
*Journal Article*

*We assess the intergenerational educational mobility of recent cohorts of high school graduates to consider whether Hispanics' lagging post-secondary attainment reflects a temporary lull due to immigration of low education parents or a more enduring pattern of unequal transmission of social status relative to whites. Using data from three national longitudinal studies, a recent longitudinal study of Texas high school seniors and a sample of students attending elite institutions, we track post-secondary enrollment and degree attainment patterns at institutions of differing selectivity. We find that group differences in parental education and nativity only partly explain the Hispanic-white gap in college enrollment, and not evenly over time. Both foreign- and native-born college-educated Hispanic parents are handicapped in their abilities to transmit their educational advantages to their children compared with white parents. We conclude that both changing population composition and unequal ability to confer status advantages to offspring are responsible for the growing Hispanic-white degree attainment gap.*


*Journal Article*

*The authors examine whether standards based accountability reforms of the past two decades have closed the achievement gap among public and private high school students. They analyzed data from the Education Longitudinal Study (ELS) to examine sector differences in high school achievement in the era of standards based reforms. The authors found that students in Catholic and private secular schools enjoy greater math gains from 10th to 12th grade than comparable public school students. However, they found that these advantages are largely concentrated among more advanced math skills. Moreover, private school students took more academic math courses than public school students, even after controlling for family background and prior achievement. These differences in course taking accounted for most of the public-private difference in achievement gains.*


*Journal Article*

*The present study is organized around the central hypothesis that the high school context affects students’ postsecondary outcomes. Drawing on a nationally representative sample of high school seniors from the Educational Longitudinal Survey (ELS:2002), this study broadens our empirical understanding of how students’ acquisition of human, social, and cultural capital at the individual and school level affects 2- and 4-year college attendance. Results highlight the normative role of high schools in promoting college enrollment, particularly the role of socioeconomics, academic preparation, and access to parent, peer, and college-linking networks. This study advances our understanding of the secondary-
postsecondary nexus and has implications for policies and practices aimed at realizing the current administration's promise of providing greater access to postsecondary education for all students.


**Journal Article**

This research examined whether various dimensions of parental involvement predicted 10th-grade students' motivation (engagement, self-efficacy towards maths and English, intrinsic motivation towards math and English) using data from the Educational Longitudinal Study of 2002 (ELS 2002). Results showed that both parents’ educational aspiration for their children and school-initiated contact with parents on benign school issues had strong positive effects on all five motivational outcomes. On the contrary, parent-school contact concerning students’ school problems was negatively related to all five motivational outcomes investigated in the study. Additionally, parental advising positively predicted students’ academic self-efficacy in English as well as intrinsic motivation towards English, and family rules for watching television were positively linked to students’ engagement and intrinsic motivation towards both English and maths.


**Journal Article**

Work-based learning interventions, particularly cooperative education, are a viable way to support the post-high school transition process, enhance work-related cognitive development, and increase the occupational engagement of at-risk youth. Using propensity score matching to analyze data from the Educational Longitudinal Study of 2002 (ELS:2002), the impact of participation in cooperative education on two indicators of postsecondary transition readiness, including postsecondary education plans right after high school and importance placed on work, were examined for students deemed at risk of high school failure. Participation in cooperative education had a significant positive effect on at-risk students' postsecondary education plans right after high school. However, no significant effect was detected for the importance students placed on work.


**Dissertation/Thesis**

This dissertation investigates the impact of high school exit exams in the United States on various student academic outcomes. The dissertation consists of two separate parts. The first part uses a specific state-based data set to examine whether failing the HSEE will discourage students from completing high school. The second part studies the relationship between state HSEE policy and math achievement, high school completion and GED (General Education Development certificate) receiving rate using a national level data set. In the first chapter, I utilize a recent and unique state-specific dataset to identify the causal effect of HSEE on students' early dropout behavior based on a Regression Discontinuity Design. It compares the educational outcome of students just below and above the cutoff score for the HSEE. I find statistically significant evidence that students who barely fail the HSEE on their initial attempt are more likely to exit from high school earlier than those who barely pass the HSEE. The discontinuity amounts to a large
proportion of the dropout probability of barely-failers, particularly for minority and low-income students, suggesting that the potential benefit of raising educational standards might come at the cost of increasing inequalities in the educational system. The second chapter provides a broader picture on the impact of the HSEE on a national level. I use the Education Longitudinal Study data (ELS: 2002–2006) to examine the association between state HSEE policy and students’ math achievement, dropout probability, on time graduation and the GED attainment. My results suggest that students residing in a state with the HSEE requirement tend to have a slightly higher mathematics score in standardized testing. I find no strong evidence that the impact of HSEE varies by ability and social economic status. However, low ability students, especially Hispanic students, are more likely to drop out and receive a GED instead of a regular diploma, and their math achievement is negatively related to the state HSEE policy.


Journal Article

Participation in school-based extracurricular activities influences educational success. Thus, it is important to depict a profile of school-based extracurricular activity involvement for a Latino student population that is marginalized in schools. This research uses the Educational Longitudinal Study of 2002 and logistic regression analyses to present a profile of the factors linked to participation in school-based extracurricular activities among Latino 10th-grade students. Results indicate that geographic characteristics, as well as immigration-related characteristics such as immigrant generational status and English proficiency, are pertinent factors in Latinos’ participation in school-based extracurricular activities.


Journal Article

This article presents a study that investigated factors that distinguish high school students who completed at least one course beyond Algebra 2 from those who completed a course in Algebra 2 or less. The sample included a cohort of 11,909 high school seniors who participated in the Educational Longitudinal Study 2002-2004. Data were analyzed using a multinomial logistic regression and results indicated that student expectations, parent aspirations, race, and socioeconomic status were among the most significant predictors. Implications for school counselors are discussed.


Journal Article

In an effort to increase both adolescents’ engagement with school and academic achievement, school districts across the United States have created small high schools. However, despite the widespread adoption of size reduction reforms, relatively little is known about the relationship between size, engagement and outcomes in high school. In response, this article employs a composite measure of engagement that combines organizational, sociological, and psychological theories. We use this composite measure with the most recent nationally-representative dataset of tenth graders, Educational Longitudinal Study: 2002, (N = 10,946, 46% female) to better assess a generalizable relationship among school engagement, mathematics achievement and school size with specific focus on cohort size. Findings confirm these measures to be highly related to
student engagement. Furthermore, results derived from multilevel regression analysis indicate that, as with school size, moderately sized cohorts or grade-level groups provide the greatest engagement advantage for all students and that there are potentially harmful changes when cohorts grow beyond 400 students. However, it is important to note that each group size affects different students differently, eliminating the ability to prescribe an ideal cohort or school size.


**Journal Article**

Women have higher educational expectations than men, matriculate at postsecondary institutions at greater rates, and take less time to graduate (Buchmann & DiPrete, 2006, Mau & Bikos, 2000, NCES, 2005). Although historically excluded from higher education, within the last thirty years females have drawn even with males and subsequently surpassed them on these educational measures, reversing the gender gap. The growth in a gender gap that favors women is forcing policymakers and administrators to deal with a difficult situation: how to address the gender disparity and increase male participation in postsecondary education without penalizing females and rolling back vital gains women have made in higher education? Attempts to address this issue have had mixed success (see Fonda, 2000), and more information is needed to maximize participation in higher education for all students, regardless of gender.

The present study provides a direct test of the assumption that peer and/or familial influences are partially responsible for the educational expectation gender gap.


**Journal Article**

**Background:** Many children of immigrants are not enrolled in high schools that sufficiently meet their needs, and subsequently, many are not making a successful transition to, and/or successfully completing, higher education. As immigration grows in the United States, educators and policy makers must understand how the educational processes for children of immigrants differ from nonimmigrants. Because expectations for higher education are a necessary, though insufficient, step toward college attendance and degree attainment, and because students have these attitudes influenced by the schools they attend, the author examines high school composition for its effects on educational expectations and how compositional effects differ between children of immigrants and nonimmigrants. **Purpose and Research Questions:** This study intends to be another step on the path toward understanding the educational processes of children of immigrants specifically, and of all students more broadly, as the immigrant population grows in U.S. schools. Toward those ends, this study is based on two overarching research questions: (1) How do the immigrant compositions of U.S. secondary schools affect the educational expectations of all students? (2) How do the compositions of U.S. secondary schools affect the educational expectations of children of immigrants differently than nonimmigrant students? **Research Design:** The research questions are addressed via secondary data analysis using data from the Educational Longitudinal Study (ELS:2002/2004), which were collected by the National Center for Education Statistics. The author explores school composition effects on a binary dependent variable indicating whether a 12th-grade student expects to complete a graduate or professional degree. This study emphasizes a critical-quantitative approach by demonstrating that common theories and assumptions about educational expectations may be inaccurate for children of immigrants in today’s schools. **Conclusions:** Results show that children of
immigrants are affected differently by school composition than are nonimmigrants, and in ways that contradict commonly accepted theoretical views. Specifically, this analysis demonstrates that comparative and normative theories of school effects are not accurate for children of immigrants, at least not to the same degree as they are for nonimmigrants. This is a reminder to researchers and practitioners alike that subgroups of students, in this case the children of immigrants, may not be affected by schools in similar ways.

2009


Dissertation/Thesis

This dissertation examines the motivational aspects of academic engagement from a social-psychological perspective by introducing the concept of school membership as a mediating factor between academic environment and the behaviors that comprise academic engagement. School membership is rooted in identity theory and is defined as the possession of social bonds with a social network of school members through which a highly salient self-identity and high levels of commitment as a member of the school are internalized. In order to identify links between academic environment, school membership, and academic engagement, I qualitatively examine disadvantaged students within "City High", a school employing the Talent Development High School Model, a comprehensive school reform model with that creates an environment conducive to the internalization of school membership. Using ethnographic methods, I compare and contrast school membership levels and perceptions of in and out of school environment within a diverse group of students at "City High". In order to test my qualitative findings on a broad scale, I quantitatively examine links between academic environment, school membership, and academic engagement through multilevel modeling techniques, using data from the Educational Longitudinal Study of 2002. Both the qualitative and quantitative portions of this dissertation provide suggestive results indicating both the presence of school membership within disadvantaged students with high levels of academic performance and effort. In addition, both phases of this project indicate that students' social and structural academic environment were related to the creation and maintenance of school membership. This dissertation concludes by examining the ways in which comprehensive school reform models benefit by focusing on students who are transitioning to high school and placing the creation of a "culture of success" on par with raising student achievement levels, as these goals are intertwined.


Journal Article

Using the 2002 Educational Longitudinal Study database, a national survey conducted by the National Center of Education Statistics, the authors investigated the characteristics of students who seek out professional school counselors in order to receive college information. Results indicated that African Americans and female students were more likely to contact the school counselor for college information. In addition, students in high-poverty, large schools and schools with smaller numbers of counselors were less likely to seek school counselors for college information. School counselors' postsecondary aspirations for students also impacted students' contact with the school counselor. Implications for school counselors and future research are included.

**Journal Article**

This study addresses the role that social and cultural capital play in first-to-second year persistence in higher education and examines how race and ethnicity are associated with initial levels of such capital. Using logistic regression analysis, the results show that social and cultural capital are positively significant for persistence in higher education across all racial and ethnic groups. However, results also show that certain groups, especially Hispanics, have lower levels of normatively valued forms of social and cultural capital than others. The effects for social and educational stratification are discussed, as are implications for higher education retention policies and further research.


**Report**

Rising concern about America's ability to maintain its competitive position in the global economy has renewed interest in science, technology, engineering and mathematics (STEM) education. To understand who enters into and completes undergraduate programs in STEM fields, this report examined data from three major national studies: the 1995-96 Beginning Postsecondary Students Longitudinal Study (BPS:96/01); the 2003-04 National Postsecondary Student Aid Study (NPSAS:04); and the Education Longitudinal Study of 2002/06 (ELS:02/06). STEM fields, as defined in this study, include mathematics, natural sciences (including physical sciences and biological/agricultural sciences), engineering/engineering technologies, and computer/information sciences. This study used students' reported major field of study to identify STEM entrants and considered a STEM entrant anyone who reported a major in a STEM field at any time during his or her postsecondary enrollment. Looking only at single points in time, STEM majors accounted for 14 percent of all undergraduates enrolled in U.S. postsecondary education in 2003-04 and 15 percent of 2003-04 high school graduates who were enrolled in postsecondary education in 2006. In general, the percentage of students entering STEM fields was higher among male students, younger and dependent students, Asian/Pacific Islander students, foreign students or those who spoke a language other than English as a child, and students with more advantaged family background characteristics and strong academic preparation than among their counterparts who did not have these characteristics. After 6 years of initial college enrollment, STEM entrants generally did better than non-STEM entrants in terms of bachelor's degree attainment and overall persistence. Although students in various STEM fields were generally alike in terms of their demographic, academic, and enrollment characteristics and their outcomes, those entering computer/information sciences differed in many respects. According to the BPS data, older students, students from low-income families, and those less academically prepared enrolled in computer/information sciences more often than did their peers who were younger, from high-income families, or more academically prepared. Additionally, compared to other STEM students, a larger percentage of computer/information sciences majors attended public 2-year institutions, enrolled in sub-baccalaureate programs, and attended classes exclusively part-time. A Technical Notes section describes data sources, study samples, weights, and derived variables used for this report. It also includes a crosswalk for the specific contents of the STEM categorization for various major fields of study.

Report

The "Higher Education Reconciliation Act of 2005" created two new grant programs for undergraduates: the Academic Competitiveness Grant (ACG) program and National Science and Mathematics Access to Retain Talent (National SMART) Grant program. The ACG program is intended to encourage students to take challenging courses in high school and thus increase their likelihood of success in college. The National SMART Grant program is intended to encourage students to pursue certain college majors considered in high demand in the global economy (mathematics, science, engineering, technology, and certain languages deemed critical to the national interest). Congress provided $790 million for the 2006-07 academic year for these new programs, and $4.5 billion over five years. The programs will end after the 2010-11 academic year unless reauthorized so it is important to know soon whether the programs are having the desired effect and if there are any unintended consequences that should be addressed. In evaluating the ACG and National SMART Grant programs during the first four years (through 2009-10), the U.S. Department of Education sought to determine: (1) lessons learned from the early implementation of the program that will lead to program improvement as well as any identifiable unintended consequences; (2) how states differ in how they define "rigorous secondary school programs of study" and whether states differ in the rate at which Pell Grant recipients complete the course work required under these definitions to qualify for an ACG or major in the specified fields to qualify for a National SMART Grant; (3) whether financial incentives induce more economically disadvantaged high school students to complete a rigorous program of study and to enroll and succeed in postsecondary education; (4) the gap between students in lower-and higher-income families in meeting the standards of the ACGs and National SMART Grants; and (5) whether the availability of National SMART Grants is associated with an increase in the proportion of Pell Grant recipients who major in and receive degrees in mathematics, science, engineering, technology, and critical languages; and (6) whether Pell Grant recipients with National SMART Grants differ from those without them. This report synthesizes information gathered during the first year of the study, which covers the first year that grants were awarded (2006-07). Six chapters comprise this report. Following an Introduction, Chapter 2 identifies implementation issues from the perspective of major stakeholders by conducting interviews, reviewing documents, and monitoring stakeholder Web sites. Chapter 3 compares information on the state-specific rigorous high school programs approved by the secretary of education and on state high school graduation requirements. Chapter 4 examines 2006-07 participation in the programs overall, across states, by student characteristics, and (for National SMART Grants) by field of study using the COD-CPS Interface Grant Recipient File maintained by the Office of Federal Student Aid. Chapter 5 analyzes historical data to determine national trends in high school course-taking and develops estimates of eligibility for ACGs and National SMART Grants. This baseline information--obtained from the National Assessment of Educational Progress (NAEP), Education Longitudinal Study of 2002 (ELS), Beginning Postsecondary Student Aid Studies (BPS), National Postsecondary Student Aid Studies (NPSAS), and the Integrated Postsecondary Education Data System (IPEDS)--will provide a benchmark against which to examine current and future participation in the ACG and National SMART Grant programs. Finally, Chapter 6 summarizes Department of Education and stakeholder recommendations for improving the programs. Appended are: (A) List of National SMART Grant-Eligible Majors; (B) History of the ACG and National SMART Grant Programs; (C) "High Schools That Work" Award of Educational Achievement; (D) National Data Sources: (E) Supplemental Tables on ACG and National SMART Grant Program Participation by Institution Type in 2006-07; (F) Supplemental Tables on High School Course Work; and (G) Supplemental Tables on ACG and National SMART Grant Program Participation by State in 2006-07.

