	Created	

Variable name	Variable type	Description and specifications
		<pre> /*LEVELS 1 2 3 4*/ if W3FCSTS = 2 and ng=3 then do; if (W3TEGPK gt 0 or W3TEGKG gt 0 or W3TEG01 gt 0 or W3TEG02 gt 0 or W3TEG03 gt 0 or W3TEG04 gt 0 or W3TEG05 gt 0 or W3TEG06 gt 0 or W3TEG07 gt 0 or W3TEG08 gt 0 or W3TEG09 gt 0 or W3TEG10 gt 0 or W3TEG11 gt 0 or W3TEG12 gt 0) then do; if (W3TEG09 = 1 or W3TEG10 = 1 or W3TEG11 = 1 or W3TEG12 = 1) and (W3TEGPK ne 1 and W3TEGKG ne 1 and W3TEG01 ne 1 and W3TEG02 ne 1 and W3TEG03 ne 1 and W3TEG04 ne 1 and W3TEG05 ne 1 and W3TEG06 ne 1 and W3TEG07 ne 1 and W3TEG08 ne 1) then W3TLEVEL = 3; * Secondary; else if (W3TEGPK = 1 or W3TEGKG = 1 or W3TEG01 = 1 or W3TEG02 = 1 or W3TEG03 = 1 or W3TEG04 = 1) and (W3TEG06 ne 1 and W3TEG07 ne 1 and W3TEG08 ne 1 and W3TEG09 ne 1 and W3TEG10 ne 1 and W3TEG11 ne 1 and W3TEG12 ne 1)then W3TLEVEL = 1; * Elementary; else if (W3TEG05 = 1 or W3TEG06 = 1 or W3TEG07 = 1 or W3TEG08 = 1) and (W3TEGPK ne 1 and W3TEGKG ne 1 and W3TEG01 ne 1 and W3TEG02 ne 1 and W3TEG03 ne 1 and W3TEG04 ne 1 and W3TEG10 ne 1 and W3TEG11 ne 1 and W3TEG12 ne 1) then W3TLEVEL=2; *Middle; else W3TLEVEL=4; *Combined; end; end; /*CASES STILL NOT ASSIGNED go by MAIN ASSIGNMENT - ELEM., SPEC. ED., EARLY CHILD*/ ELSE if ng in (1,2) then do; /*Added ELSE*/ if W3TEMAC in (101, 102) then W3TLEVEL = 1; else if W3TEMAC = 110 and W3TECLD = 3 then W3TLEVEL = 1; else if W3TECLD =2 then W3TLEVEL = 1; else if ng=2 then W3TLEVEL=4; else W3TLEVEL = -9; end; /*RETRO CASES RECIEVE a -8*/ if W3ISR = 2 then W3TLEVEL = -8; do i=1 to dim(L); If L(i)=. then L(i)=-8; If L(i)=.T then L(i)=2; end; Drop i ng; nolev; Teacher's total teaching experience in 2009–10. Coded as follows: If W3ISR = 1 or W3ISR=2 then do; </pre>
W3TTEXP	Created	

Variable name	Variable type	Description and specifications
W3URBANS12	Created	<p> If W2TTEXP = -9 then W3TTEXP = -9; Else If W3FCSTS = 2 and W2FCSTS >=1 then do; If W2TTEXP ^= -9 then W3TTEXP = sum(W2TTEXP,1); End; Else if W3FCSTS = 1 and W2FCSTS >= 1 then do; If W2TTEXP ^= -9 then W3TTEXP = W2TTEXP; End; Else W3TTEXP = -9; End; */ If W3ISR = 1 or W3ISRD=2 then do; If W3FCSTS = 2 then do; If W2TTEXP not in (-4, -9) then W3TTEXP = sum(W2TTEXP,1); else if W2TTEXP in (-4, -9) then W3TTEXP = -9; End; Else if W3FCSTS = 1 then do; If W2TTEXP not in (-4, -9) then W3TTEXP = W2TTEXP; else if W2TTEXP in (-4, -9) then W3TTEXP = -9; End; Else W3TTEXP = -9; End;end; else If W3ISR=1 and W2ISR in (2,3) and w2isrd ne 2 then W3TTEXP=-9; This is a four-level collapse of W3SLOCP12 (urban-centric school locale code) for the 2008–09 BTLS school. Methodology was updated to incorporate 2000 Census population and geography information. Categories include: 1 = City; 2 = Suburb; 3 = Town; 4 = Rural. Coded as follows: If W3SLOCP12 in (11,12,13) then W3URBANS12=1; *City; If W3SLOCP12 in (21,22,23) then W3URBANS12=2; *Suburb; If W3SLOCP12 in (31,32,33) then W3URBANS12=3; *Town; If W3SLOCP12 in (41,42,43) then W3URBANS12=4; *Rural; If W3SLOCP12 in (-8,-9) then W3URBANS12 = W3SLOCP12; * Outside US or Leaver- N/A; </p>

Wave 5 Frame and Created Variables

***W5FCSTS;**

if W5REGCL=1 and W5POSSC in (1,2,3,4,5,6,7) then W5FCSTS=2; *Current;
else if W5REGCL=2 or (W5REGCL=1 and W5POSSC in (8,9,10)) then W5FCSTS=1; *Former;

***W5STTUS;**

if W5FCSTS = 1 then W5STTUS=1; *Leaver;
else if W5FCSTS = 2 then do;
 if W5NRSAS = 1 then W5STTUS = 2; *Stayer;
 else if W5NRSAS = 2 then W5STTUS = 3; *Mover;
 else if W4FCSTS = 1 then W5STTUS = 4; *Returner;
end;
else W5STTUS = -9; *Missing;

*****W5NCSID;**

If W5STTUS=1 then W5NCSID = '-8'; *Leavers- no school ID code;
Else If W5STTUS = 2 then do;
 if W4NCSID ne '-4' then W5NCSID=W4NCSID; *Stayers;
 else if W4NCSID = '-4' then W5NCSID='-9';
end;
Else If W5STTUS in (3, 4, -9) then do;
 If W5FORYN = 1 then W5NCSID = '-8'; *School outside US;
 Else W5NCSID = left(W5SCHCOD); *New school ID from W5 New School Coder;
 if W5NCSID = " then W5NCSID = '-9';
end;

*****W5ISR;**

W5ISR = ISR;

*****W5FSECT;**

W5FSECT = ISR;

*****W5FSECT;**
If W5STTUS = 2 then do;
 if W4FSECT ne -4 then W5FSECT = W4FSECT;
 else if W4FSECT = -4 then W5FSECT = -9;
end;
if W5STTUS = 1 then W4FSECT = -8; * Respondent is a leaver;
Else if W5STTUS in (-9, 3, 4) then do;
 If W5NCSID = '-9' then W5FSECT = -9;
 Else if W5NCSID ne " and substr(W5NCSID, 1, 2) = '59' then W5FSECT = 3; *BIE;
 Else if W5FORYN = 1 then W5FSECT = -8; *School outside US;
 Else if W5NCSID = NCESSCH then W5FSECT = 1;
 Else if W5NCSID =ppin then W5FSECT = 2;
 Else if W5STTUS = 3 and W5MVTYP in (1, 2, 3) then W5FSECT = 1; *Public (using imputed MVTYP data when necessary);
 Else if W5STTUS = 3 and W5MVTYP in (4, 5) then W5FSECT = 2; *Private (using imputed MVTYP data when necessary);
end;

*****W5SLOCP12;**

If W5STTUS = 2 and W4SLOCP12 ne -4 then W5SLOCP12=W4SLOCP12;
Else if W5STTUS = 2 and W4SLOCP12 = -4 then do;