Journal Article

This study uses data from the Educational Longitudinal Study of 2002 to test a conceptual model that integrates aspects of sociological and econometric frameworks into a traditional status attainment model for educational aspirations. Using descriptive and logistic analyses, this study advanced understanding of the patterns and stability of aspirations; characteristics of students who increase, decrease, and maintain aspirations; predictors of 12th-grade aspirations; and variations in predictors of 12th-grade aspirations by race/ethnicity. The study’s findings have implications for policy, practice, and research. Specifically, the findings reinforce the need for policies and practices geared toward enhancing existing high school reform efforts. The study also identifies recommendations for future research.


Report

This report presents information about selected characteristics and experiences of high school sophomores in 2002 that subsequently dropped out of school. It also presents comparative data about late high school dropouts in the years 1982, 1992, and 2004. Three data sources provide the information for the report: the High School and Beyond Longitudinal Study of 1980 Sophomores (HS&B-So:80/92), the sophomore cohort of the National Education Longitudinal Study of 1988 (NELS:88), and the sophomore cohort of the Education Longitudinal Study of 2002 (ELS:2002). In each case, high school students were surveyed in the spring term of their sophomore year and then again 2 years later in the spring, when most of them were seniors. Dropouts are defined as sophomores who left school (and remained out of school) without receiving a regular diploma or earning a GED or equivalency credential by the spring 2 years later. All estimates have been weighted to represent the population of high school sophomores in each cohort, and the estimated standard errors account for the complex survey designs of these studies. All comparisons reported, unless explicitly noted, have met the criterion of statistical significance using a two-tailed Student's t test with an alpha level of 0.05. Adjustments for multiple comparisons were not included. The report is provided with the caution that the relationships between student characteristics and dropping out are purely correlational and do not indicate causality. This report is descriptive in nature, and the results are from bivariate comparisons that test for differences between groups defined by student characteristics and dropout status. Release of this descriptive report is intended to encourage more in-depth analyses of the relationship between these variables using more sophisticated statistical methods. Dropping out of high school is a major life event that severely impacts students’ chances for subsequent educational and occupational opportunities. Even if dropouts obtain an equivalency credential, their ability to benefit from additional postsecondary options may be limited. Two appendixes are included; (A) Technical Notes and Glossary; and (B) Standard Error Tables.


Dissertation/Thesis

The debate surrounding school choice has become increasingly polemical in recent years. While advocates of choice suggest that it will combat inequality and increase achievement, opponents contend that choice may be transforming inequality, shifting
disparities that were once a between-school problem and making them a within-school occurrence. This study examines the effect of school choice on three aspects of education: school governance and organization, school-level achievement, and inequality in student-level achievement and track placement/advanced course-taking. I use two competing theoretical frameworks to explain the relationship between choice, organization, achievement, and tracking: a market model favored by economists and conflict model rooted in sociological traditions. I use data from the Educational Longitudinal Study (ELS) of 2002 and 2004 to evaluate the effects of school choice. The results of this study suggest that public choice options do little to enhance school organization and school-level achievement gains. Private choice options, particularly Catholic schools, have significant positive effects on school organization and school-level achievement gains. Moreover, rather than reducing the SES gap in achievement, public schools of choice and private schools increase this gap. Although tracking was theorized to be the causal mechanism perpetuating this effect, my findings indicate that choice schools do not intensify racial or SES differences in curricular tracking. Instead, private choice options attenuate the SES gap in tracking and advanced course-taking. However, racial and economic diversity mediate the track placement of students in public schools of choice. Low SES and minority students in racially and economically diverse choice schools are less likely to be in the academic track while high SES and White students are more likely to be in the academic track. The findings generated here have important implications for public policy initiatives like No Child Left Behind aimed at increasing achievement levels and reducing race and income-based disparities in education via school choice. If poor and minority parents must rely on public and private choice options to flee failing schools, choice may not deliver on its promise of enhancing outcomes for these students, at least in terms of achievement.


While there has been a concerted effort to close the achievement gap and decrease school dropout rates for more than 30 years, Hispanic students are still dropping out of school at two and a half times the rate of black students, four times the rate of white students and almost eight times the rate of Asian students (Kaufman, Alt & Chapman, 2002). The Hispanic dropout crisis has been recognized as a national problem and was addressed by the federal government through the No Child Left Behind Act of 2001, through its focus on closing the racial gap in graduation rates. Regrettably, data continues to suggest that this situation is not improving (U.S. Census Bureau, 2000). A more thorough understanding of the relationship between race/ethnicity and educational persistence is necessary to help create policies and practices to increase Hispanic graduation rates and close the graduation gap. Investigating deeper into this issue of Hispanics drop out, census data disaggregated by national origin, reveal that there are strong differences between nationalities and that Mexicans have the lowest rate of educational attainment among all Hispanic groups (U.S. Census Bureau, 2004). Due to the disparity in performance within the larger Hispanic population, this study will focus on the sub-group with the lowest educational attainment and highest dropout rate, Mexican youth. The purpose of this study is to investigate those input and process variables that may be influenced by school personnel in order to help increase Mexican-descent students’ ability to persist in school toward graduation. The current study, in essence, will contribute to a better understanding of students’ social support from adults at school (social capital) and the effect this has on students’ educational expectations, attendance and persistence. The current study utilizes the Educational Longitudinal Study of 2002/2004 (ELS:2002/2004) dataset sponsored by NCES.

Journal Article

By offering information, counseling, and tutoring, college outreach programs attempt to smooth the path between high school and higher education for at-risk students. But do these program work? This paper uses longitudinal data from the Education Longitudinal Study to construct two quasi-experiments to assess the effectiveness of college outreach. The first compares outreach program participants with a propensity score matched sample of program non-participants to measure the effects of targeted college outreach programs. The second assesses the effects of school-wide college outreach programs by comparing students in school-wide outreach high schools with students in a matched sample of high schools that offer no formal outreach. The results suggest that targeted outreach programs do little to change the educational experiences of participating students. However, there is limited evidence to suggest that school-wide outreach programs may have modest "spillover" effects, improving the educational outcomes of relatively unengaged students at participating schools.


Conference Proceeding

Analysis is based upon data from ELS:2002 base year and first follow-up. The treatment of interest is defined by the responses to a set of questions that asked students whether and how they prepared for the SAT. Students were able to indicate if they had prepared through the use of school courses, commercial courses, tutoring, or a variety of preparatory materials. In what follows, a coached student is defined as one that reported participating in a commercial preparatory course. The analysis sample was restricted those students who had a 10th grade transcript available, responded to both the 2002 (grade 10) and 2004 (grade 12) surveys, and took the PSAT and SAT. Students under this condition were denominated the POP1 sample. In contrast, separate analyses were run for a POP2 sample that represents those students who took the SAT but did not take the PSAT2.


Journal Article

Using data from the National Education Longitudinal Study of 1988 and the Educational Longitudinal Study of 2002, I analyze the association that students' extracurricular activities have with two academic outcomes: mathematics achievement test scores and college expectations. I consider changes between cohorts and gender differences within each cohort. While prior achievement and expectations have the strongest associations with the dependent variables, relationships do appear between extracurricular participation and the dependent variables. There is only one cohort difference in the association between activities and math achievement test scores; computer use was positively associated with students' scores in the 1990s, but had no association with students' scores in the 2000s. School-sponsored activities were associated with higher scores for all students, while television-watching and hanging out with friends were negatively associated with them. School activities were positively associated with the college expectations of students in both cohorts, while spending time hanging out with friends was negatively associated with expectations, especially for students in the later
cohort. There were a few gender differences in the association between activities and math scores, but no gender differences in the association between activities and college expectations. The findings indicate that many of the same activities are relevant for math achievement and college expectations in the two time periods.


Report

With federal legislation now requiring schools to report graduation rates, high school dropouts are receiving renewed attention from educators, policymakers, and researchers. Recent research has indicated a relationship between the number of course credits that students accrue each school year and students' high school completion status (Allensworth and Easton 2005). This Statistics in Brief uses data from the Education Longitudinal Study of 2002 (ELS:2002) to examine the number of credits earned by high school students and the relationship between course credit accrual and dropping out. Differences in course credit accrual are first reported by selected subjects (English, mathematics, and science). Then, differences in the average cumulative number of course credits accrued across academic years between high school graduates and dropouts are examined in order to describe their enrollment and completion behaviors. This analysis examines variations in course credit accrual and the timing of dropping out by student characteristics (sex, race/ethnicity, and socioeconomic status) and students' school characteristics (location and sophomore class size). In addition, this Statistics in Brief compares the characteristics of students who dropped out with those of students who graduated on time, to show how these groups differ. Findings indicate that high school dropouts earned fewer credits than did on-time graduates within each year of high school, and the cumulative course credit accrual gap increased with each subsequent year. Standard Error Tables are appended.


Dissertation/Thesis

Analyzing data from the Educational Longitudinal Study of 2002 (ELS:2002), this study compares the conformity of student gender roles attending single-sex and co-educational schools and examines the relationship between gender role conformity and bullying victimization in each educational context. This study is the first to investigate bullying in single sex schools and to use a large scale national dataset to examine student gender role conformity in schooling. Analyses of the base year 10th grade cohort of ELS:2002 reveal that both single sex and coeducational schooling are distinct contexts for student gender roles. Female students in both single sex and coeducational schools were significantly more likely to have higher average gender role conformity than male students in both single sex and coeducational schools. Gender role conforming students were significantly less likely to be bullied than gender role nonconforming students, even when controlling for whether the school is single sex or coeducational. Results also indicate that schools have dominant gender role norms, as students who differ from the average gender role conformity in their school are significantly more likely to experience bullying. Variation from a school-based gender role norm leads to a greater experience of bullying for students, and it is gender nonconforming students that are most likely to experience this increased likelihood of bullying. Despite the fact that female single sex schools are the most gender role conforming educational contexts among all four investigated in this study, gender role nonconforming girls who attend them are significantly less likely to experience bullying. Addressing the conflation of sex and gender
underlying the sex-based educational policy of single sex schooling, this study argues that single sex public educational policy can be more carefully crafted with an attention to its theoretical underpinnings by taking into account the dynamics of students’ gender roles. Implications for educational policy are discussed with particular emphasis on policy decisions at the district and state levels in addition to federal level policies, laws, and mandates such as Title IX and No Child Left Behind.


Using secondary data from the first wave of the Education Longitudinal Study of 2002 (ELS:2002), this study tested and examined aspects of Nan Lin's (1999; 2001) social capital theory with economically disadvantaged adolescents to determine if various forms of social support have an impact on these students’ academic success in school. The results provide adequate support for Lin’s model. These findings indicate the importance of principal leadership in facilitating the process of relationship building between school staff (particularly teachers and guidance counselors) and economically disadvantaged adolescents and the effect this can have on students' academic achievement. Ideas for principals in enhancing the school staff's commitment to the importance of relationship building with economically disadvantaged adolescents are suggested.


Multiple statistical analyses were used to investigate the relationship that student characteristics have with success in alternative learning environments. Student characteristics were separated into scholastic characteristics, which have a direct academic focus and general characteristics that comprise personal and social student attributes. The review of related research indicated a number of scholastic and general student characteristics that impact or could potentially impact success in alternative schools/programs. These provided the focal variables for the study. School success was defined as school completion and math gain scores. School completion was assumed to be the ultimate measure of success while math gains were indicative of actual learning and academic growth. The sample for the study comprised data from the National Center for Education Statistics’ (NCES) Educational Longitudinal Study 2002. Within that study design, the sample consisted of 425 students who attended 22 public alternative schools and 335 students who attended alternative programs within 229 traditional public high schools. For the analyses, these subjects were divided into two samples, those attending alternative programs and those attending alternative schools. This was done to determine if the findings were applicable across different alternative educational environments. The results indicated that reading ability and motivation were the scholastic characteristics most related to school success, while the general characteristics that contributed to a student's personal outlook and level of support were the most important in their relationship to success. Although the degree of predictability was moderate to low, the different statistical analyses consistently indicated that reading ability, motivation, student expectations, self-esteem, parental involvement, and student-teacher relationships were strongly related to student success in alternative learning settings. Gender, ethnicity, and special education placement did not affect the relationship between these variables and the two measures of academic success. Socio-economic status did influence the relationship with math gains in the alternative school sample. For students from lower socio-economic backgrounds, reading ability, expectations, and parental involvement were the key variables. For students from the higher socio-
economic background, reading ability and self-esteem were the most important. The general consistency of the findings across samples suggested that students need to possess the necessary academic skills and a certain amount of academic drive in order to be successful in the alternative learning environment. The results regarding the importance of personal outlook and level of support in students' academic success seem to indicate that alternative students must have some academic focus and direction, as well as a sense of self that reflects a personal perception of being capable. This personal outlook dimension must be paired with emotional/material resources that support and sustain the students' academic work and drive.


Journal Article

This article reexamines the conjecture of James S. Coleman that intergenerational social closure promotes student achievement in high schools, analyzing the best national data on academic achievement and social networks: the 2002 and 2004 waves of the Education Longitudinal Study. The results show that within the Catholic school sector, schools that are characterized by dense parental networks have substantially higher average student achievement. This association can be reduced but not eliminated by conditioning on available measures of student network structure and standard measures of family background. In contrast, in the public school sector, a similarly strong bivariate association between dense parental networks and student achievement can be attributed almost entirely to these basic conditioning variables. These results represent, at best, a mixed verdict for Coleman's predictions. Intergenerational closure in its currently observed form does not increase achievement in public schools, suggesting that parental monitoring of discipline does not outweigh some of the costs of parental closure. However, intergenerational closure may increase achievement in Catholic schools to a modest degree because Catholic schools are affiliated with religious communities that have appropriable norms.


Journal Article

Adolescents spend only a fraction of their waking hours in school and what they do with the rest of their time varies dramatically. Despite this, research on out-of-school time has largely focused on structured programming. The authors analyzed data from the Educational Longitudinal Study of 2002 (ELS:2002) to examine the out-of-school time activity portfolios of 6,338 high school sophomores, accounting for time spent in school clubs and sports as well as 17 other activities. The analytical sample was balanced with respect to sex and racially and ethnically diverse: 49% female, 67% White, 10% Latino, 10% African American, and 6% Asian and Pacific Islander. Approximately 76% of the sample attended public schools, 30% were in the highest socioeconomic quartile, and 20% were in the lowest socioeconomic quartile. The authors identified five distinct out-of-school time activity portfolios based on a cluster analysis. The demographic profiles of students by portfolio type differed significantly with respect to sex, race/ethnicity, socioeconomic status, school type and location. Students by portfolio type also differed significantly in terms of measures of academic success, school behavior, victimization and perceptions of school climate, controlling for covariates. These findings underscore the importance of more complex considerations of adolescents' out-of-school time.
*Paper presented at the annual meeting of the American Society of Criminology.*

**Conference Paper**

This research investigates the influence of a school’s level racial and ethnic heterogeneity upon the levels of student victimization. Prior school violence and safety research indicates that schools serving racial and ethnic minorities report relatively higher incidences of violence, fear, and victimization (Welsh, 2001; Payne, Gottfredson, Gottfredson, 2003). Racial/ethnic and economic segregation remains a prevalent dilemma in the United States (Massey & Denton, 1993; Wilson, 1987). Because predominately racial and ethnic minority schools are often located within racial/ethnic communities, poor minority students are more likely to attend schools with minimal access to resources (Johnson, Crosnoe, & Elder, 2001; Roscigno, 1998). Furthermore, findings denote that varying levels of heterogeneity and economic inequality within schools influence the intertwined phenomena of student safety and academic achievement (Eitle & Eitle, 2003; Goldsmith, 2004). Research reveals that student concerns about safety affect the quality of the educational process (Gottfredson & Gottfredson, 2002). Although research suggests that schools are safe environments for students, reports of fear of violence, victimization, and both physical and emotional harassment has increased among students and teachers (Kaufman et al., 2000). Drawing from the Educational Longitudinal Study of 2002 (ELS:2002). The ELS:2002 dataset is a longitudinal study administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the United States Department of Education. This cross-sectional research on student victimization and race/ethnicity focuses on the base year nationally represented stratified sample, of the 12,039 students who attended the 580 public schools in the ELS:2002 study.


**Journal Article**

Recent demographic changes have supported the emerging research on one of the fastest growing segments of the U.S. population: the children of immigrants. Because victimization adversely affects youth development, understanding the victimization of the children of immigrants are of special interest because they are part of this country’s future, its parents, its labor force, and its voters. In addition, segmented assimilation theory guides this study's examination about the victimization that the children of Latino and Asian American immigrants endure in U.S. public schools. Analyses, which draw from the restricted-use Educational Longitudinal Study of 2002, indeed reveal some important results. For instance, first-generation immigrant students are afraid of the schools they attend. Furthermore, Latino third-plus generation immigrant students have increased risk of victimization by violence at school. This article also discusses the importance of understanding the schooling of the children of immigrants in the U.S. educational system.


**Journal Article**

*Exposure to violence, beyond more obvious physical injuries, has long-term emotional and psychological consequences for youth. It should thus come as no surprise that much research has focused on the correlates of youth exposure to violence and victimization. Less attention, however, has been paid to research examining the relationship between school involvement (i.e., extracurricular activities), opportunity, and youth exposure to school violence and victimization. Analyses that draw from the restricted-use Educational Longitudinal Study of 2002 and that use logistic regression analyses suggest some*
important results. Most notably, involvement in classroom-related extracurricular activities is linked to an increase in victimization, whereas interscholastic sports involvement is related to a decrease in victimization for youth who participate. Besides discussing the findings of this study, this article also underscores the importance of understanding youth exposure to school violence in greater depth.


Journal Article

Based on the 2003 Trends in International Mathematics and Science Study, the authors find that negative associations between student employment and academic achievement are stronger in some countries than in others – differences likely to result from country-specific work opportunities and needs. Turning to the 2004 Educational Longitudinal Survey of the United States for causality, they observe a curvilinear association between employment and math proficiency: working up to ten hours per week has a modest positive effect, 10-19 hours has no effect, and 20 hours or more has a substantial negative effect. The possible endogeneity of work-hours is then tested with instrumental variables.


Journal Article

Using a national data set, Education Longitudinal Study of 2002 (ELS:2002), we examined three dimensions of 10th-grade school climate, unfairness, hostility, and victimization, as predictors of teacher-perceived student engagement and achievement in reading and mathematics in the same year. The dimensions of school climate that predicted engagement and achievement depended on whether differences were examined within schools (individual level) or between schools (school level). Specifically, at the individual level, student perceptions of victimization predicted lower individual engagement and reading and math achievement. At the school level, collective perceptions of hostility predicted lower engagement and reading achievement. This study furthers understanding of the predictors of school engagement and achievement and offers implications for how school climate operates in differentiated ways depending on the level of the school ecology.


Dissertation/Thesis

This study used a social cognitive theoretical framework to examine the relations of selected 10th grade school contextual influences, parent socioeconomic status, and personal beliefs to rural adolescents' 12th grade educational plans and mathematics achievement. Participants were 2,095 rural high school students from the 2002 Educational Longitudinal Study. This study found that rural youth who had more positive views of the relational context of their school, were enrolled in college-preparatory high school programs, and were of higher socioeconomic status had higher mathematics self-efficacy beliefs, higher educational expectations for their future, and higher mathematics achievement. Consistent with social cognitive theory, the study found that mathematics self-efficacy beliefs partially mediated the relation of high school program enrollment and socioeconomic status to educational expectations and mathematics achievement. Mathematics self-efficacy beliefs also partially mediated the relation of the relational
context of schools to educational expectations, and fully mediated the association between the relational context of the school and mathematics achievement. In addition, students who expressed more interest in moving away from the area and less importance on living near family had higher educational expectations. Mathematics teacher beliefs about student success and the academic press within schools did not have a significant effect on mathematics self-efficacy beliefs, educational expectations, or mathematics achievement. The findings provide support for the importance of socioeconomic status and certain school contextual influences for rural youth's academic and career trajectories.


Journal Article

Violence at a school can have a negative impact on the health of students, teachers, administrators, and others associated with the school and surrounding community. The use of weapons in school buildings or on school grounds accounts for the majority of violent deaths, particularly among males. This national trend suggests the need for a more concerted effort to improve safety and prevent violence. This article reports the use of 13 safety measures in US public schools in 4 geographic regions (Northeast, Midwest, South, and West) and 3 community settings (urban, suburban, and rural). METHODS: Data representing 16,000 schools reported in the Educational Longitudinal Survey of 2002-2004 were analyzed. Data were self-reported by school administrators. RESULTS: Of the various safety measures assessed, fire alarms and extinguishers were consistently reported regardless of the geographic region or community setting of the school. Other than measures for fire safety, schools throughout the country routinely used exterior light and student lockers as safety measures. There was a significant difference by geographic region and community setting in the use of safety measures that required specific personnel, namely a security guard and an adult to direct a guest to sign in. CONCLUSION: Recognizing the patterns of violence at public high schools, administrators working with students, other school personnel, and community partners may consider more combinations of the safety measures within their institutions together with local resources and services to improve safety and reduce violence.


Dissertation/Thesis

Nationally, high school exit exams are administered (or are currently being phased in) in 26 states. By 2012, more than 72% of American public school students will attend school in states with high school exit exams (Center on Education Policy, 2005). These exams continue to be implemented despite considerable disagreement about their costs and benefits among researchers, policymakers, and other stakeholders. Using the nationally representative, cohort-based data of the Education Longitudinal Study of 2002 (ELS:02), this study examined the effects of exit exams, with the goal of determining the effects of those exams on student achievement and school completion. Using multiple regression and multiple linear path analysis, this study found that exit exams, regardless of type, did not have substantial effects on student achievement in mathematics and had no effect on school completion. This study found no support for the claim that exit exams improve student achievement. The main exit exam variable did not predict either math test score gains or grade point averages in the twelfth grade. When exit exams were disaggregated by type, none emerged as significant predictors. End of course exams were found to have some small negative effects on mathematics test score gains when students were separated by ninth grade GPA quartile. Students in the bottom two quartiles saw reduced test score gains of 28% and 29% of a grade level equivalency (GLE). Standards-based
exams were positive predictors in the top quartile, with an effect size was about 37% of a GLE. All of these effects disappeared when a less conservative coding strategy was employed, casting doubt on the ability to reject the null hypothesis and conclude that exit exams affected test score gains. For school completion, the main exit exam variable was not a significant predictor of school completion, whether or not GED recipients were counted as dropouts. Standards-based exams were a positive predictor of dropping out of school, but lost their predictive power once GED recipients were coded as graduates. No effects on GED seeking and acquisition were found for any of the exit exam variables. Exit exams have substantial direct and indirect costs for states, school districts, teachers, students, parents, and society. These costs come in the form of money and time that could be profitably spent on other activities in education, many of which have been shown to have demonstrably positive effects on academic achievement and school completion. The findings of this study should shift the burden of proof in the debate about the merits of high school exit examinations. Previous studies have found limited or mixed evidence for these high stakes tests. This study used the most recent and nationally representative cohort-based data available, made several methodological improvements over previous studies, and found no substantial positive effects for exit exams regardless of type. These findings support the adoption of a “precautionary principle” when it comes to high school exit exams. States should reconsider their implementation of high school exit examinations, and policymakers should demand more solid evidence that these exams increase student achievement before moving forward with additional high school exit exam systems.


Dissertation/Thesis

Few education researchers explicitly examine civic engagement and academic achievement as important educational outcomes in concert. By using longitudinal panel data from 10,724 high school students in the Educational Longitudinal Survey of 2002 (ELS: 2002), this dissertation investigates the high school contextual characteristics that contribute to youth civic participation, their sense of community, and mathematics achievement. A series of multilevel regression models (hierarchical linear models) examine the influence of school climate, instructional practice, and school-wide extracurricular activity while controlling for individual and school background characteristics that are beyond the control of school personnel. The results contest the common notion that high schools influence civic and academic outcomes in a common, monolithic way. That is, schools that promote high levels of math achievement are only slightly more likely to have students that participate at least once in a community service activity. However, those same high math achieving schools show no correlation with high rates of students who volunteer on a weekly basis. This analysis also challenges the notion that students who volunteer on a weekly basis attend high functioning, safe schools. In fact, in-depth volunteering appears at significantly higher rates in schools with less than positive characteristics. In addition to questioning the conventional wisdom that positive school climates promote positive student behaviors, the discussion of this dissertation argues that educators in low achieving schools may be able to use in-depth student voluntary activity as a means to promote positive youth development. Given that few school characteristics have competing effects on the different outcomes, educators can make use of this strategy with little fear of negative unintended consequences.

**Journal Article**

*Immigration in the U.S. continues to increase and to become increasingly diverse. About 20% of U.S. students are children of immigrants. This phenomenon is occurring as schools are racially and ethnically re-segregating even as race-based decision making for K-12 schooling has been severely limited. This study examines school segregation for children of immigrants who are often an overlooked component of this phenomenon. Using a large national dataset, the author explores the extent to which children of immigrants are segregated from non-immigrants as well as the extent to which they are segregated from Whites. This study also examines how these relationships vary based on a student's race/ethnicity and socioeconomic status. Results show a society where children of immigrants are segregated in school, which carries with it a host of likely negative outcomes. Implications for policy, practice, and future research are discussed.*


**Journal Article**

*The benefits of whole-grade acceleration for the highest achieving students in K-12 education are widely acknowledged. However, much less is known about which personal, family, and school factors are correlated with student acceleration. Which children are grade accelerated in K-7 education? Have factors associated with grade acceleration changed over time? We analyze data from the NELS (students from 1988-1992) and the ELS (students from 2002-2004) nationally representative and longitudinal databases to answer these questions. Other things being equal, females, Asian Americans, and students living on the U.S. east or west coast were more likely to be grade accelerated. For example, females had odds of being accelerated that were 1.3 times higher than the odds of males being accelerated. Students from the northeastern region of the U.S. had odds of acceleration that were nearly twice (1.9 times) as high as Midwest students’ odds of acceleration. When accelerated students were compared to older classmates of similar achievement who were not accelerated, the accelerated students showed greater gains in achievement than nonaccelerated classmates in and throughout high school. In other words, accelerated students do not just keep up with their older classmates, they actually perform better.*


**Journal Article**

*The study explores the ways in which school size influences two important student outcomes commonly used in school effects research: growth in mathematics achievement and dropout rate. Past research suggests that smaller high schools can lead to increased benefits for students. In this study, multilevel analytic models of the first two waves of the Educational Longitudinal Study (ELS) of 2002 are used to better understand mediating factors in the small school size effect. Results support the benefits of smaller schools: students in smaller schools were less likely to drop out than their counterparts in large high schools. The relationship between high school size and math gain, however, is curvilinear; students attending very small (less than 674) or very large (greater than 2592) schools have the largest math gains, while students in schools with intermediate enrollment sizes demonstrated smaller math gains. Implications for school size decision making are discussed in light of these results.*

Dissertation/Thesis

While group differences in academic achievement between Black and White students have diminished since the 1960s, inequality in mean levels of academic achievement and representation among high achievers persists. What accounts for this “Black-White achievement gap?” Racial inequality in resources and access to institutions that facilitate academic achievement explain only a portion of Black-White achievement gaps. Oppositional culture theory attempts to explain why these inequalities do not fully explain Black-White academic achievement gaps, positing that institutionalized racial inequality prompts Black students to adopt an oppositional stance toward education. This dissertation assesses the empirical viability of oppositional culture theory as an explanation for this residual Black-White academic gap by testing the following three major hypotheses: (1) the “acting White” hypothesis, which states that Black students perform worse in school than do Whites because they receive negative sanctions for doing well in school, or engaging in its behavioral or attitudinal correlates; (2) that hypothesis 1 holds only in schools with a high degree of inequality in academic opportunity between White and Black students; and (3) that disengagement from school accounts for unrealized academic potential among Blacks to a greater extent than among Whites. I use quantitative methods to analyze data from the Education Longitudinal Study, a nationally representative panel survey of high school sophomores and seniors. Structural equation modeling (SEM) results yield no support for hypothesis 1. Hierarchical linear modeling (HLM) results yield no support for hypothesis 2, but they do suggest that schools with high levels of Black-White inequality in AP course taking discourage Blacks who earn good grades from taking as many AP courses as they would in schools with less inequality. Finally, HLM results support hypothesis 3, indicating that high-achieving Black students do not realize their full potential because of lower school engagement relative to high-achieving Whites. These results provide mixed support for oppositional culture theory as a partial explanation for Black-White achievement gaps. Policies should promote racial equality in academic opportunities in schools, and school programs should focus on helping high-achieving Blacks sustain high levels of engagement throughout high school.

2008


Journal Article

The discrepancies between test-based and teacher-based criteria of high achievement are well-documented for students of all ages. This study seeks to determine whether certain high school students who score high on tests of academic achievement are more likely than others to be nominated for advanced academic programs by their teachers. Using Gagné's Differentiated Model of Giftedness and Talent as a guide, this study focused on three categories of correlates: social perceptions, individual motivation, and demographic background. Analysis of data from the Educational Longitudinal Study of 2002 revealed separate correlational patterns for nomination to advanced English programs and nomination to advanced math programs. High-achieving English students were more likely to be nominated by teachers for advanced work in the subject if they had high intrinsic motivation to read, if they were female, and if they were not Black. To contrast, high-achieving mathematics students were more likely to be nominated by teachers for advanced work in this subject if they had high math self-efficacy, if they were female,
and if their friends did not place high importance on social relationships. Moreover, high-achieving male math students were more likely to be nominated if they had high levels of intrinsic motivation in math and if their friends valued academic goals. These results speak to the importance of considering the context of a particular subject area when deciding on who is eligible for enrollment in advanced programs. They also show a potential bias against poorly motivated male students in subjects that are traditionally male dominated.