If W5FSECT in (1, 3) and W5NCSID=NCESSCH then W5SLOCP12=ULOCAL09;
 If W5FSECT = 2 and W5NCSID=PPIN then W5SLOCP12=ULOCAL09;
 Else W5SLOCP12 = -9;
 end; *Stayer's SASS School locale code;
 If W5STTUS = 1 then W5SLOCP12=-8; *Leavers- no locale code;
 If W5STTUS in (-9, 3, 4) then do;
 If W5FSECT -9 then W5SLOCP12 = -9;
 If W5FORYN=1 then W5SLOCP12= -8; *School outside US;
 Else if W5FSECT in (1, 3) and W5NCSID = NCESSCH then W5SLOCP12=ULOCAL09; *Mover's new school locale code from 2009-10 CCD;
 Else if W5FSECT = 2 and W5NCSID =ppin then W5SLOCP12=ULOCAL09 ; * Mover's new school locale code from 2009-10 PSS;
 end;
 If W5ISR = 1 and W5SLOCP12 = . then W5SLOCP12 = -9;

***W5RELIG;

If W5FSECT in (1, 3) then W5RELIG=-8; * Not a private school;
 Else if W5FSECT in (2, -9) then do;
 If W5STTUS = 2 then do;
 if W4RELIG ne -4 then W5RELIG = W4RELIG;
 else if W4RELIG= -4 and W5NCSID=ppin then W5RELIG=RELIG;
 else W5RELIG = -9;
 end;
 Else if W5STTUS in (-9, 3, 4) and W5NCSID = ppin then W5RELIG=RELIG; *From PSS;
 Else W5RELIG = -9;
 end;

***W5SUBMT;

if w5isr=1 then do;
 if W5net_code = '01' and W5WHO_COMPLETED = '1' then W5SUBMT = 2; *Submitted via Internet, respondent completed;
 if W5net_code = '01' and W5WHO_COMPLETED = '2' then W5SUBMT = 3; *Submitted via Internet, interviewer completed;
 if W5net_code = '15' then W5SUBMT = 2; *Submitted via Internet, respondent completed;
 end;

***W5URBANS12;

If W5SLOCP12 in (11,12,13) then W5URBANS12=1; *City;
 If W5SLOCP12 in (21,22,23) then W5URBANS12=2; *Suburb;
 If W5SLOCP12 in (31,32,33) then W5URBANS12=3; *Town;
 If W5SLOCP12 in (41,42,43) then W5URBANS12=4; *Rural;
 If W5SLOCP12 in (-8, -9) then W5URBANS12 = W5SLOCP12;

***W5BIEFLAG;

If W5FSECT in (1, 2) then W5BIEFLAG = 2; *Not a BIE school;
 Else if W5FSECT = 3 then W5BIEFLAG = 1; *BIE school;
 Else W5BIEFLAG = W5FSECT;

***W5CHARFLAG;

If W5STTUS = 1 then W5CHARFLAG=-8; *Not applicable-Leavers;
 If W5STTUS = 2 and W4CHARFLAG ne -4 then W5CHARFLAG=W4CHARFLAG;

```

Else if W5STTUS = 2 and W4CHARFLAG = -4 then do;
  if W5NCSID = NCESSCH and CHARTR09 ne 'N' then W5CHARFLAG=input(CHARTR09,1.);
  else W5CHARFLAG = -9;
end;
Else If W5STTUS in (-9, 3, 4) then do;
  If W5FORYN = 1 then W5CHARFLAG = -8; *School outside US;
  Else if W5FSECT = 2 then W5CHARFLAG = -8; *Private school;
  Else if W5FSECT in (1, 3) then do;
    if W5NCSID = NCESSCH and CHARTR09 ne 'N' then W5CHARFLAG=input(CHARTR09,1.); *Movers
    charter status from CCD;
    else W5CHARFLAG = -9;
  end;
  else W5CHARFLAG = -9;
end;
end;

```

***W5TEFRPL;

```

If W5STTUS = 1 then W5TEFRPL = -8; *Not applicable - Leavers;
else If W5FSECT in (1,3) then do;
  if W5NCSID = NCESSCH and MEMBER09 gt 0 and TOTFRL09 ge 0 then W5TEFRPL =
  (INT((TOTFRL09/MEMBER09)*10e5)/10e3);
  else if W5STTUS = 2 and W4TEFRPL ne -9 then W5TEFRPL = W4TEFRPL;
  else W5TEFRPL = -9;
  If W5TEFRPL gt 100 then W5TEFRPL = 100;
end;
else if W5FSECT = 2 then W5TEFRPL = -8; *Valid skip - private school;
else if W5NCSID = '-9' then W5TEFRPL = -9;

```

***W4LONGSTS;

```

PRVSTS= W4LONGSTS; *From previous wave - in this case Wave 4;
if W5ISRD in (1,2) and W5FCSTS =1 then WAVESTS='1'; *Former;
If W5ISRD in (1,2) and W5FCSTS=2 then WAVESTS='2'; *Current;
Else if W5ISRD in (9,10,11,12,13) then WAVESTS='0'; *Nonrespondent;
Length LONGSTS $ 5; *Length will be the same as wave number;
LONGSTS=CATS(PRVSTS,WAVESTS); *Drops any leading or trailing blanks, just in case;
Drop WAVESTS;
Drop PRVSTS;

```

*W5COUNTRY;

```

If upcase(W5UCNRY) not in ('USA', 'U.S.A.', 'UNITED STATES', 'UNITED STATES OF AMERICA',
'AMERICA', 'US', 'U.S.') then W5COUNTRY = W5UCNRY
Else W5COUNTRY = -8;

```

*W5STABB;

```

if W5STTUS = 2 then do;
  if W4STABB not in ('-4', '-9') then W5STABB = W4STABB;
  else if W5SCSTA not in ('-9', '', '-8') then W5STABB = W5SCSTA;
  else if W5ELSECSTATE not in ('-9', '', '-8') then W5STABB=W5ELSECSTATE;
  else if W5J9006 not in ('', '-9') then W5STABB = W5J9006;
  else if W5ST not in ('', '-9') then W5STABB = W5ST;
  else W5STABB = '-9';
end;
else if W5STTUS in (3, 4) then do;