Journal Article

This article employs data from ELS:2002 as well as the prior NCES high school longitudinal studies and the National Assessment of Educational Progress. The authors analyze data from 1972 to 2004 to examine mathematics achievement in relation to school and family measures. A particular focus is the association between Black-White test score gaps and changes in family background and school characteristics.


Report

Recent research shows that U.S. 15-year-olds are behind their international counterparts in problem solving and mathematics literacy, ranking 24th of 29 nations (Lemke et al. 2004). Therefore, a key concern among policymakers and educators is improving the quantitative and analytical skills of American youth, who face job prospects in an economy that increasingly values a strong foundation in mathematics and science. As a means to improve proficiency in this area, many states have increased their course requirements for graduation. This study, which uses data from the Education Longitudinal Study of 2002 (ELS:2002), improves upon past research by using information from high school transcripts to identify the exact course sequences students take and links them with achievement test scores that have been scaled to indicate different levels of mathematics proficiency. This linkage provides a more detailed understanding of the curricular pathways students travel and the types of proficiencies they acquire along the way. Chapter 1 provides a brief background description of the pattern of mathematics coursetaking in the United States and lists the research questions. Chapter 2 describes the ELS:2002 data and the measures used in the analysis. Chapter 3 provides the results of the analysis. Chapter 4 concludes with a discussion of the findings and their limitations. Appended are: (1) Technical Notes and Glossary; and (2) Standard Error Tables for Estimated Means and Proportions, with Weighted Standard Deviations and Raw Sample Sizes for Means.


Dissertation/Thesis

Predicting student achievement is often the goal of many studies, and a frequently employed tool for constructing predictive models is multiple linear regression. This research sought to compare the performance of a three-layer back propagation neural network to that of traditional multiple linear regression in predicting math and reading proficiency from 103 non-curricular variables collected in the National Center for
The neural network model was implemented using the Java programming language and the coefficients for the regression equations were produced by SPSS. The results showed that, for this data set, neither model provided an advantage over the other in terms of prediction accuracy when presented with error-free cases. When synthetic noise was introduced into the data, however, the neural network model showed a greater resistance to degradation. The fact that the neural network model performed as well as, and in some cases better than, regression suggests that further study of neural network modeling is warranted to better understand the most effective ways to harness this flexible modeling technology.


This study examines the relationship between various measures of parental and student expectations and aspirations and math achievement among Latino 12th graders of immigrant parents in the Educational Longitudinal Study (ELS): 2002 database. Findings indicate parental expectations and aspirations were not significant predictors of student achievement after controlling for an index of covariates. Moreover, neither were student expectations, agreement between student and parent expectations, nor student perceptions of parental aspirations. The analyses of the secondary questions likewise indicated only one strong relationship between aspirations, expectations, and parents’ time in the United States; parental aspirations and expectations.


Using prospective data from the Educational Longitudinal Study: 2002 (ELS:2002), a national longitudinal study by the National Center for Education Statistics (NCES) of 15,000 tenth grade students attending 752 schools across the United States, this study examines the influence of school leadership autonomy. Statistical analyses, including hierarchical linear modeling (HLM), demonstrate the effect of school-level leadership autonomy in the areas of teacher hiring, budgeting, instruction and curriculum, and organizational design on student learning. In addition, the effect of professional community as a mediating variable between school leadership and student outcomes is examined. Further, since the context of this study is secondary schools, the structural, compositional, and organizational features of secondary schools are also considered. The results of the HLM analyses indicate that after controlling for effects of student demographic characteristics, academic background, and school context, mathematics achievement was slightly higher in secondary schools with greater school leadership autonomy, although the difference was not statistically significant at conventional levels; in addition, there was a statistically significant relationship between math achievement and school leadership autonomy in public high schools. The results further suggest that school leadership autonomy may influence student achievement in high schools indirectly through professional community. The HLM analyses with math achievement gain as the outcome did not show a significant relationship between leadership autonomy and achievement gain. These analyses indicated a very small between-school variance in 10th-12th grade math achievement gain; the vast majority of the variation in math gain was found to be among students within the same school. This study, using multilevel analyses, secondary school context, and mediating variables, adds to the literature on leadership effects in education. Specifically, it increases understanding of the influence of school leadership autonomy on student achievement in secondary schools and of the effect of professional community when used as a mediating variable between school leadership and student achievement. This increased understanding of the influence of
school leadership autonomy through professional community will enable educational reformers and policy makers to develop more effective leadership models for schools.


Journal Article

Objectives: Following up on Bourdieu’s (1973) model of reproduction and DiMaggio’s (1982) model of mobility, I determine whether there are socioeconomic differences in the academic benefits provided by adolescents' use of free time. Methods: I analyze the associations that students’ uses of time have with mathematics achievement test scores and grade point averages, using data from the Educational Longitudinal Study of 2002 and OLS regression models. Results: Time spent on school-sponsored activities is associated with improved math test scores, while time spent on social activities is negatively associated with them. School activities are more beneficial for students in the bottom SES quartile than in the top two SES quartiles. Conclusions: Limited support is found for the mobility model; however, lower-SES students are more likely to engage in activities such as television watching and videogame playing that are associated with lower test scores and grades, and higher-SES students are more likely to participate in beneficial school-sponsored activities.


Journal Article

Data analyzed from the Educational Longitudinal Study of 2002 indicate that the reading achievement of urban African American high school students is positively influenced by the amount of hours spent doing homework and by parents' expectations of their child's future educational attainment. Implications for practice and research are provided.


Journal Article

This study describes the truancy and disciplinary problems of high school bullying victims in the USA. Analyses are based on data from the Educational Longitudinal Study of 2002, a nationally representative sample of 10th graders (students aged 14-15) in the USA. Being bullied is found to be positively associated with increased risk of being frequently absent, getting into trouble excessively at school and being subject to formal school actions such as in or out-of-school suspensions and disciplinary transfers for high school bullying victims. These findings are presented within the context of the current state of knowledge about the effects of bullying. Their implications for practice and future research are also discussed.


Journal Article

This study examines gender, race, and the need for social gratification as significant predictors of the number of hours of weekday and weekend digital game play. Secondary analysis of data from the National Center for Education Statistics' Education Longitudinal Study of 2002 revealed that that Caucasian and Asian students were associated with diminished digital game play, whereas African Americans students were associated with
increased play. Results also indicated that the need for social gratification and being male was associated with greater digital game play.


Journal Article

This project investigated the impacts of family religious involvement and family religious affiliations on parenting practices and academic performance. This study utilized data from the base-year and first follow-up of the Education Longitudinal Study: 2002/2004 (ELS). A series of statistical techniques were incorporated to examine the nature of the overall associations. The results revealed that parents' religious involvement with their children is related to their parenting practices and their children's academic performance, but this link is mediated by the parents' religious affiliation. Significant associations among religious involvement, parenting practices for family socialization and academic performance suggest that a higher level of family religious participation indicates a level of social impact on education that leads to better academic performance. Implications for researchers and parents were discussed.

Hoffman, A. V. (2008). Examining the Plans of Youth with Disabilities to Enroll In a 2 or 4-Year College or University. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 69*(5).

Dissertation/Thesis

The purpose of this study was to explore the differences between youth with disabilities plans to attend a 2- or 4-year college and to compare them to their peers without disabilities who also plan to attend a 2- or 4-year college or university. A second purpose was to identify the relative contribution of selected family, student, academic, and school contextual factors in predicting a student's plans in 12th grade to attend a 2- or 4-year college or university. Variables related to family, student, academic, and school characteristics were identified from the first and second waves of the Education Longitudinal Study of 2002 database. Chi-squares, t-tests, and HGLM analysis were used in this study. The results of the study showed that having an IEP was negatively related to a youth's plans to attend a 2- or 4-year college or university. However, taking advanced math coursework and being in a college preparatory track reduced the impact of having an IEP on a youth's educational plans. Although, on average, youth with disabilities did not take the same level of advanced math coursework as did their peers without disabilities who also planned to attend a college or university. Further, GPA had less an impact on the plans of a youth with disabilities to attend a 2- or 4-year college or university than it did on youth without disabilities. Finally, the results demonstrated that educational aspirations of youth with disabilities remained stable between 10th and 12th grades. The findings emphasize the importance of providing youth with disabilities access to a general education curriculum and a course of study that will allow them to be prepared for a 2 or 4 year college. The findings regarding aspirations also indicate that developing transition goals and a course of study prior to entering high school will provide opportunities for youth with disabilities who aspire to attend higher education to take the necessary coursework.


Dissertation/Thesis

Computer technology has been used in education for years, and the government budgets large amounts of money to foster technology. However, it is still a debated whether computer technology makes a difference in students' learning outcomes. The purpose of
this study is to find if any relationship exists between computer use by teachers and students and the students’ academic achievement in math and reading for both traditional populations and English language learner (ELL) tenth graders. Computer use in this study included the computer activities by students and teachers, in terms of the time, frequency, activities types, the places students use computers, teachers’ computer activities, and the training teachers received. This study used data gathered from tenth grade students from the dataset Education Longitudinal Study of 2002 (ELS:2002) of the National Center for Education Statistics (NCES). Fifteen thousand, three hundred and sixty-two students were randomly selected to represent all U.S. tenth-graders attending schools in 2002. The findings showed diverse relationships consistent with the literature. Based on the findings, some suggestions were made to teachers and parents about the quality of school work and computer use by students and teachers.


Using questionnaire and transcript data collected in 1972, 1980, 1982, 1992, and 2004, this report presents information on five cohorts of high school seniors. The analysis addresses overall trends, as well as trends within various subgroups defined by sex, race/ethnicity, and socioeconomic status (SES). Key findings of the report include the following: The proportion of Black seniors who were in the highest SES quartile doubled from 1972 to 1992 (from 5 percent to 10 percent), and increased overall from 5 percent in 1972 to 14 percent in 2004. The percentage of seniors enrolling in calculus during their senior year grew from 6 percent to 13 percent between 1982 and 2004. The percentage of seniors taking no mathematics courses during their senior year declined from 57 percent to 34 percent over this time period. Seniors increased their senior-year enrollment in advanced science courses (chemistry II, physics II, and advanced biology) from 12 percent in 1982 to 25 percent in 2004. In each class of seniors, most of those who planned further schooling intended to attend four-year postsecondary schools, with the proportion of students planning to attend four-year schools rising from 34 percent in 1972 to 61 percent in 2004. In all years, higher percentages of Asian high school seniors, and lower percentages of Hispanic seniors (except in 1992), compared to other racial/ethnic groups, planned attendance at four-year institutions. No difference was observed between 1972 and 2004 between the percentage of seniors expecting a bachelor’s degree as their highest level of education. Instead, growth between these two time points was greatest in expectations for a graduate or professional degree: 13 percent of seniors expected to attain this level of education as their highest in 1972, compared to 38 percent of seniors in 2004. In 1972, males expected to earn a graduate degree as their highest educational level in greater proportions than did females (16 percent versus 9 percent); however, in 2004, females expected to earn a graduate degree more often than males (45 percent versus 32 percent). Seniors increasingly expected to work in professional occupations (growing from 45 percent).


This report draws on various NCES databases, including the student and school surveys of the Education Longitudinal Study of 2002 (ELS:2002), in order to report on the condition of and trends in contemporary career and technical education. ELS:2002 describes U.S. high schools in 2002, including comprehensive high schools and full-time CTE high schools, indicating as well whether these full-time high schools were served by area CTE schools, and this information that is drawn upon in the report.

**Conference Paper**

*Using the Education Longitudinal Study, 2002 this paper operationalizes and measures the "psychic costs" of schooling. Results show considerable interpersonal variation in psychic costs and suggest that among high school students psychic costs lower the time spent on homework, worsen study habits and lower educational expectations. Analysis of the determinants of psychic costs shows that cognitive skill lowers psychic costs but that family background is essentially unrelated to psychic costs. Psychic costs appear to be lower among blacks and Hispanics than among whites.*


**Journal Article**

*Least squares regression estimates of causal effects are conditional-variance-weighted estimates of individual-level causal effects. In this paper, we extract from the literature on counterfactual causality a simple nine-step routine to determine whether or not the implicit weighting of regression has generated a misleading estimate of the average causal effect. The diagnostic routine is presented along with a detailed and original demonstration, using data from the 2002 and 2004 waves of the Education Longitudinal Study, for a contested but important causal effect in educational research: the effect of Catholic schooling, in comparison to public schooling, on the achievement of high school students in the United States.*


**Journal Article**

*In life as in literature, both the mainstream public and the Black community writ large, overlook the Black female experiences, both adolescent and adult. In order to contribute to the knowledge base regarding this population, we present through our study a statistical portrait of Black females in high school. To do so, we present an analysis of data gathered using the Educational Longitudinal Survey of 2002. Findings suggest that in life as in literature, young Black females approaching womanhood are strong students who work extremely hard in an environment where sex, race, and culture can and do shape experiences and opportunities.*


**Journal Article**

*This study tested a theoretical model explaining the relationship between technology, family context, and school context variables as predictors of mathematics achievement across two language groups: English-speaking and non-English-speaking Hispanic students. It used data from the base year and first follow-up of the Education Longitudinal Study (ELS: 2002/2004). The multigroup analysis of the path model was used to analyze the data. The findings continue to indicate the importance of individual technology usage as a predictor of mathematics performance among non-English-speaking Hispanic students. The study also found that Hispanic parents' direct*
involvement in their children's schooling has a significant negative effect on their academic achievement.


Journal Article

This project investigated the impacts of family religious involvement and family religious affiliations on parenting practices and academic performance. This study utilized data from the base-year and first follow-up of the Education Longitudinal Study: 2002/2004 (ELS). A series of statistical techniques were incorporated to examine the nature of the overall associations. The results revealed that parents' religious involvement with their children is related to their parenting practices and their children's academic performance, but this link is mediated by the parents' religious affiliation. Significant associations among religious involvement, parenting practices for family socialization and academic performance suggest that a higher level of family religious participation indicates a level of social impact on education that leads to better academic performance. Implications for researchers and parents were discussed.


Journal Article

This study investigated the relationships between bullying victimization and students' extracurricular activity and misbehavior. This research examined whether students' engagement in particular school activities increased or decreased the likelihood of being bullied while at school. Data for this research were drawn from the Educational Longitudinal Study of 2002 (ELS:2002) and utilized the base year's nationally represented stratified sample (N = 7,990). Associations were examined between various activities of 10th grade public school students--including classroom-related activities, club, interscholastic sports, intramural sports, and misbehavior--and their likelihood of being bullied while at school.


Conference Paper

Recent demographic changes have supported the emerging research on one of the fastest growing segments of the U.S. population: children in immigrant families. In turn, understanding the pathways for educational success and failure for immigrant children is imperative because these are part of this country’s future: its parents, its labor force, and its voters. Furthering the investigation of the characteristics linked with immigration for the discipline and punishment of students is essential for a growing immigrant population. Additionally, segmented assimilation is a conceptual framework that will be utilized to examine the likelihood of receiving school disciplinary sanctions. This study utilizes the restricted-use Educational Longitudinal Study of 2002 (ELS:2002), a nationally represented stratified sample of 9,874 tenth grade public school students, and logistic modeling techniques to test the research arguments. Indeed, the findings do indicate that immigrant generational status as a relevant factor for racial and ethnic minority adolescents and the likelihood of their discipline and punishment in schools. Implications of immigrant children’s with school discipline in the U.S. educational system are discussed more generally.