```

```

if W5FORYN = 1 then W5STABB = '-8';
else if W5SCSTA not in ('-9', '', '-8') then W5STABB = W5SCSTA;
else if W4ELSECSTATE not in ('-9', '', '-8') then W4STABB=W4ELSECSTATE;
else if W5J9006 not in ('', '-9') then W5STABB = W5J9006;
else if W5ST not in ('', '-9') then W5STABB = W5ST;
else W5STABB = '-9';
end;
else if W5STTUS = 1 then do;
  if W5J9006 not in ('', '-9') then W5STABB = W5J9006; *Leaver's current home address from survey;
  else if W5ST not in ('', '-9') then W5STABB = W5ST; *From master file. Leaver's home address;
  else W5STABB = '-9';
end;

*W5REGION;
if W5STABB in ('CT', 'ME', 'MA', 'NH', 'NJ', 'NY', 'PA', 'RI', 'VT') then W5REGION = 1; *Northeast;
if W5STABB in ('IL', 'IN', 'IA', 'KS', 'MI', 'MN', 'MO', 'NE', 'ND', 'OH', 'SD', 'WI') then W5REGION = 2;
*Midwest;
if W5STABB in ('AL', 'AR', 'DE', 'DC', 'FL', 'GA', 'KY', 'LA', 'MD', 'MS', 'NC', 'OK', 'SC', 'TN', 'TX', 'VA',
'WV') then W5REGION = 3; *South;
if W5STABB in ('AK', 'AZ', 'CA', 'CO', 'HI', 'ID', 'MT', 'NV', 'NM', 'OR', 'UT', 'WA', 'WY') then W5REGION =
4; *West;
if W5STABB = '-8' then W5REGION = -8;
if W5STABB = '-9' then W5REGION = -9;

*W5NSTATE;
*W5NSTATE (numeric code), recode using W5STABB;
if W5STABB = '-9' then W5NSTATE = -9;
if W5STABB = '-8' then W5NSTATE = -8;
if W5STABB = 'AL' then W5NSTATE = 1;
if W5STABB = 'AK' then W5NSTATE = 2;
if W5STABB = 'AZ' then W5NSTATE = 3;
if W5STABB = 'AR' then W5NSTATE = 4;
if W5STABB = 'CA' then W5NSTATE = 5;
if W5STABB = 'CO' then W5NSTATE = 6;
if W5STABB = 'CT' then W5NSTATE = 7;
if W5STABB = 'DE' then W5NSTATE = 8;
if W5STABB = 'DC' then W5NSTATE = 9;
if W5STABB = 'FL' then W5NSTATE = 10;
if W5STABB = 'GA' then W5NSTATE = 11;
if W5STABB = 'HI' then W5NSTATE = 12;
if W5STABB = 'ID' then W5NSTATE = 13;
if W5STABB = 'IL' then W5NSTATE = 14;
if W5STABB = 'IN' then W5NSTATE = 15;
if W5STABB = 'IA' then W5NSTATE = 16;
if W5STABB = 'KS' then W5NSTATE = 17;
if W5STABB = 'KY' then W5NSTATE = 18;
if W5STABB = 'LA' then W5NSTATE = 19;
if W5STABB = 'ME' then W5NSTATE = 20;
if W5STABB = 'MD' then W5NSTATE = 21;
if W5STABB = 'MA' then W5NSTATE = 22;
if W5STABB = 'MI' then W5NSTATE = 23;
if W5STABB = 'MN' then W5NSTATE = 24;
if W5STABB = 'MS' then W5NSTATE = 25;
if W5STABB = 'MO' then W5NSTATE = 26;
if W5STABB = 'MT' then W5NSTATE = 27;

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if W5STABB = 'NE' then W5NSTATE = 28;
if W5STABB = 'NV' then W5NSTATE = 29;
if W5STABB = 'NH' then W5NSTATE = 30;
if W5STABB = 'NJ' then W5NSTATE = 31;
if W5STABB = 'NM' then W5NSTATE = 32;
if W5STABB = 'NY' then W5NSTATE = 33;
if W5STABB = 'NC' then W5NSTATE = 34;
if W5STABB = 'ND' then W5NSTATE = 35;
if W5STABB = 'OH' then W5NSTATE = 36;
if W5STABB = 'OK' then W5NSTATE = 37;
if W5STABB = 'OR' then W5NSTATE = 38;
if W5STABB = 'PA' then W5NSTATE = 39;
if W5STABB = 'RI' then W5NSTATE = 40;
if W5STABB = 'SC' then W5NSTATE = 41;
if W5STABB = 'SD' then W5NSTATE = 42;
if W5STABB = 'TN' then W5NSTATE = 43;
if W5STABB = 'TX' then W5NSTATE = 44;
if W5STABB = 'UT' then W5NSTATE = 45;
if W5STABB = 'VT' then W5NSTATE = 46;
if W5STABB = 'VA' then W5NSTATE = 47;
if W5STABB = 'WA' then W5NSTATE = 48;
if W5STABB = 'WV' then W5NSTATE = 49;
if W5STABB = 'WI' then W5NSTATE = 50;
if W5STABB = 'WY' then W5NSTATE = 51;

```

***W1AGE – W5AGE;**

```

If W1T0360 > 1 then do;
  W5AGE = (2012-W1T0360);
  W4AGE = (2011-W1T0360);
  W3AGE = (2010-W1T0360);
  W2AGE = (2009-W1T0360);
  W1AGE = (2008-W1T0360);
end;

```

***W5TTEXP;**

```

if W4TTEXP in (-9,-4) then W5TTEXP = -9;
else if W5ISR = 1 then do;
  if W5FCSTS=2 then W5TTEXP = sum(W4TTEXP,1);
  else if W5FCSTS=1 then W5TTEXP=W4TTEXP;
end;

```

***W5TLEVEL;**

```

Array L (*) W5TEGPK W5TEGKG W5TEG01 W5TEG02 W5TEG03 W5TEG04 W5TEG05 W5TEG06
W5TEG07 W5TEG08 W5TEG09 W5TEG10 W5TEG11 W5TEG12 W5TEGUG;
Do i= 1 to dim(L);
  If L(i)=-8 then L(i)=.;
  If L(i)=-2 then L(i)=.T;
end;
/*VALID SKIPS -8*/
if W5FCSTS = 1 then W5TLEVEL = -8; * Respondent is a former teacher;
/*TRUE MISSINGS -9*/
if W5TEGPK in (.n, .T, -9) and W5TEGKG in (.n, .T, -9) and W5TEG01 in (.n, .T, -9) and W5TEG02 in (.n,
.T, -9)
and W5TEG03 in (.n, .T, -9) and W5TEG04 in (.n, .T, -9) and W5TEG05 in (.n, .T, -9) and W5TEG06 in (.n,
.T, -9)

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and W5TEG07 in (.n, .T, -9) and W5TEG08 in (.n, .T, -9) and W5TEG09 in (.n, .T, -9) and W5TEG10 in (.n, .T, -9)
and W5TEG11 in (.n, .T, -9) and W5TEG12 in (.n, .T, -9) then nolev=1;
if nolev=1 THEN DO;
if W5TEGUG in (.n, .T, -9) then ng=1; *No grades marked;
else if W5TEGUG in (1) then ng=2; *Only ungraded marked;
end;
else ng=3; *Grades are marked;
/*LEVELS 1 2 3 4*/
if W5FCSTS = 2 and ng=3 then do;
if (W5TEGPK gt 0 or W5TEGKG gt 0 or W5TEG01 gt 0 or W5TEG02 gt 0 or
W5TEG03 gt 0 or W5TEG04 gt 0 or W5TEG05 gt 0 or W5TEG06 gt 0 or
W5TEG07 gt 0 or W5TEG08 gt 0 or W5TEG09 gt 0 or W5TEG10 gt 0 or
W5TEG11 gt 0 or W5TEG12 gt 0) then do;
if (W5TEG09 = 1 or W5TEG10 = 1 or W5TEG11 = 1 or W5TEG12 = 1)
and (W5TEGPK ne 1 and W5TEGKG ne 1 and W5TEG01 ne 1 and W5TEG02
ne 1 and W5TEG03 ne 1 and W5TEG04 ne 1 and W5TEG05 ne 1 and W5TEG06
ne 1 and W5TEG07 ne 1 and W5TEG08 ne 1) then W5TLEVEL = 3; * Secondary;
else if (W5TEGPK = 1 or W5TEGKG = 1 or W5TEG01 = 1 or W5TEG02 = 1 or W5TEG03 = 1
or W5TEG04 = 1) and (W5TEG06 ne 1 and W5TEG07 ne 1 and W5TEG08 ne 1 and
W5TEG09 ne 1 and W5TEG10 ne 1 and W5TEG11 ne 1 and W5TEG12 ne 1) then W5TLEVEL = 1; *
Elementary;
else if (W5TEG05 = 1 or W5TEG06 = 1 or W5TEG07 = 1 or W5TEG08 = 1) and
(W5TEGPK ne 1 and W5TEGKG ne 1 and W5TEG01 ne 1 and W5TEG02 ne 1 and
W5TEG03 ne 1 and W5TEG04 ne 1 and W5TEG10 ne 1 and W5TEG11 ne 1 and W5TEG12 ne 1) then
W5TLEVEL=2; *Middle;
else W5TLEVEL=4; *Combined;
end;
end;
/*CASES STILL NOT ASSIGNED go by MAIN ASSIGNMENT - ELEM., SPEC. ED., EARLY CHILD*/
else if ng ne 3 then do; /*Added ELSE*/
if W5TEMAC in (101, 102) then W5TLEVEL = 1;
else if W5TEMAC = 110 and W5TECLD = 3 then W5TLEVEL = 1;
else if W5TECLD =2 then W5TLEVEL = 1;
else if ng=2 then W5TLEVEL=4;
else W5TLEVEL = -9;
end;
end;

***W5ASN03;**
If W5FCSTS = 1 then W5ASN03 = -8; * Respondent is a former teacher;
If W5FCSTS =2 then do;
If W5TEMAC in (-9, .n) then W5ASN03=-9;
Else do;
if W5TEMAC in (101,102) then W5ASN03 = 1; *Early Childhood/General Elementary;
if W5TEMAC = 110 then W5ASN03 = 2; *Special Education;
if W5TEMAC in (141, 143, 144, 145) then W5ASN03 = 3; *Arts and Music;
if W5TEMAC in (151, 152, 153, 154, 155, 158, 159) then W5ASN03 = 4; *English/Language Arts;
if W5TEMAC in (160, 161, 162) then W5ASN03 = 5; *ESL/Bilingual Education;
if W5TEMAC in (171, 172, 173, 174, 175) then W5ASN03 = 6; *Foreign Language;
if W5TEMAC in (181, 182) then W5ASN03 = 7; *Health/Physical Education;
if W5TEMAC in (191, 192, 193, 194, 195, 196, 198, 199, 200, 201) then W5ASN03 = 8; *Mathematics;
if W5TEMAC in (210, 211, 212, 213, 215, 216, 217) then W5ASN03 = 9; *Natural Sciences;
if W5TEMAC in (220, 221, 225, 226, 227, 228, 231, 233, 234) then W5ASN03 = 10; *Social Sciences;
if W5TEMAC in (241, 242, 243, 244, 245, 246, 247, 249, 250, 253, 254, 255, 256) then W5ASN03 = 11;
*Vocational/Technical Education;
if W5TEMAC in (197, 262, 264, 265, 266, 267, 268) then W5ASN03 = 12; *Other;

end;
end;

***W5OCODE;**

*Coded by Census from W5OCCTL;
if W5FCSTS = 2 then W5OCODE = '-8'; * Respondent is a current teacher;
else If W5FCSTS = 1 and IO1OCD ne ' ' then W5OCODE = IO1OCD;
else W5OCODE = '-9';

***W5EARN;**

Array M (5) W5ERSSA W5ERNTA W5TCHSA W5EREXA W5EROSA;
count = 0;
Do i=1 to 5;
 if M (i) in (-9,.n) then count + 1;
end;
do i = 1 to 5;
 if M (i) = -8 then M (i)= .;
end;
if count gt 0 then W5EARN = -9;
else if W5FCSTS = 1 then W5EARN = -8; * Respondent is a former teacher;
else if W5FCSTS =2 then W5EARN=sum (W5ERSSA, W5ERNTA, W5TCHSA, W5EREXA, W5EROSA);
do i = 1 to 5;
 if M (i) = . then M (i)= -8;
end;
drop count i;

***W5EARNT;**

Array MV(7) W5ERSSA W5ERNTA W5TCHSA W5EREXA W5EROSA W5ERNNSA W5EROUA;
count = 0;
Do i=1 to 7;
 if MV(i) in (-9,.n) then count + 1;
end;
Do i=1 to 7;
 if MV(i) in (-8) then MV(i)=.;
end;
if count gt 0 then W4EARNT = -9;
else if W5FCSTS = 1 then W5EARNT = -8; * Respondent is a former teacher;
else If W5FCSTS =2 then W5EARNT=sum (W5ERSSA, W5ERNTA, W5TCHSA, W5EREXA, W5EROSA,
W5ERNNSA, W5EROUA);
Do i=1 to 7;
 if MV(i) = . then MV(i)= -8;
end;
drop count i;

Appendix P. Crosswalk of BTLS Items by Wave

The BTLS crosswalk includes a comparison of survey items from the first wave (2007–08), second wave (2008–09), third wave (2009–10), fourth wave (2010–11), and fifth wave (2011–12).

Within the crosswalk, variables are listed in 2007–08 item order. A blank in the variable name column for one of the waves means that there was no equivalent item for that wave. Variables are categorized by how closely they “match” the corresponding variable in the earlier wave:

- *New. The question was added since the previous survey.*
- *Exact. The question wording and format are exactly the same except for changes in reference periods, changes in skip patterns, and item references.*
- *Minor. The question content is the same, but there have been minor changes to the question wording or format. Minor changes include addition or deletion of text in the question, instruction or answer categories, changes in the use of bold and capitalization, and a change in the length of a write-in response category.*
- *Major. The general content of or subject addressed by the item is the same, but the question wording or format has been changed significantly.*

[illegible]

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
W1T0042																		
W1T0050	W2TEGPK	Minor		W3TEGPK	Minor	Minor		W4TEGPK	Minor	Minor	Exact		W5TEGPK	Minor	Minor	Exact	Exact	
W1T0051	W2TEGKG	Minor		W3TEGKG	Minor	Minor		W4TEGKG	Minor	Minor	Exact		W5TEGKG	Minor	Minor	Exact	Exact	