**Journal Article**

**Background:** The role of race and ethnicity is consistently found to be linked to the likelihood of students experiencing school violence–related outcomes; however, the findings are not always consistent. The variation of likelihood, as well as the type, of student-related school violence outcome among the Latino student population may be attributed to immigrant status. Methods: Drawing from the Education Longitudinal Study of 2002, this research investigates if the role of immigrant status and English proficiency are pertinent for 1457 nationally representative public school Latino students’ experiences with school violence–related outcomes. Results: Third-generation immigrant students were more likely than first- and second-generation students to be victimized while at school, as well as receive a formal disciplinary school sanction. On the other hand, first-generation immigrant children were less likely to be a victim of crime while at school and receive a formal disciplinary sanction in comparison to second- and third-generation immigrants. However, first-generation immigrant students were the most likely to feel unsafe at school. Additionally, nonnative English-speaking students were more likely to report being a victim of school violence in comparison to native English speakers. Conclusions: This study indicates that immigrant status–related variables should be included in school violence research. Furthering the investigation of school and local community characteristics of immigration and assimilation and their impact upon children’s lives and their exposure to violence is essential for a growing immigrant population.


**Report**

This report draws on data from various NCES databases, including the Education Longitudinal Study of 2002 (ELS:2002), in order to present a descriptive profile of community colleges in the United States. ELS:2002 data are used to answer questions about the characteristics of students who enroll in community colleges immediately after completing high school; about how immediate enrollees in community colleges differ from those in public and private 4-year colleges and universities; about the percentage of immediate enrollees who attend community college as a stepping stone to a higher degree; about changes in the educational expectations of immediate enrollees in community college.


**Report**

Using ELS:2002, this statistical brief compares high school completion statuses for dropouts in California with the completion statuses of dropouts from the nation at large. Also examined are (California versus nation) school and work statuses for dropouts and their non-dropout peers.

**Journal Article**

The study in this article employed a multidimensional (behavioral, emotional, and cognitive) construct of school engagement to examine its relationship to school achievement in mathematics across the five major racial groups. The sample included 115 American Indians, 486 Asians, 1,551 Blacks, 1,682 Latinos, and 7,554 Whites who participated in the Educational Longitudinal Study (2002-2004). Data were analyzed using a multiple regression analysis for each of the five racial groups. Behavioral and cognitive engagement accounted for much more of the variance in math achievement scores than did emotional engagement. Ways in which professional school counselors can promote these kinds of engagement are discussed.


**Conference Paper**

With the enactment of No Child Left Behind, attention has focused on the importance of teacher expectations as causes of student achievement. Using the 2002 base-year and 2004 follow-up waves of the Education Longitudinal Study, this paper applies the counterfactual framework to examine the effect of math teacher expectations on math achievement for white, black, and Hispanic students. Models are estimated for 10th and 12th grade math achievement, as well as math gain scores. The findings for all three analyses indicate that white students benefit the most from teacher expectations, which is consistent with previous research. However, the gain score models show that students not expected to complete college benefit the most from teacher expectations. In other words, raising teacher expectations reduces the achievement gap within each race group, but not between race groups. The implications of these findings are discussed with respect to the policy goals of the No Child Left Behind Act.


**Journal Article**

A growing number of high school students are involved in "dual enrollment" programs of one form or another, ranging from programs in which high school students do work to earn college credit (e.g., through Advanced Placement or International Baccalaureate programs) to actual enrollment in college courses prior to high school graduation. At the same time, it is clear that large numbers of students who are formally enrolled in post-secondary institutions are doing secondary school-level work (e.g., through high school completion programs, GED programs, or remedial coursework). In the former case, secondary school students are essentially doing post-secondary level work. In the latter case, post-secondary school students are essentially doing secondary level work. However, researchers who analyze the transition to post-secondary schooling almost universally treat secondary and post-secondary schooling as discrete, non-overlapping entities. We pursue three objectives in this paper. First, we quantify the degree of "bluriness" in the boundary between secondary and post-secondary education. What fraction of secondary school students is essentially doing post-secondary school work? What fraction of post-secondary school students is essentially doing secondary school work? Second, we describe inequalities by race/ethnicity, sex, and socioeconomic circumstances in the "bluriness" of the boundary between secondary and post-secondary schooling. Third, we compare models of the transition to post-secondary schooling that
view that transition as discrete and non-overlapping to those that view that transition as gradual and nuanced. To do so we analyses data from the Educational Longitudinal Study of 2002 and from the Beginning Postsecondary Students Longitudinal Study.


**Journal Article**

This study addresses the role that social and cultural capital play in first-to-second year persistence in higher education and examines how race and ethnicity are associated with initial levels of such capital. Using logistic regression analysis, the results show that social and cultural capital are positively significant for persistence in higher education across all racial and ethnic groups. However, results also show that certain groups, especially Hispanics, have lower levels of normatively valued forms of social and cultural capital than others. The effects for social and educational stratification are discussed, as are implications for higher education retention policies and further research.


**Journal Article**

This study examines the influences of social and cultural capital on persistence from 1st to 2nd year and how these effects differ between community colleges and 4-year institutions. Results show that social and cultural capital have a positive association with student persistence overall but matter less when students begin at a community college.


**Dissertation/Thesis**

The current study explores the ways in which school size and school climate influence the student outcomes of gain in mathematics achievement and drop out from school. Specifically, the main focus of this study was to determine how several dimensions of school climate (student-teacher relationships, student supports, safety, academic press, and school morale) impact the relationship between school size and these student outcomes. Research suggests that smaller schools have more benefits than larger schools. However, smaller school reforms have not always produced greater student achievement than the larger schools they replace (American Institutes for Research, 2005), and many newly formed small schools struggle under the same bureaucracy as larger schools (Raywid et al., 2003). Because these newly formed small schools have not always produced the intended outcomes, further empirical evidence is needed to uncover how school size impacts student outcomes. In the current investigation, the first two waves of the Educational Longitudinal Study (ELS) of 2002 were utilized to explore how the relationship between school size and school outcomes is influenced by school climate. In the first step of the analysis, school climate dimensions were developed using exploratory factor analyses (EFA). A series of Hierarchical Linear Models (HLM) was then conducted to examine the relationship between school size and student outcomes (math gain and dropout) when controlling for the school climate factors. Results show that the relationship between high school size and math gain is curvilinear; students attending the schools with enrollment smaller than 673 and larger than 2,593 had the largest math gains and schools with intermediate enrollment sizes showed smaller math gains. In terms of dropout rate, however, the larger the school, the higher the student dropout rate. The school climate dimensions included in this study were generally associated with
greater math gain and lower rates of dropout. However, the effects of these dimensions did not demonstrate a substantial influence on the relationship between school size and student outcomes. Recommendations for future research are discussed.


**Dissertation/Thesis**

The purpose of this study was to extend school effects research to explore the influence of specific school-level factors on the math course-taking behaviors of students with disabilities and to determine whether the level of math courses taken affects the math achievement of students with disabilities. I also sought to examine these effects relative to the performance of students without disabilities. I analyzed school and student level data for 6,398 students in 608 schools from the Education Longitudinal Study of 2002. Using a 2-level hierarchical linear model, I found that school composition and curriculum structure affect the average 12th grade math achievement of students with disabilities. I also found an association between curriculum structure and advanced math course-taking by students with disabilities. I discuss the implications of these findings on policy and future research.


**Journal Article**

**Background:** Small schools have been promoted as an educational reform that is capable of improving student outcomes. However, a survey of the research on small schools indicates that much of the movement for decreasing school size is based primarily on correlational methods that do not control for selection effects in the data. In addition, several recent studies have suggested that smaller schools may be able to increase student attendance and graduation rates but that these gains might not necessarily translate into gains in student achievement. **Purpose:** This study investigates the potential effect of attending smaller schools on student mathematics achievement using propensity score matching techniques. **Research Design:** Data in the study are from the Educational Longitudinal Study of 2002 and represent over 12,000 high school students. Observed student responses from 10th and 12th grade are used in the analyses. **Data Collection and Analysis:** An estimate of the potential effect of attending smaller schools is determined by matching students in the largest schools to smaller schools of four different sizes using propensity score matching techniques. These methods are used to attempt to account for selection effects present in these data and to approximate what the effect of attending a smaller school would be in each case. **Results:** Results from the study suggest that simply switching students to smaller school environments does not necessarily raise the mathematics achievement of students in the largest schools. Further analysis indicated that there did not appear to be an optimal range of school sizes that would provide maximum levels of student mathematics achievement. **Conclusion:** This study suggests that creating smaller schools might not be the best mechanism to raise student achievement. It is suggested that policy makers make careful deliberations before deciding to invest in small schools as an educational reform, because it is hard to establish when they will or will not be successful. Further research is needed into what makes some small schools effective.
Multilevel longitudinal data are clustered both structurally and temporally. The hierarchically nested structure induces between-subject dependency because individuals in the same unit may share something in common. The longitudinal aspect of data induces within-subject dependency because observations are made on same subjects over time. Since both types of clustered structures contribute to the dependency in the data, both aspects need to be taken into account when modeling such data. Many developments for multilevel and longitudinal data have focused on continuous response or outcome variables, and less attention has been paid to data with discrete manifest and latent variables. The Multilevel Latent Markov Model (MLMM) extends the latent class model to simultaneously incorporate the temporal and structural dependency in a single model. The MLMM is a hybrid of random-effects and conditional models. The latent Markov model, one type of conditional model, is adopted to model the change between two occasions. The random-effects modeling approach is utilized to account for the effects due to the nested structure. The parameters of the proposed model are estimated by maximum likelihood approach with modified EM procedures. Simulation studies are conducted to investigate the estimation procedures. The effects of ignoring the multilevel data structure are also studied through simulations. The estimation procedures for the MLMM are implemented in MATLAB. The MLMM MATLAB Toolbox is available for estimating the MLMM and its component models (i.e., LCM, LMM, MLCM). An application using the Educational Longitudinal Study of 2002 (ELS:2002) illustrates the usefulness of the MLMM in describing the dynamics of change. Types of random effects and several technical issues in estimation are discussed. Future extensions include incorporating covariates, relaxing the model parameters, and developing graphical representations of models and results are also proposed. The MLMM provides conceptual models and estimation tools to model movements between latent states for nested longitudinal discrete data. An MLMM allows researchers to extend the focus from individual-level to higher-level while taking into account the effects of individuals' group membership. Analyzing data using an MLMM clearly has many advantages over traditional single-level models in terms of understanding the underlying structures and the dynamics of change.


The relationships of school context, motivation, and individual background to receiving teacher nominations for advanced work and/or scoring in the top decile on a standardized test of achievement were examined in both English and mathematics using survey data collected from a nationally-representative sample of tenth grade students as part of the Educational Longitudinal Study of 2002. This study builds upon previous research examining the relationships between students identified as high-achieving by test score criteria and by teacher nomination criteria by exploring whether certain characteristics of students and their schools systematically make them more or less likely to meet them. Students' individual perceptions of their school context were only associated with achievement criteria met in math. Students who perceived their friends to be the least socially-oriented were most likely to meet both criteria. Further, male students who perceived their friends to be the least academically-oriented were the most likely to have high test performance but no teacher nomination. Students who were self-efficacious and intrinsically motivated were the most likely to meet both criteria in English and in math.
The relationship of intrinsic motivation in math to having high achievement recognized by teachers in this area was especially prominent for male students. Further, students of Black or Hispanic ethnicity were more likely than were white students to be nominated as high achieving by teachers despite lower test performance, as were students from lower socioeconomic statuses. Male students, on the other hand, were more likely than females overall to have high test performance without being nominated as high-achieving by teachers. Specific aspects of these relationships vary between subject areas. In addition to several associations with individual characteristics, the proportions of students identified as high-achieving only by teachers differ systematically among schools. This variation can be explained by several school-level variables, including school socioeconomic status and minority composition. These findings affirm that there are systematic differences between students identified as high-achieving by teacher nominations and by test scores. Learning more about these differences will help teachers and administrators to consider explicitly these factors when identifying adolescent students for special programs and other recognitions.


Journal Article

As an educational leader, in selecting a curriculum we must know our success as a knowledge-based economy will depend on how well schools equip young people with competencies the future will require, says Prof Geoff Masters. Within the school sector, efforts are being made at many levels--from classroom teachers to system managers--to enhance the quality of children's learning experiences and to ensure that all students receive the best education America can provide. For educational leaders these efforts to improve school education depend on access to relevant, reliable and timely feedback on educational outcomes for students. In school education, outcomes are measured not only in terms of academic achievement, but also in terms of access to, participation in and completion of schooling. It can also be gauged in terms of preparation for, and successful transition into, future study and employment (Masters, 2002). This article examines the most recent educational curriculum trends that should be considered in the planning, design, and modernization of schools and the direction of Career Technical Education and how it can be used in renewing obsolete curriculum. The trends were identified by reviewing research on the relationship of school facilities to student outcomes, by performing a general environmental scan of current trends, issues, problems, and initiatives in education, and by reviewing demographic patterns emerging out of the Education Longitudinal Study 2002 (ELS, 2004).


Dissertation/Thesis

Communication between parents and schools is associated with students' academic outcomes and also facilitates other types of parental involvement. Parent-school communication by way of email and Internet websites is increasingly common, but little research has examined this practice. This study used data from the nationally-representative Education Longitudinal Study of 2002 to examine access and usage, as well as benefits, of Internet-based parent-school communication. Adolescents and their parents were followed longitudinally from 10th grade to 12th grade. One third of the sample engaged in Internet-based parent-school communication, but parents with lower incomes and less education, as well as Hispanic parents, were less likely to have access and to use it to communicate with schools when they did have access. However, students from all demographic groups benefited when their parents used the technology. Internet-
based parent-school communication was associated with higher math achievement and student educational expectations two years later, and decreased likelihood of school dropout, even when controlling for prior achievement and parent-school communication by other methods. It also predicted increased levels of more traditional forms of parental involvement; however these forms of parental involvement did not mediate the direct relationships. Implications for practice, policy, and future research are discussed.


Report

This brief report uses data from the Education Longitudinal Study of 2002 (ELS:2002) to describe the initial postsecondary enrollment experiences of the high school sophomore class of 2002, including the types of postsecondary institutions they attend, the timing of their enrollment, the reason they chose their first college or university, their fields of study, their reason for leaving if they have withdrawn, and their expectations for future education. Additionally, the report shows the relationship between these initial postsecondary enrollment experiences with student background characteristics and high school factors. The appendix provides a brief description of the ELS:2002 design.


Conference Paper

This study extends research on college choice by examining what African American students say about the importance of college athletic reputation in choosing which school to attend. We first examine, among African American high school seniors who express plans to attend colleges immediately after high school, the overall distribution of self-reported factors that shaped their college choices. We then conduct factor analysis to examine the structure of relations among the diverse factors shaping student preferences and their contribution to understanding variation in the college choice process among African Americans. Finally, to understand the relations of athletic reputation with other relevant college selection and access factors, we undertake logistic regression analyses. Our descriptive results show that roughly one out of every three African American respondents report that a school's athletic reputation is at least a somewhat important consideration in determining their college choice. The factor analysis revealed four common factors--Academic/Career, Economic/Practical, Demographic, and Social. Academic/Career issues represented the strongest factor, with Social considerations ranked somewhat lower in importance. College's athletic reputation had the highest loading on the Social factor across analysis groups.