W1T0052	W2TEG01	Minor		W3TEG01	Minor	Minor		W4TEG01	Minor	Minor	Exact		W5TEG01	Minor	Minor	Exact	Exact	
W1T0053	W2TEG02	Minor		W3TEG02	Minor	Minor		W4TEG02	Minor	Minor	Exact		W5TEG02	Minor	Minor	Exact	Exact	
W1T0054	W2TEG03	Minor		W3TEG03	Minor	Minor		W4TEG03	Minor	Minor	Exact		W5TEG03	Minor	Minor	Exact	Exact	
W1T0055	W2TEG04	Minor		W3TEG04	Minor	Minor		W4TEG04	Minor	Minor	Exact		W5TEG04	Minor	Minor	Exact	Exact	
W1T0056	W2TEG05	Minor		W3TEG05	Minor	Minor		W4TEG05	Minor	Minor	Exact		W5TEG05	Minor	Minor	Exact	Exact	
W1T0057	W2TEG06	Minor		W3TEG06	Minor	Minor		W4TEG06	Minor	Minor	Exact		W5TEG06	Minor	Minor	Exact	Exact	
W1T0058	W2TEG07	Minor		W3TEG07	Minor	Minor		W4TEG07	Minor	Minor	Exact		W5TEG07	Minor	Minor	Exact	Exact	
W1T0059	W2TEG08	Minor		W3TEG08	Minor	Minor		W4TEG08	Minor	Minor	Exact		W5TEG08	Minor	Minor	Exact	Exact	
W1T0060	W2TEG09	Minor		W3TEG09	Minor	Minor		W4TEG09	Minor	Minor	Exact		W5TEG09	Minor	Minor	Exact	Exact	
W1T0061	W2TEG10	Minor		W3TEG10	Minor	Minor		W4TEG10	Minor	Minor	Exact		W5TEG10	Minor	Minor	Exact	Exact	
W1T0062	W2TEG11	Minor		W3TEG11	Minor	Minor		W4TEG11	Minor	Minor	Exact		W5TEG11	Minor	Minor	Exact	Exact	
W1T0063	W2TEG12	Minor		W3TEG12	Minor	Minor		W4TEG12	Minor	Minor	Exact		W5TEG12	Minor	Minor	Exact	Exact	
W1T0064	W2TEGUG	Minor		W3TEGUG	Minor	Minor		W4TEGUG	Minor	Minor	Exact		W5TEGUG	Minor	Minor	Exact	Exact	
W1T0065																		
W1T0066																		
W1T0067	W2TEMAC	Minor		W3TEMAC	Minor	Exact		W4TEMAC	Minor	Exact	Exact		W5TEMAC	Minor	Exact	Exact	Exact	

[illegible]

[illegible]

[illegible]

[illegible]

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
W1T0127																		
W1T5127																		
W1T0128																		
W1T0129																		
W1T5129																		
W1T0130																		
W1T0131																		
W1T0132				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T5132				W3DEGSP	Major		Different question wording and format	W4DEGSP	Major		Exact		W5DEGSP	Major		Exact	Exact	
W1T0133				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T0134				W3ADDEG	Major		Different question wording and format	W4ADDEG	Major		Exact		W5ADDEG	Major		Minor	Exact	
W1T0135				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T5135				W3DEGSP	Major		Different question	W4DEGSP	Major		Exact		W5DEGSP	Major		Exact	Exact	

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
							wording and format											
W1T0136				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T0137				W3ADDEG	Major		Different question wording and format	W4ADDEG	Major		Exact		W5ADDEG	Major		Minor	Exact	
W1T0138				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T5138				W3DEGSP	Major		Different question wording and format	W4DEGSP	Major		Exact		W5DEGSP	Major		Exact	Exact	
W1T0139				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T0140				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T0141				W3DEGCA	Major		Different question wording and format	W4DEGCA	Major		Exact		W5DEGCA	Major		Exact	Exact	
W1T5141				W3DEGSP	Major		Different question wording and format	W4DEGSP	Major		Exact		W5DEGSP	Major		Exact	Exact	

[illegible]

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
W1T0161				W3CERFI	Major		Different question wording and format	W4CERFI	Major		Exact		W5CERFI	Major		Exact	Exact	
W1T5161				W3CERFI	Major		Different question wording and format	W4CERFI	Major		Exact		W5CERFI	Major		Exact	Exact	
W1T0162				W3CERGL	Major		Different question wording and format	W4CERGL	Major		Exact		W5CERGL	Major		Exact	Exact	
W1T0163				W3CERGL	Major		Different question wording and format	W4CERGL	Major		Exact		W5CERGL	Major		Exact	Exact	
W1T0164				W3CERGL	Major		Different question wording and format	W4CERGL	Major		Exact		W5CERGL	Major		Exact	Exact	
W1T0165																		
W1T0166				W3CERFI	Major		Different question wording and format	W4CERFI	Major		Exact		W5CERFI	Major		Exact	Exact	
W1T5166				W3CERFI	Major		Different question wording and format	W4CERFI	Major		Exact		W5CERFI	Major		Exact	Exact	
W1T0167				W3CERGL	Major		Different question wording and format	W4CERGL	Major		Exact		W5CERGL	Major		Exact	Exact	

[illegible]

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BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
W1T5197																		
W1T0198																		
W1T0199																		
W1T0200																		
W1T0201																		
W1T0202																		
W1T5202																		
W1T0203																		
W1T0204																		
W1T0205																		
W1T0206																		
W1T0207																		
W1T5207																		
W1T0208																		
W1T0209																		
W1T0210																		
W1T0211	W2TEHQT	Exact		W3TEHQT	Exact	Exact		W4TEHQT	Exact	Exact	Exact		W5HQTTE	Exact	Exact	Exact	Major	Different format, comparable when W4TEHQT and W4TEQTA used

[illegible]

[illegible]

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
W1T0240																		
W1T0241																		
W1T0242																		
W1T0243																		
W1T0244																		
W1T0245																		
W1T0246																		
W1T0247																		
W1T0248																		
W1T0249																		
W1T0250																		
W1T0251																		
W1T0252																		
W1T5252																		
W1T0260																		
W1T0261																		
W1T0262																		
W1T0263				W3ACTCO	Minor			W4ACTCO	Minor		Exact		W5ACTCO	Minor		Exact	Exact	
W1T0264				W3ACTSG	Minor			W4ACTSG	Minor		Exact		W5ACTSG	Minor		Exact	Minor	

[illegible]

[illegible]

[illegible]

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
W1T0327																		
W1T0335	W2ERSSC	Exact		W3ERSSC	Exact	Exact		W4ERSSC	Exact	Exact	Exact		W5ERSSC	Exact	Exact	Exact	Exact	
W1T0336	W2ERSSA	Minor		W3ERSSA	Minor	Exact		W4ERSSA	Minor	Exact	Exact		W5ERSSA	Minor	Exact	Exact	Exact	
W1T0337																		
W1T0338	W2ERNTJ	Exact		W3ERNTJ	Exact	Exact		W4ERNTJ	Exact	Exact	Exact		W5ERNTJ	Exact	Exact	Exact	Exact	
W1T0339	W2ERNTA	Minor		W3ERNTA	Minor	Exact		W4ERNTA	Minor	Exact	Exact		W5ERNTA	Minor	Exact	Exact	Exact	
W1T0340																		
W1T0341	W2ERNSJ	Exact		W3ERNSJ	Exact	Exact		W4ERNSJ	Exact	Exact	Exact		W5ERNSJ	Exact	Exact	Exact	Exact	
W1T0342	W2ERNSA	Minor		W3ERNSA	Minor	Exact		W4ERNSA	Minor	Exact	Exact		W5ERNSA	Minor	Exact	Exact	Exact	
W1T0343	W2TCHSA	Exact		W3TCHSA	Exact	Exact		W4TCHSA	Exact	Exact	Exact		W5TCHSA	Exact	Exact	Exact	Exact	
W1T0344	W2EREXC	Exact		W3EREXC	Exact	Exact		W4EREXC	Exact	Exact	Exact		W5EREXC	Exact	Exact	Exact	Exact	
W1T0345	W2EREXA	Minor		W3EREXA	Minor	Exact		W4EREXA	Minor	Exact	Exact		W5EREXA	Minor	Exact	Exact	Exact	
W1T0346	W2EROSS	Exact		W3EROSS	Exact	Exact		W4EROSS	Exact	Exact	Exact		W5EROSS	Exact	Exact	Exact	Exact	
W1T0347	W2EROSA	Minor		W3EROSA	Minor	Exact		W4EROSA	Minor	Exact	Exact		W5EROSA	Minor	Exact	Exact	Exact	
W1T0348	W2EROUT	Exact		W3EROUT	Exact	Exact		W4EROUT	Exact	Exact	Exact		W5EROUT	Exact	Exact	Exact	Exact	
W1T0349	W2EROUA	Minor		W3EROUA	Minor	Exact		W4EROUA	Minor	Exact	Exact		W5EROUA	Minor	Exact	Exact	Exact	
W1T0350	W2OUTSD	Exact		W3OUTSD	Exact	Exact		W4OUTSD	Exact	Exact	Exact		W5OUTSD	Exact	Exact	Exact	Exact	
W1T0351																		
W1T0352								W4GENDR	Exact				W5GENDR	Exact			Exact	

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
W1T0353																		
W1T0354																		
W1T0355																		
W1T0356																		
W1T0357																		
W1T0358																		
W1T0359																		
W1T0360																		
	W2ONLVE			W3ONLEA		Minor		W4ONLEA		Minor	Exact		W5ONLEA		Minor	Exact	Exact	
	W2FRPOP																	
	W2TREXP			W3TREXP		Exact		W4TREXP		Exact	Exact							
	W2OCCST			W3OCCST		Exact		W4OCCST		Exact	Minor		W5OCCST		Exact	Minor	Exact	
	W2OCCSP			W3OCCSP		Exact		W4OCCSP		Exact	Exact		W5OCCSP		Exact	Exact	Exact	
	W2OCCYN			W3OCCYN		Exact		W4OCCYN		Exact	Exact		W5OCCYN		Exact	Exact	Exact	
	W2OCCTL			W3OCCTL		Exact		W4OCCTL		Exact	Exact		W5OCCTL		Exact	Exact	Exact	
	W2OCCAC			W3OCCAC		Exact		W4OCCAC		Exact	Exact		W5OCCAC		Exact	Exact	Exact	
	W2OCCCL			W3OCCCL		Exact		W4OCCCL		Exact	Exact		W5OCCCL		Exact	Exact	Exact	
	W2SCOCC			W3SCOCC		Exact		W4SCOCC		Exact	Minor		W5SCOCC		Exact	Minor	Exact	
	W2SCOSP			W3SCOSP		Exact		W4SCOSP		Exact	Exact		W5SCOSP		Exact	Exact	Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2SCTYP			W3SCTYP		Exact		W4SCTYP		Exact	Exact		W5SCTYP		Exact	Exact	Exact	
	W2OCCFP			W3OCCFP		Exact		W4OCCFP		Exact	Exact		W5OCCFP		Exact	Exact	Exact	
	W2OCCSA			W3OCCSA		Exact		W4OCCSA		Exact	Exact		W5OCCSA		Exact	Exact	Exact	
	W2RINYN																	
	W2RINST																	
	W2LCNYN			W3LCNYN		Exact		W4LCINV		Exact	Major	Different question structure and wording	W5LCINV		Exact	Major	Exact	
	W2LCNRS			W3LCNRS		Exact		W4LCWHY		Exact	Major	Different question structure and wording	W5LCWHY		Exact	Major	Exact	
	W2LCNSP			W3LCNSP		Exact		W4LCOPS		Exact	Major	Different question structure and wording	W5LCOPS		Exact	Major	Exact	
	W2LVHOM			W3LVHOM		Exact		W4LVHOM		Exact	Minor		W5LVHOM		Exact	Minor	Minor	
	W2LVCHI			W3LVCHI		Exact		W4LVPER		Exact	Major	Different question structure and wording	W5LVPER		Exact	Major	Exact	
	W2LVHEA			W3LVHEA		Exact		W4LVPER		Exact	Major	Different question structure and wording	W5LVPER		Exact	Major	Exact	
	W2LVRET			W3LVRET		Exact		W4LVRET		Exact	Exact		W5LVRET		Exact	Exact	Exact	
	W2NRPER		Retro item, content	W3NRPER			Retro item, content	W4NRPER				Retro item, content						

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
			comparable to W2LVHOM, W2LVCHI, W2LVHEA, W2LVRET				comparable to W3LVHOM, W3LVCHI, W3LVHEA, W3LVRET					comparable to W4LVHOM, W4LVRET						
	W2LVTES			W3LVTES		Exact		W4LVTES		Exact	Exact							
	W2LVITR			W3LVITR		Exact												
	W2LVDES			W3LVDES		Exact		W4LVJDA		Exact	Major	Different question wording	W5LVJDA		Exact	Major	Exact	
	W2LVGSU			W3LVGSU		Exact		W4LVJDA		Exact	Major	Different question wording	W5LVJDA		Exact	Major	Exact	
	W2NRGSU		Retro item, Major comparable to W2LVGSU	W3NRGSU			Retro item, Major comparable to W3LVGSU											
	W2LVSAL			W3LVSAL		Exact		W4LVHSA		Exact	Major	Different question wording	W5LVHSA		Exact	Major	Exact	
	W2LVBEN			W3LVBEN		Exact		W4LVBEN		Exact	Exact		W5LVBEN		Exact	Exact	Exact	
	W2LVLIV			W3LVLIV		Exact												
	W2NRSAL		Retro item, Major comparable to W2LVSAL, W2LVBEN, W2LVLIV	W3NRSAL			Retro item, Major comparable to W3LVSAL, W3LVBEN, W3LVLIV	W4NRSAL				Retro item, Major comparable to W4LVBEN,						

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
	W2LVSEC			W3LVSEC		Exact		W4LVSEC		Exact	Exact		W5LVSEC		Exact	Exact	Minor	
	W2LVNPO			W3LVNPO		Exact		W4LVNPO		Exact	Exact		W5LVNPO		Exact	Exact	Exact	
	W2NRNPO		Retro item, Major comparable to W2LVNPO	W3NRNPO			Retro item, Major comparable to W3LVNPO	W4NRNPO				Retro item, Major comparable to W4LVNPO						
	W2LVDEV			W3LVDEV		Exact		W4LVDEV		Exact	Exact		W5LVDEV		Exact	Exact	Exact	
	W2LVWED			W3LVWED		Exact		W4LVWED		Exact	Exact		W5LVWED		Exact	Exact	Minor	
	W2LVOED			W3LVOED		Exact		W4LVOED		Exact	Exact		W5LVOED		Exact	Exact	Minor	
	W2NRAED		Retro item, content comparable to W2LVWED, W2LVOED	W3NRAED			Retro item, content comparable to W3LVWED, W3LVOED	W4NRAED				Retro item, content comparable to W4LVWED, W4LVOED						
	W2LVTCH			W3LVTCH		Exact		W4LVTCH		Exact	Exact		W5LVTCH		Exact	Exact	Exact	
	W2NRTCH		Retro item, content comparable to W2LVTCH	W3NRTCH			Retro item, content comparable to W3LVTCH	W4NRTCH				Retro item, content comparable to W4LVTCH						
	W2LVAUT			W3LVAUT		Exact		W4LVAUT		Exact	Exact		W5LVAUT		Exact	Exact	Exact	
	W2LVNUM			W3LVNUM		Exact		W4LVNUM		Exact	Exact		W5LVNUM		Exact	Exact	Exact	
	W2LVMST			W3LVMST		Exact												
	W2LVINT			W3LVINT		Exact		W4LVINT		Exact	Minor		W5LVINT		Exact	Minor	Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2LVCON			W3LVCON		Exact		W4LVCON		Exact	Exact		W5LVCON		Exact	Exact	Exact	
	W2LVDIS			W3LVDIS		Exact		W4LVDIS		Exact	Exact		W5LVDIS		Exact	Exact	Exact	
	W2NRCON		Retro item, content comparable to W2LVCON, W2LVDIS	W3NRCON			Retro item, content comparable to W3LVCON, W3LVDIS	W4NRCON				Retro item, content comparable to W4LVCON, W4LVDIS						
	W2LVADM			W3LVADM		Exact		W4LVADS		Exact	Major	Different question wording	W5LVADS		Exact	Major	Exact	
	W2LVSUP			W3LVSUP		Exact		W4LVADS		Exact	Major	Different question wording	W5LVADS		Exact	Major	Exact	