Dissertation/Thesis

Predicting student achievement is often the goal of many studies, and a frequently employed tool for constructing predictive models is multiple linear regression. This research sought to compare the performance of a three-layer back propagation neural network to that of traditional multiple linear regression in predicting math and reading
proficiency from 103 non-curricular variables collected in the National Center for Educational Statistics’ 2002 Educational Longitudinal Study. The neural network model was implemented using the Java programming language and the coefficients for the regression equations were produced by SPSS. The results showed that, for this data set, neither model provided an advantage over the other in terms prediction accuracy when presented with error-free cases. When synthetic noise was introduced into the data, however, the neural network model showed a greater resistance to degradation. The fact that the neural network model performed as well as, and in some cases better than, regression suggests that further study of neural network modeling is warranted to better understand the most effective ways to harness this flexible modeling technology.


Conference Paper

In this paper, we analyze data from the Educational Longitudinal Study (ELS) to update our understanding of sector differences in high school achievement. We found that students in Catholic and private, non-Catholic schools enjoy greater math gains from tenth to twelfth grade than comparable public school students. Race-ethnicity and SES had the same relationship with math achievement in both public and private schools. Private school students took more academic courses in math than public school students, even after controlling for family background and prior achievement. These differences in course taking accounted for much of the public-private difference in achievement gains.


Report

This report presents new time series data on the course-taking patterns in mathematics and science for the spring high school graduating classes of 1982, 1992, and 2004. Course-taking information was derived from high school transcripts collected by NCES in the following three studies: (1) High School and Beyond Longitudinal Study of 1980 Sophomores; (2) the National Education Longitudinal Study of 1988; and (3) the Education Longitudinal Study of 2002. The analysis addresses overall trends, as well as trends within various subgroups defined by sex, race/ethnicity, socioeconomic status (SES), expectations for future educational attainment, and school sector. The report examines trends in academic course-taking in both mean credits earned in math and science and in the highest course level that high school graduates completed in the two subjects. Some key findings are as follows. First, in mathematics, academic coursework increased from, on average, 2.7 total credits in 1982 to 3.6 total credits in 2004. In addition, graduates shifted from taking lower level mathematics courses to taking more advanced courses. For example, the percentage of graduates who persisted through the mathematics curriculum into the two most advanced levels—precalculus and calculus—tripled between 1982 and 2004. At the subgroup level, while students in each of the four SES quartiles increased their participation in advanced mathematics over time, some disparities increased—for example, the difference between the highest and lowest SES quartiles in precalculus and calculus course-taking went from 18 percentage points in 1982 to 35 percentage points in 2004. Second, in science, the average number of credits increased from 2.2 total credits in 1982 to 3.3 total credits in 2004. Further, graduates shifted in significant proportions from taking lower level science courses to taking upper level ones. At the subgroup level, despite increased completion of advanced-level science courses by graduates from all school sectors, Catholic and other private school students
remained more likely than their public school counterparts to complete advanced-level courses in science.


Book

This study presents empirical evidence, from the base year of the Education Longitudinal Study of 2002 (ELS:2002) on whether the size of public high schools influences measures of parental involvement and social capital. This publication includes a discussion of the school-size literature and of the difficulties of making causal inferences, a multivariate analysis of baseline data, and results of a bounding exercise. Study findings suggest that smaller high schools may be more effective at influencing the probability that parents volunteer at the school and may be more effective at promoting social capital.


Conference Paper

Using data from the National Education Longitudinal Study of 1988 and the Educational Longitudinal Study of 2002, I analyze the effects that students' attitudes and extracurricular participation have on two academic outcomes: mathematics achievement test scores and college expectations. I consider both changes between cohorts, and gender differences within each cohort. The positive effects of school activities on math achievement test scores were greater for the Class of 2004 than for the Class of 1992, as were the negative effects of non-academic values. There were no cohort differences in the activities and attitudes that affected college expectations. For the Class of 1992, leisure activities had more of a negative effect on males' math test scores than on females' scores. Females in the Class of 2004 who worked experienced an increase in math test scores, while working males experienced a decrease. The findings indicate that many of the same activities and attitudes were relevant for math achievement and college expectations in the two time periods, but that gender differences have emerged.


Journal Article

There is little debate among researchers, policymakers, and educational stakeholders that reading achievement among African American students is an important issue. Despite some recent gains among African American students, data from statewide and national tests indicate that reading achievement gaps by race still persist among the nation's school children. To assist researchers in examining African American students' reading achievement, this article highlights promising areas of research and related educational practice, some of which are currently overlooked in relation to this student group. Researchers should also study the effects of teacher knowledge of diversity issues on African American students' reading abilities. Improving reading achievement and enhancing reading skills among African American students must remain a top priority for reading researchers. It is important to acknowledge that in addition to the issues discussed in this article, many other factors and variables require examination to gain a deeper understanding of how to improve African American students' reading achievement.
in schools, such as the educational environment, school setting, and physical and emotional characteristics of students.


Report

This report uses ELS:2002 base year and first follow-up data (as well as National Postsecondary Student Aid Study data) to examine the question of what challenges Asian American and Pacific Islander students face in pursuing and completing their postsecondary education, taking into account factors such as academic preparedness (e.g., high school program, proportion enrolled in English as a second language courses, tested achievement in reading and math as reflected by the ELS:2002 assessment battery, socioeconomic status, and parental savings for their child’s future education). It includes breakdowns for eight Asian/Pacific Islander groups.


Report

This brief publication uses the ELS:2002 transcript data to report and examine differences in the average number of course credits earned between on time high school graduates and dropouts, both within and accumulated across academic years. Differences in the course credit accrual of ELS:2002 sophomore cohort high school graduates and dropouts are also reported by selected subjects (English, mathematics, and science).


Conference Paper

Studies of institutional justice abound in political science, sociology, organization theory and elsewhere. These studies suggest the importance of perceived justice in social interactions by members of an institution. However, few studies have examined perceptions of the institutional justice among high school students. This study accounts for 38% of the variance in students' perceptions of institutional justice among high school sophomores. The authors analyze student survey, characteristic, and behavioral information from the NCES Educational Longitudinal Study of 2002/04. The findings reveal that gender, race/ethnicity and socioeconomic status do matter with regard to a student's perception of institutional justice. The relationship is strongest in regard to socioeconomic status where a student's decreasing SES is associated with a dramatic increase in her perception of institutional justice. Additionally, follow-up data during senior year reveal that student perception of institutional justice is related to the act of dropping out of high school.


Report

This data file documentation report describes the procedures and methodologies
employed during the Education Longitudinal Study of 2002 (ELS:2002) base year, first- and second-follow-ups. The focus is on the second follow-up; its concise treatment of the base year and first follow-up does not supersede the more detailed documentation available for the earlier rounds of the study. The manual is designed to provide guidance and documentation for users of the restricted-use data as released in Electronic Codebook (ECB) format and may also prove helpful for users of the associated public use Data Analysis System (DAS). Included in the documentation are the following: an overview of the study and its predecessor studies; a description of the data collection instruments, including both the development and content of the tests and questionnaires used in the three rounds of data collection; documentation of the sample design, weighting, and design effects; a summary of the data collection methodology and results, including detailed response rates; a description of data preparation and processing activities; and an overview of data file structure and contents. In addition, further documentation is contained in a series of appendices.


Report

This NCES report includes ELS:2002 data on after-school activities (broken down by race and gender) as well as advanced coursetaking in mathematics, science, English and foreign languages.


Journal Article

We used a national database (Educational Longitudinal Study) to investigate the effects of parent's gender, child's gender, and parental involvement in school on the academic achievement of adolescents in single-parent families. A three way 2×2×2 (parent's gender × child's gender × parental involvement) MANCOVA was conducted with four student academic achievement indicators as dependent variables and SES as a covariate. The results indicated that parent gender and child gender interact with parent involvement to affect adolescents' academic achievement differentially. Specifically, daughters who lived with highly involved single-fathers performed better academically than the other groups did. These findings suggest that researchers who study single-parents' involvement in their adolescents' academic achievement need to pay more attention to gender-specific effects.


Dissertation/Thesis

The mathematics scores of Latinos on the National Assessment for Educational Progress (NAEP) have been described as "pervasively, disproportionately, and persistently low" over time, relative to whites (Valencia, 2002). The scores for Latinos who are not proficient English-speakers are particularly low. Thus, the mathematics achievement of Latinos, particularly English Learners (ELs), is a critical issue in our schools and, consequently, for educational research and policy. Both individual and institutional factors have been found to impact Latinos' mathematics achievement and some studies showed that: (1) English proficiency was linked difficulties in comprehending instruction in English, and, (2) Latino ELs with low-levels of English proficiency were often placed in
lower-track courses. Using the Education Longitudinal Study of 2002 (ELS:2002) dataset, I analyze a nationally representative sub-sample of 2,234 native and non-native English-speaking Latino 10th graders. I use generalized least squares (GLS) regression analysis to fit multi-level models that describe the mathematics achievement of native and non-native English-speaking Latino students as a function of: (1) their English proficiency, (2) their placement in a general or academic track in school, and, (3) whether they are provided with native language support. My study reveals that Latino non-native English speakers with low levels of English proficiency perform at much lower levels than their native-English speaking peers—about one standard deviation lower. English proficiency, however, was not the only factor that accounted for this substantial difference in mathematics performance. Institutional-level factors also played a strong role in mediating their achievement. Placement in the college preparatory track (compared to general track placement), and having access to a certified teacher with a mathematics background together accounted for a difference of about one-half of a standard deviation in performance. My findings suggest that access to college preparatory courses and native language support for Latino ELs can promote higher levels of mathematics achievement. Additionally, policies aimed at increasing the achievement of the most disadvantaged students in this study—Latino ELs—need to focus on equity and access to both rigorous mathematics content and adequately trained teachers that have a mathematics background in addition to training to meet the language needs of ELs.


Journal Article

The authors examined the relationships between interracial best friendships and 10th-grade students' academic achievement. The analysis consisted of data from 13,134 participants in the ELS:2002 database. The results indicated that interracial best friendships for minority students (African Americans, Latino Americans, Asian Americans, and American Indians) generally have a positive relationship with students' academic achievement. Discussion and implications of the results are presented.


Conference Paper

This paper challenges James Coleman's concept of "inter-generational closure" as social capital. It seeks a better understanding of the process of intergenerational transmission of social capital by differentiating the social capital available to parents and that which is available to children. Second, the paper contextualizes the concept of social capital in educational settings by examining the content of the resources that are embedded in social ties. We highlight whether the resources conform to the institutional goals of schools, and whether the intentions of actors activating the resources are consistent with these norms. The data used for this study are the Education Longitudinal Study (ELS:2002) base year and first follow-up data. The parent questionnaire of ELS:2002 includes various questions related to social capital that highlight the content of social ties. We use structural equation modeling (SEM) to test our hypothesis. The SEM framework allows us to model measurement error, which will allow the structural relations between latent variables to be more accurately estimated. The SEM also allows us to fit the structural model, and test the extent to which children's social capital mediates the effect of parent social capital on student achievement.

Conference Paper

This study investigates the hierarchical relationships between a school's physical context, students' school routines, and school violence. This research study continues and extends previous studies by examining the role of a school's physical disorder and students' routine activity and lifestyle with their experience with detrimental outcomes related to school violence. At the school level, few studies investigate the relationship between physical characteristics of the school (i.e., disorder and security), and school violence. At the student level, limited studies examine the association between a student's school routines (i.e., classroom related, club, sports participation, and misbehavior) and school violence. Data for this research is drawn from the Educational Longitudinal Study of 2002 (ELS:2002) and utilized the base year nationally represented stratified sample (N = 9,233). The following is an examination of the associations between school physical disorder/deterioration, security, classroom related, club, interscholastic sports, intramural sports, and misbehaving school routines with the likelihood of public school students experiencing school violence related outcomes.


Report

The special analysis on high school coursetaking uses ELS:2004 data in conjunction with data gathered in earlier high school transcript studies to report on coursetaking trends.


Report

This statistical brief uses ELS:2002 state-level (California) and national-level data as well as data from NELS:88 to compare tenth-graders' reasons for dropping out of high school.


Journal Article

The article discusses the effects of socioeconomic status on age at the time of college enrollment. Traditionally, enrollment occurs within 2 years of high school graduation, but research shows lower rates of enrollment within that time frame for U.S. students with lower income and low socioeconomic status than for other students. This study builds on work by J. C. Hearn, who studied students graduating high school in 1980, by looking at a later group of students, expanding the enrollment time examined, and utilizing a more comprehensive conceptual model. Both studies show that Black students, students from low socioeconomic backgrounds, and students with lower levels of academic preparation are more likely to delay college enrollment. Implications for policy and practice are included.

Using data from the Education Longitudinal Study of 2002 (ELS:2002), the authors investigated the impact of small schools on student mathematics achievement, postsecondary expectations, college attendance after high school, the number of postsecondary institutions students applied to, and the type of institution to which students applied, employing both conventional hierarchical linear models and propensity score matching techniques that specifically attempt to account for selection effects. Small schools did not show consistently positive effects.


Past studies on the academic performance of Asian American students primarily attribute their academic success to the Asian cultural values that emphasize education. Using data from the base year study of the Educational Longitudinal Study of 2002 and its first follow-up study in 2004, this study compares the academic performance of Asian American high school seniors with that of their peers and relates it to their part-time employment and behavior that demonstrate their commitment to academic performance. Study results show a non-linear relationship between work intensity and academic performance which is measured by the standardized math test scores. Aspirations to attend college at 10th grade accounts for the most in the math test scores of 12th grade. Other significant determinants are school attendance, preparedness for class, compliance to school rules, enrollment in college preparatory program, and after-school hour activities. Factors such as family income, father's education, and parental help with homework are also important.


This indicator compares data on time spent in homework in 1980 versus 2002, for high school sophomores as studied in High School and Beyond and the Education Longitudinal Study of 2002. The data are taken from the report Cahalan, Ingels, Burns, Planty and Daniel (NCES 2006327) United States High School Sophomores: A Twenty-Two Year Comparison.


This indicator compares data on student preparedness in 1980 versus 1990 and 2002, for high school sophomores as studied in HS&B, NELS:88, and ELS:2002 (percentage of 10th graders who usually or often came to school unprepared without school books,
supplies or homework). The data are taken from the report Cahalan, Ingels, Burns, Planty and Daniel (NCES 2006327) United States High School Sophomores: A Twenty-Two Year Comparison.


Dissertation/Thesis

The manifestation of both the achievement and discipline gaps in the African-American communities in the United States emphasizes the need for investigation of factors which contribute to the ever-emerging problem. This study revealed that the impact of African-American students' perceptions of teacher attitudes does indeed play a role in the successes of schooling. This study of a 10th grade sample of the Educational Longitudinal Study of 2002 (ELS:2002) yielded analysis through multiple linear regressions and correlations. The study was designed to determine: (1) if African-Americans students' perceptions of teachers' attitudes significantly predict academic performance and discipline; (1a) the correlation between students' perceptions of teacher attitudes and discipline sanctions; (1b) the correlation between students' perceptions of teacher attitudes and academic achievement; (1c) the relationship between students' perceptions and socioeconomic status; and (1d) the relationship between students' perceptions and gender. This limited results study indicated that students' perceptions are indeed a factor in academic achievement and discipline sanctions. The results of the multiple linear regression on perceptions and discipline sanctions indicated that students' relationships with teachers, students' feelings regarding teacher sensitivity, and the reasons for attendance are significant. The strongest predictor of student discipline was linked to teacher sensitivity. These same predictors were significant in perceptions and academic achievement. The strongest predictor was a negative indicator and inferred a correlation between the reasons students attend school and academic achievements. Overall, the researcher found that students in the lowest SES quartile did not attend school because of their teachers' expectation of success. Gender was identified as significantly related to how well students got along with teachers and feelings of humiliation in class. These findings can be of assistance to teachers as they realize the impact of their actions, both intentional and unintentional, in the classroom on the students' success. Studying the perceptions of students in the classroom can assist teachers in understanding the impact that they have on students' success and the importance of favorable relationships for better classroom dynamics.