	W2NRADM		Retro item, content comparable to W2LVADM, W2LVSUP	W3NRADM			Retro item, content comparable to W3LVADM, W3LVSUP	W4NRADM				Retro item, content comparable to W4LVADS						
	W2LVNOI			W3LVNOI		Exact		W4LVNOI		Exact	Exact		W5LVNOI		Exact	Exact	Exact	
	W2LVAIM			W3LVAIM		Exact		W4LVACC		Exact	Major	Different question wording	W5LVACC		Exact	Major	Exact	
	W2LVARW			W3LVARW		Exact		W4LVARW		Exact	Exact		W5LVARW		Exact	Exact	Minor	
	W2LVASP			W3LVASP		Exact												
	W2LVACU			W3LVACU		Exact		W4LVACC		Exact	Major	Different question wording	W5LVACC		Exact	Major	Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2LVAOT			W3LVAOT		Exact		W4LVACC		Exact	Major	Different question wording	W5LVACC		Exact	Major	Exact	
	W2NRACC		Retro item, content comparable to W2LVAIM, W2LVARW, W2LVASP, W2LVACU, W2LVAOT	W3NRACC			Retro item, content comparable to W3LVAIM, W3LVARW, W3LVASP, W3LVACU, W3LVAOT	W4NRACC				Retro item, content comparable to W4LVACC, W4LVARW						
	W2LVOTH			W3LVOTH		Exact		W4LVOTH		Exact	Exact		W5LVOTH		Exact	Exact	Exact	
	W2NROTH		Retro item, content comparable to W2LVOTH	W3NROTH			Retro item, content comparable to W3LVOTH	W4NROTH				Retro item, content comparable to W4LVOTH						
	W2LVOSP			W3LVOSP		Exact		W4LVOSP		Exact	Exact		W5LVOSP		Exact	Exact	Exact	
	W2NROSP		Retro item, content comparable to W2LVOSP	W3NROSP			Retro item, content comparable to W3LVOSP	W4NROSP				Retro item, content comparable to W4LVOSP						
	W2LVIMP			W3LVIMP		Exact		W4LVIMP		Exact	Exact		W5LVIMP		Exact	Exact	Exact	
	W2NRIMP		Retro item, content comparable to W2LVIMP	W3NRIMP			Retro item, content comparable to W3LVIMP	W4NRIMP				Retro item, content comparable to W4LVIMP						
	W2APPYN			W3APPYN		Exact		W4APPYN		Exact	Exact		W5APPYN		Exact	Exact	Exact	

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BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2MISBJ																	
	W2MFDIS																	
	W2MIDIS																	
	W2MFINS																	
	W2MIINS																	
	W2MFTEC																	
	W2MITEC																	
	W2MFSTA																	
	W2MISTA																	
	W2MFCUR																	
	W2MICUR																	
	W2MFPAR																	
	W2MIPAR																	
	W2MFREF																	
	W2MIREF																	
	W2MNIMP																	
	W2ALTCP			W3CERTI		Major	Comparability is achieved when used in conjunction with W3ALTCT.	W4CERTI		Major	Exact	Comparability is achieved when used in conjunction with W4ALTCT.	W5CERTI		Major	Exact	Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2ALTPR			W3CEREF		Major	Comparability is achieved when used in conjunction with W3ALTCT.	W4CEREF		Major	Exact	Comparability is achieved when used in conjunction with W4ALTCT.	W5CEREF		Major	Exact	Exact	
	W2ALTLY																	
	W2ALTMM																	
	W2ALTTR																	
	W2REGPR			W3CEREF		Minor	The population answering this item was expanded.	W4CEREF		Major	Exact	Comparability is achieved when used in conjunction with W4ALTCT.	W5CEREF		Major	Exact	Exact	
	W2MOVYN			W3MOVYN		Exact		W4MOVYN		Exact	Exact		W5NRSAS				Minor	
				W3NRSAS		Exact		W4NRSAS		Exact	Exact		W5NRSAS		Exact	Exact	Exact	
				W3RESAS		Minor												
	W2STTYN			W3STTYN		Exact		W4STTYN		Exact	Exact		W5STTYN		Exact	Exact	Exact	
				W3RESST		Minor												
	W2FORYN			W3FORYN		Exact		W4FORYN		Exact	Exact		W5FORYN		Exact	Exact	Exact	
	W2FORNM			W3FORNM		Exact		W4FORNM		Exact	Exact		W5FORNM		Exact	Exact	Exact	
	W2SCNAM			W3SCNAM		Exact		W4SCNAM		Exact	Exact		W5SCNAM		Exact	Exact	Exact	
	W2SCSTR			W3SCSTR		Exact		W4SCSTR		Exact	Exact		W5SCSTR		Exact	Exact	Exact	
	W2SCCIT			W3SCCIT		Exact		W4SCCIT		Exact	Exact		W5SCCIT		Exact	Exact	Exact	

BTLS 2007-08		BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments		Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
	W2SCSTA				W3SCSTA		Exact		W4SCSTA		Exact	Exact		W5SCSTA		Exact	Exact	Exact	
	W2SCZIP				W3SCZIP		Exact		W4SCZIP		Exact	Exact		W5SCZIP		Exact	Exact	Exact	
	W2SCDIS				W3SCDIS		Exact		W4SCDIS		Exact	Exact		W5SCDIS		Exact	Exact	Exact	
	W2SCCOU				W3SCCOU		Exact		W4SCCOU		Exact	Exact		W5SCCOU		Exact	Exact	Exact	
	W2SCGPK				W3SCGPK		Minor		W4SCGPK		Minor	Exact		W5SCGPK		Minor	Exact	Exact	
	W2SCGKG				W3SCGKG		Minor		W4SCGKG		Minor	Exact		W5SCGKG		Minor	Exact	Exact	
	W2SCG01				W3SCG01		Minor		W4SCG01		Minor	Exact		W5SCG01		Minor	Exact	Exact	
	W2SCG02				W3SCG02		Minor		W4SCG02		Minor	Exact		W5SCG02		Minor	Exact	Exact	
	W2SCG03				W3SCG03		Minor		W4SCG03		Minor	Exact		W5SCG03		Minor	Exact	Exact	
	W2SCG04				W3SCG04		Minor		W4SCG04		Minor	Exact		W5SCG04		Minor	Exact	Exact	
	W2SCG05				W3SCG05		Minor		W4SCG05		Minor	Exact		W5SCG05		Minor	Exact	Exact	
	W2SCG06				W3SCG06		Minor		W4SCG06		Minor	Exact		W5SCG06		Minor	Exact	Exact	
	W2SCG07				W3SCG07		Minor		W4SCG07		Minor	Exact		W5SCG07		Minor	Exact	Exact	
	W2SCG08				W3SCG08		Minor		W4SCG08		Minor	Exact		W5SCG08		Minor	Exact	Exact	
	W2SCG09				W3SCG09		Minor		W4SCG09		Minor	Exact		W5SCG09		Minor	Exact	Exact	
	W2SCG10				W3SCG10		Minor		W4SCG10		Minor	Exact		W5SCG10		Minor	Exact	Exact	
	W2SCG11				W3SCG11		Minor		W4SCG11		Minor	Exact		W5SCG11		Minor	Exact	Exact	
	W2SCG12				W3SCG12		Minor		W4SCG12		Minor	Exact		W5SCG12		Minor	Exact	Exact	
	W2SCGUG				W3SCGUG		Minor		W4SCGUG		Minor	Exact		W5SCGUG		Minor	Exact	Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
	W2MVTYP			W3MVTYP		Exact		W4MVTYP		Exact	Exact		W5MVTYP		Exact	Exact	Exact	
	W2SCREL																	
	W2MCNYN			W3MCNYN		Exact		W4MCINV		Exact	Major	Different question structure and wording	W5MCINV		Exact	Major	Exact	
	W2MCNRS			W3MCNRS		Exact		W4MCWHY		Exact	Minor	Stem changed and response options added	W5MCWHY		Exact	Minor	Exact	
	W2MCNSP			W3MCNSP		Exact		W4MCOPS		Exact	Minor	Stem change	W5MCOPS		Exact	Minor	Exact	
	W2MVHOM			W3MVHOM		Exact		W4MVHOM		Exact	Minor	Different question structure and wording	W5MVHOM		Exact	Minor	Minor	
	W2MVHEA			W3MVHEA		Exact		W4MVPER		Exact	Major	Different question wording	W5MVPER		Exact	Major	Exact	
	W2MVTES			W3MVTES		Exact		W4MVTES		Exact	Exact							
	W2MVITR			W3MVITR		Exact												
	W2MVDES			W3MVDES		Exact		W4MVJDA		Exact	Major	Different question wording	W5MVJDA		Exact	Major	Exact	
	W2MVGSU			W3MVGSU		Exact		W4MVJDA		Exact	Major	Different question wording	W5MVJDA		Exact	Major	Exact	
	W2MVSAL			W3MVSAL		Exact		W4MVHSA		Exact	Major	Different question	W5MVHSA		Exact	Major	Exact	

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BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
	W2TPRES																	
	W2TPCON																	
	W2TPSEC																	
	W2TPCHA																	
	W2TPACC																	
	W2TPDIF																	
	W2TPTAS																	
	W2M08YN			W3M08YN		Exact		W4M08YN		Exact	Exact		W5M08YN		Exact	Exact	Exact	
	W2M08IM			W3M08IM		Exact		W4M08IM		Exact	Exact		W5M08IM		Exact	Exact	Exact	
	W2OUTSP			W3OUTSP		Exact		W4OUTSP		Exact	Exact		W5OUTSP		Exact	Exact	Exact	
	W2PENYN																	
	W2PENAM																	
	W2WHDES																	
	W2WHPRI																	
	W2WHACT																	
	W2WHYRS																	
	W2CITZN			W3CITZN		Exact		W4CITZN		Exact	Exact		W5CITZN		Exact	Exact	Exact	
	W2RESOR			W3RESOR		Exact		W4RESOR		Exact	Exact		W5RESOR		Exact	Exact	Exact	
	W2RESSP			W3RESSP		Exact		W4RESSP		Exact	Exact		W5RESSP		Exact	Exact	Exact	

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
	W2HHINC			W3HHINC		Exact		W4HHINC		Exact	Exact		W5HHINC		Exact	Exact	Exact	
	W2MARCU			W3MARCU		Exact		W4MARCU		Exact	Exact		W5MARCU		Exact	Exact	Exact	
	W2MARCH																	
	W2MAR07																	
	W2SPYOU			W3SPYOU		Exact												
	W2SPSPO			W3SPSPO		Exact												
	W2SPLT5			W3SPLT5		Exact												
	W2SP518			W3SP518		Exact												
	W2SP18P			W3SP18P		Exact												
				W3ONSAB				W4ONSAB			Exact		W5ONSAB			Exact	Exact	
				W3SATJB				W4SATJB			Exact		W5SATJB			Exact	Exact	
				W3LCRED														
				W3LCRSP														
				W3RETYN				W4RETYN			Exact		W5RETYN			Exact	Exact	
				W3RETWN				W4RETWN			Exact		W5RETWN			Exact	Exact	
				W3SCCHA				W4SCCHA			Minor		W5SCCHA			Minor	Exact	
				W3PRMGT				W4PRMGT			Exact		W5PRMGT			Exact	Exact	
				W3PRPAR				W4PRPAR			Exact		W5PRPAR			Exact	Exact	
				W3PRAPR				W4PRAPR			Exact		W5PRAPR			Exact	Exact	

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
				W3PRLIS				W4PRLIS			Exact		W5PRLIS			Exact	Exact	
				W3PRDEV				W4PRDEV			Exact		W5PRDEV			Exact	Exact	
				W3PRTCH				W4PRTCH			Exact		W5PRTCH			Exact	Exact	
				W3PRSTU				W4PRSTU			Exact		W5PRSTU			Exact	Exact	
				W3PRFAR				W4PRFAR			Exact		W5PRFAR			Exact	Exact	
				W3PRCOL				W4PRCOL			Exact		W5PRCOL			Exact	Exact	
				W3PRSAT				W4PRSAT			Exact		W5PRSAT			Exact	Exact	
				W3REMT														
				W3REHOM				W4REHOM			Minor		W5REHOM			Minor	Minor	
				W3RECHI				W4REPER			Major	Different question wording	W5REPER			Major	Exact	
				W3REHEA				W4REPER			Major	Different question wording	W5REPER			Major	Exact	
				W3RESAL				W4REHSA			Major	Different question wording	W5REHSA			Major	Minor	
				W3RELOA														
				W3REINC				W4REINC			Minor		W5REINC			Minor	Exact	
				W3RECOM				W4RECOM			Exact		W5RECOM			Exact	Exact	
				W3REHBE				W4REHBE			Exact		W5REHBE			Exact	Exact	

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BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
				W3ACTSU				W4ACTSU			Exact		W5ACTSU			Exact	Minor	
				W3ACTMN				W4ACTMN			Exact		W5ACTMN			Exact	Minor	
				W3ACTUN				W4ACTUN			Exact		W5ACTUN			Exact	Minor	
				W3ACTPR				W4ACTPR			Exact		W5ACTPR			Exact	Minor	
				W3ACTLD				W4ACTLD			Exact		W5ACTLD			Exact	Exact	
				W3ACTSP				W4ACTSP			Exact		W5ACTSP			Exact	Exact	
				W3CERWN				W4CERWN			Exact		W5CERWN			Exact	Exact	
				W3CERBA				W4CERBA			Exact		W5CERBA			Exact	Exact	
				W3CEREX				W4CEREX			Exact		W5CEREX			Exact	Exact	
				W3CEREV				W4CEREV			Exact		W5CEREV			Exact	Exact	
				W3RENT				W4RENT			Minor		W5RENT			Minor	Exact	
				W3ENDOR				W4ENDOR			Minor		W5ENDOR			Minor	Exact	
				W3DESCH				W4DESCH			Exact		W5DESCH			Exact	Exact	
				W3POSTSECSCHOOL				W4POSTSECSCHOOL			Exact		W5POSTSECSCHOOL			Exact	Exact	
				W3DEOUS				W4DEOUS			Exact		W5DEOUS			Exact	Exact	
				W3DECIT				W4DECIT			Exact		W5DECIT			Exact	Exact	
				W3POSTSECCITY				W4POSTSECCITY			Exact		W5POSTSECCITY			Exact	Exact	
				W3DESTA				W4DESTA			Exact		W5DESTA			Exact	Exact	

BTLS 2007-08	BTLS 2008-09			BTLS 2009-10				BTLS 2010-11					BTLS 2011-12					
Variable Name	Variable Name	Match 2007-08	Comments	Variable Name	Match 2007-08	Match 2008-09	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Comments	Variable Name	Match 2007-08	Match 2008-09	Match 2009-10	Match 2010-11	Comments
				W3POSTSECSTATE				W4POSTSECSTATE			Exact		W5POSTSECSTATE			Exact	Exact	
				W3ENCOU				W4COURS			Minor		W5COURS			Minor	Exact	
				W3REACO				W4REACO			Minor		W5REACO			Minor	Exact	
				W3MENTR				W4MENTR			Exact		W5MENTR			Exact	Exact	
				W3MENUM				W4MENUM			Exact		W5MNUMB			Exact	Major	Response options changed
				W3MENRA				W4MENRA			Exact		W5MENRA			Exact	Minor	
				W3MENPR				W4MENPR			Exact		W5MENPR			Exact	Exact	
				W3BIRTM														
				W3BIRTD														
				W3SPSYS				W4SPSYS			Exact		W5SPSYS			Exact	Exact	
	W2ELSECSCHOOL			W3ELSECSCHOOL		Exact		W4ELSECSCHOOL		Exact	Exact		W5ELSECSCHOOL			Exact	Exact	
	W2ELSECCITY			W3ELSECCITY		Exact		W4ELSECCITY		Exact	Exact		W5ELSECCITY			Exact	Exact	
	W2ELSECSTATE			W3ELSECSTATE		Exact		W4ELSECSTATE		Exact	Exact		W5ELSECSTATE			Exact	Exact	
	W2ELSECCOUNTY			W3ELSECCOUNTY		Exact		W4ELSECCOUNTY		Exact	Exact		W5ELSECCOUNTY			Exact	Exact	
								W4SALAR					W5SALAR				Major	Response options changed
								W4EVALF					W5EVALF				Exact	

BTLS 2007–08	BTLS 2008–09			BTLS 2009–10				BTLS 2010–11					BTLS 2011–12					
Variable Name	Variable Name	Match 2007–08	Comments	Variable Name	Match 2007–08	Match 2008–09	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Comments	Variable Name	Match 2007–08	Match 2008–09	Match 2009–10	Match 2010–11	Comments
								W4EVALI					W5EVALI				Exact	
								W4REOPP					W5REOPP				Minor	
								W4MVOPP					W5MVOPP				Minor	
								W4TENSC					W5TENSC				Exact	
								W4TENYN					W5TENYN				Exact	
								W4SALAT					W5SALAT				Exact	
								W4DEPEN					W5DEPEN				Exact	
													W5LVWHY					
													W5REWHY					
													W5MVWHY					
													W5UNDE5					

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