2006


Report

ELS:2002 first follow-up (2004) data are presented in Indicator 23, which compares their educational expectations as seniors with those of seniors in High School and Beyond (HS&B: 1982) and the National Education Longitudinal Study of 1988 (NELS:88). The expectations tables are broken down by the following row variables: socioeconomic status (SES), sex, race/ethnicity, males by race/ethnicity, and females by race/ethnicity.

Report

ELS:2002 first follow-up (2004) data are presented in Indicator 27, on high school sophomore cohort members who had left high school without graduating with a regular diploma or certificate of attendance 2 years later. Tables show the percentage of noncompleters by parent education, percentage of leavers in the ELS:2002 sophomore cohort compared to the sophomore cohorts of earlier studies (NELS:88 in 1990 and HS&B in 1980), the characteristics of their schools and their school experiences, and the reasons they gave for leaving school.


Report

The transcript data documentation accompanies the restricted-use ELS:2002 first follow-up high school transcript and course offering component ECB. It comprises five chapters and a series of appendixes. The first chapter introduces the transcript dataset. Chapter 2 describes transcript data collection materials and procedures. Chapter 3 covers the topic of data control and preparation. Chapter 4 discusses data processing, while Chapter 5 is a guide to the transcript component data files and documentation, including the transcript weights, design effects, and content and organization of the data files. Appended matter deals with the following topics: cross-cohort comparison to other transcript collections, transcript study data collection materials, letter grade conversion scale, course content lists for subject area and composite variables, the student file codebook, the course file codebook, the school file codebook, the course offerings file codebook, a listing of the classification of secondary school courses, and further documentation of design effects.


Report

Using questionnaire and test data collected in 1980, 1992, and 2002, this report presents time series data on three cohorts of high school sophomores. Chapter 1 provides an introduction. Chapter 2 examines the changing context of cohort demographics, family characteristics, and school characteristics. Chapter 3 reports on the school experiences of the three sophomore cohorts, including their high school programs, motivation, views of school safety and of teaching, and computer use. Tested achievement is addressed in Chapter 4, which details results in math from 1980 to 1990 and 2002, and results in reading from 1990 to 2002. Chapter 5 examines after-school activities, including trends in extracurricular activities, employment, and unstructured social activities. Continuity and change in life values across cohorts are explored in Chapter 6; specifically, attitudes toward work and money, friendship and leisure, family life and children, and community and social values. Chapter 7 reports on plans and expectations, including educational expectations, occupational expectations, and perceptions of adult influences on attending college. Two appendixes provide technical notes, a glossary of key classification variables used, and tables of standard errors for estimates contained in the report.
Dougherty, K. J. (2006). It’s Not Enough To Get Through The Open Door: Inequalities By Social Background In Transfer From Community Colleges To Four-Year Colleges. *Teachers College Record*, 108(3): 452-487.

Journal Article

The growing policy interest in community colleges as gateways to the baccalaureate degree naturally raises the question of how equitably transfer opportunities are distributed by student background and what factors may explain background differences that might be found. We analyze two nationally representative datasets to examine how the likelihood of transfer is affected by social background, precollege academic characteristics, external demands at college entrance, and experiences during college. We find that high-SES students have significantly higher transfer rates, in part because of advantages in precollege academic preparation and educational aspirations. Older college entrants are much less likely to transfer than students entering college right out of high school, and a significant portion of this age gap is more often due to having children, lower educational aspirations, and a vocational major, and being enrolled part time. Though women and non-Whites differ from men and Whites in transfer rates, these differences are not statistically significant. But there is an important caveat: Blacks tend to have higher educational aspirations than Whites of the same socioeconomic background. When we control for educational aspirations, thus removing this Black aspirational advantage, the Black-White gap in transfer rates widens considerably, becoming statistically significant in one of our samples but not the other.


Conference Paper

Using data from the Educational Longitudinal Study of 2002, I examine the extracurricular activities of tenth-grade students, distinguishing between school-related activities, structured out-of-school activities, unstructured out-of-school activities, leisure activities, and work. I analyze the association between extracurricular participation and mathematics achievement test scores, both examining all students together, and noting the differences that occur by gender, race/ethnicity, and socioeconomic status. Regardless of background, most students spend their time playing interscholastic sports, watching television, and talking on the telephone. Leisure activities (including television watching and talking on the phone) have a negative effect on math achievement scores, while school-related activities such as student government and student academic clubs have positive effects. Part-time jobs are found to be detrimental to all students except for females and African-Americans, for whom employment actually improves test scores. The findings indicate that, like what Coleman argued in his Adolescent Society, there is a youth culture focused on leisure in American society, and this focus on leisure is associated with lower achievement test scores.


Report

This ED TAB report presents initial findings from the first follow-up of the Education Longitudinal Study of 2002 (ELS:2002). ELS:2002 is the fourth major secondary school longitudinal study sponsored by NCES, closely reflecting the research purposes and design of its three predecessor studies, NLS-72, HS&B, and NELS:88. ELS:2002 began with a nationally representative sample of 10th-graders in 2002. In the first follow-up,
this sophomore cohort was studied 2 years later (2004), and the sample freshened to provide a representative sample of 12th-graders. This ED TAB report summarizes the demographic and educational characteristics of the high school senior class of 2004. It also reports on the senior cohort’s mathematics achievement, their expectations for eventual educational attainment, the importance to them of various institutional characteristics in choosing a college, and their values and plans.


Report

This data file documentation report describes the procedures and methodologies employed during the Education Longitudinal Study of 2002 (ELS:2002) base year and first follow-up, with focus on the latter. The manual is designed to provide guidance and documentation for users of the public-use data as released in Electronic Codebook (ECB) format (NCES 2006346). Included in the documentation are the following: an overview of the study and its predecessor studies; an account of instrumentation (both the mathematics assessment and the various questionnaires); documentation of the sample design, weighting, design effects, and analyses of data quality; a summary of the data collection methodology and results, including detailed response rates; a description of data preparation and processing activities; and an overview of data file structure and contents. In addition, further documentation is contained in a series of appendices.


Dissertation/Thesis

This researcher analyzed data from the database of the National Center for Educational Statistics: Education Longitudinal Studies (ELS) 2002. The study included responses from 743 principals in 752 schools and from 15,362 10th grade students from public, Catholic, and other private schools. The dissertation investigated if the percentage of school participation in afterschool/summer outreach programs could predict students’ perceptions of teachers, drug availability on campus, student misbehaviors and punishments, and attitudes toward school and grades. The independent variable was the percentage of students in afterschool/summer outreach programs as reported by principals.

The dependent variables related to students' responses to attitudes about teachers, if someone sold them drugs and if school and grades were important. Eight of the 10 variables were not statistically significant at p < .05. The teachers' praise of students was statistically significant at .009. Whether students were suspended or placed on probation was borderline significant at .057. The study revealed participation in afterschool/summer outreach programs could predict students’ attitudes toward the importance of teachers praise and could impact if students are suspended from school or placed on probation.


Conference Paper
This study examined family and parental factors contributing to Asian-American advantage in math achievement. Using data collected from ELS:2002, it found that the Asian advantage could be attributed in part to Asian-American parents' high educational expectations and positive achievement attributional styles, and that the effects of these norms and expectations were also mediated by all the three basic elements of students' learning process: ability, effort and opportunities for learning.


This project uses the Educational Longitudinal Study (ELS) 2002 to measure feminist attitudes and gender role attitudes among high school athletes. Female athletes and feminists are often stigmatized as lesbians because both challenge the current gender role arrangement. Because of this double stigmatization (i.e., being female and an athlete), female athletes may be less likely to identify as feminists than nonathletes. This research examines feminist attitudes and gender role attitudes to determine if there are attitudinal differences between female athletes, female nonathletes, male athletes, and male nonathletes. Overall, female athletes tend to have more profeminist attitudes and more flexible gender role attitudes than female nonathletes, male athletes, and male nonathletes. Male athletes have the most sexist attitudes.


This research investigates the relationship between immigrant status and the likelihood of being bullied for Latino and Asian students. Although few school bullying research studies focused on examining the role of ethnicity, even fewer have considered student immigration status. In education research, findings suggest relationships between school related experiences such as achievement, attainment, and attachment varies for immigrant Latino and Asian students (Portes & Rumbaut, 2001; Zhou, 1997; Kao & Tienda, 1995). In criminology literature, immigrant status is significantly associated with the likelihood of individual victimization and exposure to community violence (Martinez, Lee, & Nielsen, 2004). There are limited studies that concentrate their examination on Latino and Asian students’ experience with bullying; however, the same researchers have recommended that future bullying research should consider the role of immigrant status (Hanish & Guerra, 2000; Christie-Mizell, 2003). Furthermore, I utilize segmented assimilation theory to guide the framework of this research to examine if the likelihood of bullying victimization differs between Latino and Asian students. Drawing from the Educational Longitudinal Study of 2002 (ELS:2002). The ELS:2002 dataset is a longitudinal study administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the United States Department of Education. This cross-sectional research on student bullying victimization focuses on the base year nationally represented stratified sample of 1,886 Latino and 1,294 Asian students who attended the 580 public schools in the ELS:2002 study.


Report

This report uses transcript data from the Education Longitudinal Study of 2002 (ELS:2002) to provide nationally representative information about the level of academic
preparation the high school graduating class of 2003-04 had when leaving high school. This report focuses on two general areas. First, it presents the curricular landscape for contemporary American high school students. Pursuant to this theme, the report’s tables address the following questions: How many credits are today’s high school graduates earning? In what subject areas are they most/least focusing their energies? Do these patterns vary across characteristics of the student and the schools they attend? Second, this report describes the linkage between academic pathways, particularly in mathematics coursework, and high school performance and preparation for postsecondary life. The tables in the report address the following questions: What is the association between advanced coursetaking and grades? Is advanced mathematics coursetaking associated with greater math proficiency? Are students who take more advanced courses more prepared than their peers who take lower-level courses? To what degree is there an association between educational expectations and coursetaking? Two appendixes provide information about ELS:2002 and its transcript component, information about the variables used in the report, and standard errors for all reported estimates.


Report

ELS:2002 first follow-up (2004) data are presented in Indicator 23, which compares their educational expectations as seniors with those of seniors in High School and Beyond (HS&B: 1982) and the National Education Longitudinal Study of 1988 (NELS:88). The expectations tables are broken down by the following row variables: socioeconomic status (SES), sex, race/ethnicity, males by race/ethnicity, and females by race/ethnicity.


Report

ELS:2002 first follow-up (2004) data are presented in Indicator 27, on high school sophomore cohort members who had left high school without graduating with a regular diploma or certificate of attendance two years later. Tables show the percentage of non-completers by parent education, percentage of leavers in the ELS:2002 sophomore cohort compared to the sophomore cohorts of earlier studies (NELS:88 in 1990 and HS&B in 1980), the characteristics of their schools and their school experiences, and the reasons they gave for leaving school.

2005


Report

ELS:2002 base year (2002) data are presented in Indicator 29, on high school sophomore cohort members’ perceptions of their school’s learning and social environment, by student race/ethnicity and school degree of minority enrollment.

Conference Proceedings

Statistical adjustment of nonresponse is a deep and pervasive issue for sample surveys. Contemporary statistical methods offer two broad classes of approach to nonresponse adjustment. One is the use of a traditional weighting cell approach. More recently, response propensity modeling, using, typically, logistic regression, has been developed as a further approach to nonresponse adjustment. Additionally, RTI’s General Exponential Model (GEM) is a generalization of weight adjustments, and in addition to nonresponse adjustment can optionally include features such as poststratification and weight trimming. The authors use data from the Education Longitudinal Study of 2002 (ELS:2002) to compare the results of the weighting class method, raking, a logistic regression propensity model, and GEM. They focus on nonresponse adjustment but also look at extreme weight adjustment and poststratification. For the one-dimensional case where each unit is in one unique cell, it can be shown that the three methods will produce the same results. Expanding to many variables and multiple dimensions, marginal totals, variances, and weight distributions can be compared.


Conference Paper

This paper assesses the effects of social disorganization on school performance for males and females. The data used is the Education Longitudinal Study: 2002. This paper has implications for understanding pathways to delinquency.


Journal Article

This article reviews the contemporary literature on school-based activity participation, focusing on patterns of participation, academic achievement, substance use, sexual activity, psychological adjustment, delinquency, and young adult outcomes. Also, the authors discuss possible mediators and moderators of extracurricular activity participation in regard to adolescent development. The review indicates that the associations between school-based activity participation and these outcomes are mostly positive but that the picture becomes mixed once moderator variables are included. The authors suggest areas for future research that include using new methods for measuring activities and applying an overarching theoretical framework to investigations of extracurricular activities and adolescent development. Finally, to move toward a causal model of activities and adolescent functioning, future research must consider the mechanisms through which activities exert their influence on development. The authors propose several possible mechanisms of participation in terms of adjustment during adolescence and young adulthood.


Report
Indicator 18 of this report employs ELS:2002 base year data to examine sophomores’ educational aspirations. Breakdowns are provided by race and ethnicity, with comparisons to past surveys (1980, 1990, vs. 2002).


The data for this report describe the tested achievement and educational status of a cohort based on a nationally representative probability sample of 15,362 10th-graders in 752 public, Catholic, and other private schools, who were studied in the spring term of the 2001-02 school year. The base-year data collection for the Education Longitudinal Study of 2002 (ELS:2002) is the first wave of a new longitudinal study of high school students that continues a series of nationally representative longitudinal studies conducted by the U.S. Department of Education’s National Center for Education Statistics (NCES) over recent decades. Future survey waves will follow both students and high school dropouts and will monitor the transition of the cohort to postsecondary education, the labor force, and family formation. Although the base-year study comprised surveys of parents, teachers, school administrators, and library media specialists, as well as the cohort of high school sophomores, to remain concise, this report draws primarily on data from students, the primary unit of analysis for the study. This document is organized in the following sections: (1) Introduction; (2) Sociodemographic and Educational Profile of American High School Sophomores in 2002; (3) School Experiences; (4) Extracurricular and Sports Activities; (5) Sophomores’ Time Use; (6) Tested Achievement- the Reading and Mathematics Proficiency of High School Sophomore Class of 2002; and (7) Values, Expectations, and Plans. The following are appended: (1) Technical Notes and Glossary; and (2) Standard Error Tables.


This report provides guidance and documentation for users of the public release for the combined base-year and first follow-up data of the Education Longitudinal Study of 2002 (ELS:2002). It provides extensive documentation of the content of the data files and how to access and manipulate them. Chapter 1 serves as an introduction to ELS:2002. It includes an overview and history of the National Center for Education Statistics (NCES) program of longitudinal high school cohorts, summarizes the ELS: 2002 objectives, and supplies an overview of the base-year and longitudinal study design. Chapter 2 describes the first follow-up data collection instruments, including both the development and content of the in-school student, transfer, dropout, early graduate, home schooled, and school administrator questionnaires, as well as the student assessment in mathematics. The sample design and weighting procedures used both in the base-year and first follow-up studies are documented in chapter 3, as are weights, imputation, and the calculation of design effects. Data collection schedules, training, procedures, and results are presented in chapter 4. Chapter 5 describes data preparation and processing, including the receipt control system, optical scanning, machine editing, and data file preparation. Chapter 6 describes the contents of the data files, including the data structure and analysis populations. Appended are: (1) Introduction to the Electronic Codebook; (2) Base-Year and First Follow-up Questionnaires; (3) Documentation for Imputed Variables; (4) Public-Use Masked/Suppressed Variables Available on Restricted Files for Licensed Users; (5) Glossary of Terms; (6) Student Questionnaire Critical Items; (7) Base-Year to
First Follow-up Electronic Codebook; (8) Cross-Cohort Comparisons; (9) Standard Errors and Design Effects; and (10) Synopsis of the ELS: 2002 First Follow-up Field Test (2003).


Conference Paper

This research investigates the influence of a schools level racial and ethnic heterogeneity upon the levels of student victimization. Prior school violence and safety research indicates that schools serving racial and ethnic minorities report relatively higher incidences of violence, fear, and victimization (Welsh, 2001; Payne, Gottfredson, Gottfredson, 2003). Racial/ethnic and economic segregation remains a prevalent dilemma in the United States (Massey & Denton, 1993; Wilson, 1987). Because predominately racial and ethnic minority schools are often located within racial/ethnic communities, poor minority students are more likely to attend schools with minimal access to resources (Johnson, Crosnoe, & Elder, 2001; Roscigno, 1998). Furthermore, findings denote that varying levels of heterogeneity and economic inequality within schools influence the intertwined phenomena of student safety and academic achievement (Eitle & Eitle, 2003; Goldsmith, 2004). Research reveals that student concerns about safety affect the quality of the educational process (Gottfredson & Gottfredson, 2002). Although research suggests that schools are safe environments for students, reports of fear of violence, victimization, and both physical and emotional harassment has increased among students and teachers (Kaufman et al., 2000). Drawing from the Educational Longitudinal Study of 2002 (ELS:2002). The ELS:2002 dataset is a longitudinal study administered by the Research Triangle Institute (RTI) for the National Center for Education Statistics (NCES) of the United States Department of Education. This cross-sectional research on student victimization and race/ethnicity focuses on the base year nationally represented stratified sample, of the 12,039 students who attended the 580 public schools in the ELS:2002 study.


Dissertation/Thesis

Within the educational system, there has recently been a quest to determine potential causes of the Black-White achievement gap in schools. While researchers have investigated many areas related to this gap, little attention has been given to the role of student perceptions of teacher treatment on the classroom school experience. The purpose of this study was to investigate the key role of students' perceptions, and their influence on education as it pertains to school involvement and academic achievement. This study utilized a sample of tenth grade students who took part in the base year of the Education Longitudinal Study of 2002 (ELS:2002). Analysis of data included t-tests, correlations, and multiple regression analysis to determine (a) if students perceive poor treatment from teachers; (b) if African-American students are more likely to perceive poor treatment than their White counterparts; (c) if perceptions of poor treatment based on race exist above and beyond socioeconomic status; (d) if perceptions of poor teacher treatment are related to decreased school involvement; and (e) if perceptions of poor teacher treatment are related to decreased academic achievement. Results of the study indicated that students do perceive negative treatment in the classroom. African-American students were found to be less likely to agree that students get along with teachers and teachers are interested in students than were their White peers. Results of multiple regression analysis indicated that race was a stronger predictor of perception than was socioeconomic status. Correlations between perception, school involvement, and academic achievement variables revealed weak significant relationships indicating that African-American students who perceive poor treatment typically have decreased
school involvement and academic achievement. Information gained from this study will assist teachers in becoming more aware of students’ perceptions and their impact on classroom performance. By exploring student perceptions of teacher behavior, perhaps a greater understanding of the classroom dynamic can be obtained.


Report

This report presents key findings from the Education Longitudinal Study of 2002 (ELS:2002) Facilities Checklist for all ELS:2002 public and private schools and students in the 10th grade. The first section presents findings at the school level. National estimates on the appearance, safety and security, noise levels, and neighborhood conditions for public and private 10th-grade schools in 2002 are provided. The second section presents a description of the number and percentage of 10th-grade students who attend schools with a particular condition. In this section, national estimates on the number of 10th-grade public and private school students that attend schools with certain characteristics based on structural appearance and safety and security are provided. Appendixes discuss the goals and objectives of the ELS:2002 study, the base year study design and methodology. Also, discussions of base year sampling, weighting, response rates, and standard errors follow. Additionally, an account is provided of the statistical procedures employed for this report. A glossary is presented and, finally, the facilities checklist instrument is duplicated.


Report

This report provides an overview of the current state of school library media centers that serve U.S. 10th-graders. The National Center for Education Statistics (NCES) Education Longitudinal Study of 2002 (ELS:2002) provides comprehensive data from multiple sources on school library media centers that served 10th-graders in 2002. ELS:2002 is a longitudinal study of a nationally representative sample of 15,525 10th-graders in 752 schools in the United States in 2002. The first follow-up was conducted in 2004, when most of the students were in the 12th grade. During the high school years, ELS:2002 was a multilevel study, involving multiple respondent populations, including students, their parents, their teachers, and their schools (from which data were collected from the school principal, the school librarian, and a facilities checklist). The ELS:2002 library media center survey, administered primarily to school librarians, examined various aspects of school libraries: their space, organization, collections, resources, staffing, and use. In addition, 10th-graders provided information on their use of and opinions about their school libraries. This E.D. TAB summarizes findings for all ELS:2002 schools and students about library media centers. Findings for schools are presented by the following school characteristics: school sector, school urbanicity, school region, grade span, school enrollment, and the percentage of students receiving free or reduced-price lunch in grade 10. Findings for students are presented by the following student characteristics: sex, race/ethnicity, socioeconomic status (SES), composite achievement test score in grade 10, student’s school sector, student’s school urbanicity, and student’s school region. Comparisons by these school and student characteristics have been tested for statistical significance. The following are appended: (1) Technical Notes and Glossary; (2) Standard Error Tables; and (3) ELS:2002 Library Media Center Questionnaire.

Conference Paper

Obtaining high rates of student participation in school-based studies has become increasingly difficult in recent years due to such trends as increasing numbers of schools requiring active consent, student and school overburden, and the rise in number of high-stakes assessments. Additionally, high student participation rates are more difficult to achieve for studies that select student participants at random from a roster as opposed to intact classrooms. The success of these studies typically requires the assistance of school personnel to advertise the study and handle logistical arrangements. The Education Longitudinal Study of 2002 (ELS:2002) is a school-based research study that uses a random student selection process. ELS:2002 faced challenges in securing student participation in its base year data collection. As part of the design of the field test of the first follow-up study, RTI implemented an incentive experiment to increase student response rates. Offering an incentive was believed to not only make students more likely to participate but also facilitate school cooperation. Student respondents in half of the field test schools were offered a cash incentive and student respondents in the other half of the schools were offered a gift card in the same amount. It was anticipated that cash would result in a higher response rate than gift cards; this was the result in the field test. Based on the results of the field test, cash incentives were offered for the main study. Gift cards were offered only for schools that did not allow cash incentives for students. This presentation will report on the utility of using cash and gift card incentives to increase student response rates and the implications for other school-based studies. Analysis will include measures of data quality (in terms of item nonresponse) as well as quantitative data about response rates.


Journal Article

Institutional researchers frequently use national datasets such as those provided by the National Center for Education Statistics (NCES). The authors of this chapter explore the adjustments required when analyzing NCES data collected using complex sample designs.


Book

The study discussed and analyzed 10th grade math teachers' use of technology in a broad level in the United States. The Education Longitudinal Study: 2002 (ELS: 2002) base year. Results are discussed in terms of math teachers' use of technology in teaching and the relationship between their use of technology and students' math achievement.

Conference Paper

Using information from the three NCES high school sophomore cohort surveys (HS&B, NELS:88, ELS:2002) Part I of the paper provides a descriptive summary of selected primarily demographic trends related to high school sophomores. Part II focuses on sophomores’ educational expectations and examines the relationships between aspirations and demographic variables observing changes between the studies. A concluding section briefly notes some areas of future study. An appendix includes selected information from related Census reports over the time frame of interest.


Journal Article

Analyzing data from the Education Longitudinal Study of 2002, this report examines how computer use produced generic benefits for all children and differential benefits for minority and poor children. Computer use at home was compared with computer use at school in relation to the academic performance of disadvantaged children and their peers. The findings suggest that: a) disadvantaged children did not lag far behind their peers in computer use at school, but they were much less likely to use computers at home; b) computer use at home was far more significant than computer use at school in relation to high academic performance; c) using a computer at school seemed to have dubious effects on learning; d) disadvantaged children benefited less than other children from computer use, including computer use at home; and e) compared to their peers, disadvantaged children’s academic performance seemed less predictable by computer use.


Conference Paper

The paper is divided into four parts. Part 1 provides an overview of the evolving design of the NCES high school longitudinal studies (NLS-72, HS&B, NELS:88, and ELS:2002). Part 2 describes the various kinds of inter-cohort analyses that can be undertaken with the studies. Part 3 (the bulk of the paper) addresses threats to true change measurement. It does so by examining the tension between the need for continuity to ensure true replication (measurement conditions must be kept constant), and the necessity for updating and revision across the dimensions of survey design, content, and methodology (nothing can be frozen in time and remain relevant). Threats to comparability are catalogued across the dimensions of sample design and definition; test and questionnaire content and format; and data collection and processing. Incremental improvements that may sharpen cross-sectional estimation may pose significant risk to cross-cohort change measurement. At the same time, some changes in design, content and methodology will be both necessary and desirable. Part 4 of the paper summarizes recommendations for dealing with the tradeoffs between strict continuity for replication, and change in response to altered circumstances and new methodological opportunities.

Report

This manual has been produced to familiarize data users with the procedures followed for data collection and processing for the base year of the Education Longitudinal Study of 2002 (ELS:2002). It also provides the necessary documentation for use of the public-use data files, as they appear on the ELS:2002 base year Electronic Codebook (ECB) (NCES 2004404). Most social scientists and policy analysts should find the dataset organized and equipped in a manner that facilitates straightforward production of statistical summaries and analyses. This manual provides extensive documentation of the content of the data files and how to access and manipulate them. Chapter 1 serves as an introduction to ELS:2002. It includes an overview and history of the National Center for Education Statistics (NCES) program of longitudinal high school cohorts, summarizes the ELS:2002 objectives, and supplies an overview of the base year and longitudinal study design. Chapter 2 describes the data collection instruments, including both the development and content of the student, parent, school administrator, teacher, and library media center questionnaires, as well as the student assessments in reading and mathematics, and the facilities checklist. The sample design and weighting procedures used in the base year study are documented in chapter 3, as are weights, imputation, and the calculation of design effects. Data collection schedules, training, procedures, and results are presented in chapter 4. Chapter 5 describes data preparation and processing, including the receipt control system, optical scanning, machine editing, and data file preparation. Chapter 6 describes the contents of the data files, including the data structure and analysis populations. The appendices include, among other topics, an introduction to the public-use ECB (appendix A); the ELS:2002 questionnaires (appendix B); a glossary of special terms used in the ELS:2002 documentation (appendix E), and a crosswalk to the National Education Longitudinal Study of 1988 (NELS:88) and the High School and Beyond (HS&B) longitudinal study sophomore questionnaires (appendix H).


Report

This ED-TAB report presents first findings from the base year of the Education Longitudinal Study of 2002 (ELS:2002). ELS:2002 is the fourth major secondary school longitudinal study sponsored by NCES, closely reflecting the research purposes and designs of its three predecessor studies NLS-72, HS&B and NELS:88. Beginning with a nationally representative sample of 10th-graders in 2002, ELS:2002 is designed to provide data about critical transitions experienced by students as they proceed through high school and into postsecondary education or the workplace. This E.D. Tab report summarizes the sociodemographic and educational characteristics of the sophomore class of 2002. These characteristics are captured in a series of student- and school-level classification variables. At the student level, these variables are: sex, age, race/ethnicity, language minority status, family composition, parental education, student’s expectations, and tested achievement. Also included are three characteristics of each student’s school: sector (public, Catholic, or other private), metropolitan status (urban, suburban, or rural), and region in which schools are located (Northeast, Midwest, South or West).

Conference Paper

This paper contributes to the theme of the need to update ongoing study series (balancing exploration of new themes with the need for continuity with past contents). Two areas in which ELS:2002 has innovated, making it different from its predecessors, are in the inclusion of new psychological scales, and computer items. A considerable battery of psychological scales encompassing numerous motivational variables was included on the ELS student questionnaires. (These items can be linked to similar scales on PISA in 2000, to which the ELS:2002 reading results can also be linked.) A second focus of the paper is to analyze the set of new items that are designed to provide additional insight into the role of educational technology in contemporary American high schools. The paper presents the theoretical framework underlying the inclusion of specific computer items on the ELS:2002 school, parent and student questionnaires, and the relationship of the various factors thought to be associated with effective use of computers in school, and underscores their potential for cross-sectional analysis of the base year and longitudinal analysis thereafter.

2003


Report

This field test report provides information about the methods and procedures of the study, and the performance of field test forms (specifically, tests and questionnaires), in the ELS:2002 base year field test (2001). Information provided on assessment and questionnaire item performance includes item response rates, reliability and factor structure, differential item functioning, reliabilities of scales, inter-item consistency, etc. The report is presented in an introduction and seven chapters. The introduction provides a basic account of the design of the study and the goals of the 2001 field test. Chapter 1 deals with field test preparation, such as sampling and the instrument development process. Chapter 2 deals with securing cooperation—enlisting the sample of schools as well as students and their parents and other respondent populations. Chapter 3 provides an account of data collection methods and procedures. Chapter 4 treats of the survey control system and data processing. Chapter 5 comprises an analysis of student survey results (both questionnaire and test) in terms of measures of data quality. Chapter 6 similarly analyzes the quality of school, teacher, library survey and facilities results. The final chapter, chapter 7, is an analysis of parent survey results.

2002


Conference Paper

This paper summarizes recent experience of large-scale, nationally representative longitudinal youth transition studies in the United States. Two study series are considered. First, the longitudinal youth cohorts of the U.S. Department of Labor's Bureau of Labor Statistics (BLS): the National Longitudinal Study, with youth cohorts that started in 1979 (NLSY79) and 1997 (NLSY97). Second, the student cohorts sponsored by the
U.S. Department of Education’s National Center for Education Statistics (NCES). The NCES study series comprises the following: the National Longitudinal Study of the High School Class of 1972 (NLS-72), High School and Beyond (HS&B), the National Education Longitudinal Study of 1988 (NELS:88), and the new Education Longitudinal Study of 2002 (ELS:2002). The paper is divided into four sections. The first section supplies an overview of the U.S. Department of Labor and Department of Education studies. The second section compares the studies, looking to commonalities and differences in their approach to issues of design and method. The third section summarizes the content of the research instruments used in the studies. The fourth and final section talks about some of the research applications of these databases. In addition, there are two appendices. The first appendix points to further sources of information about the design, content, and findings of these studies. The second appendix contains more detailed information about the content of the instruments described in section 3.