

**INTERAGENCY WORKING GROUP ON EXPANDED MEASURES OF  
ENROLLMENT AND ATTAINMENT (GEMENA)  
EXPERT PANEL MEETING  
DECEMBER 9, 2014, 9-11AM E.T.**

Attendees:

- *Expert panel:* Morris Kleiner, Tobin Kyte , Jim Parker, Kent Phillippe, Ken Poole, Andrew Reamer, Jeff Strohl, Michelle Van Noy
- *GEMEnA working group:* Dori Allard, Sharon Boivin, Sarah Crissey, Sarah Grady, Stephanie Ewert, John Finamore, Dan Foley, Harley Frazis, Lisa Hudson, Kashka Kubzdela, Jon O’Bergh, Andrew Zukerberg
- *AIR staff:* Mickey Jackson, Kirsten Manville, Cameron McPhee, Rebecca Medway, Mahi Megra, Celeste Stone
- *Others:* Amy Ho, Jolanta Juskiewicz

1. Meeting goals:

- a. Update expert panelists on data availability and measurement issues.
- b. Present findings from a nonresponse bias study conducted as part of the National Adult Training and Education Survey (NATES) 2013 pilot study and discuss its implications for addressing nonresponse in adult population surveys.

2. Update on data availability (Sharon)

- a. Federal surveys that either currently do or soon will include credential items:
  - i. Currently: 2008 Survey of Income and Program Participation (SIPP), Wave 13 topical module fielded in fall 2012; 2002/2012 Education Longitudinal Survey 10 year follow up of 10<sup>th</sup> grade class of 2002 (12<sup>th</sup> grade class of 2004)
  - ii. Available in the near future (availability dates in parentheses): Redesigned SIPP (2015); Baccalaureate and Beyond (2015); Current Population Survey (February 2016) (2 questions about certifications in educational attainment section and 1 in labor force section); National Survey of College Graduates (2016); Beginning Postsecondary Students (2016); Credentials for Work Survey (2017)
    - The CPS will be fielded in January 2015. Data will be released in February 2016, which will be available both as restricted-use data and as public-use data through PowerStats. We are hoping to have a concurrent release with reports from BLS, Census, and NCES.
- b. A handout was distributed that included the versions of the certification/license item, the provider question that helps to differentiate between certifications and licenses, and the question about whether the credential is required to perform one’s job that is used in each of the above surveys.

3. Discussion of and feedback on measurement challenges faced in writing survey questions about credentials (Lisa)

- a. Certificates

- i. It is difficult to measure educational certificates because the term means different things to different people. One option that was tested was to be very specific in the instructions about what kind of certificates need to be reported. However, the resulting survey question was very long, convoluted, and confusing to respondents.
  - ii. The current approach is to break the item into multiple questions about different types of certificates (training certificates, high school certificates, educational certificates, etc.), which are presented as four yes/no questions. The purpose of this approach is to allow respondents to report the different types of certificates they have by placing them in these different buckets, with the final question asking about educational certificates. Based on the cognitive interviews, this approach seems to work. However, the question is still too long to be included as one question in the CPS.
  - iii. Based on cognitive interviews, one of the more common misunderstandings of the certificate item seems to be reporting of a degree.
  - iv. The expert panel did not raise concerns with asking about educational certificates using the discussed format.
  - v. There is interest in looking at how many of the people who indicate that their educational attainment is “some college-no degree” also indicate that they have a certificate. There currently is not any large-scale data available to do this, but the NHES 2016 data would allow this kind of analysis.
- b. Initial work training programs
- i. Two prior versions of the initial work training questions have been tested in an attempt to determine if respondents have completed an apprenticeship. The first asked a single question about whether the respondent has completed an apprenticeship. The second, which asked a series of yes/no questions about different types of initial work training programs similar to what is currently used in the certificates section, was aimed at singling out apprenticeships. Both of these formats suggested that respondents have difficulty classifying whether what they have done is an apprenticeship or some other type of program, leading to suspected overreporting.
  - ii. Hence, now a single question is asked about all types of programs: “Have you ever COMPLETED one of these types of work experience programs—for example, an internship, student teaching, co-op, practicum, clerkship, externship, residency, clinical experience, or apprenticeship?” Respondents who say “yes” will get follow-up questions about field, length, type of wage, classes, etc. that analysts can use to put them in different buckets for different types of programs.
  - iii. The ATEs survey plans to collect information about formal work experience programs; the Programme for the International Assessment of Adult Competencies (PIACC) collects information about informal work experience.
  - iv. NCEs currently is not looking to capture programs that give credit for previous work experience such as the National External Diploma program.
  - v. When confused, cognitive interview respondents seem to be more likely to offer up extra, irrelevant information than to hold it back.

- vi. Only length of the work training is included because it may be difficult for respondents to recall about duration, intensity or frequencies of programs they participated in a long time ago.
  - vii. There will likely be inaccurate reporting of on-the-job training, but that can be weeded out based on the follow-up questions.
- c. Most important vs. most recent certification/license
- i. This section starts with a general question asking whether the respondent has a certification or a license. It is followed by a grid asking for details on the three most recent certifications. This grid used to include an extensive set of questions about each credential. However, this format was too difficult for respondents to follow.
  - ii. Now, there are only a few questions about each credential in a grid, including one labor market question (i.e., “How important is this certification/license in increasing your pay?”), followed by an extensive set of questions about only *one* of the credentials.
  - iii. To identify the credential for respondents to answer the more extensive labor market questions about, economists have recommended asking about the *most recent* one, to get a random sample of credentials, as opposed to the *most important* one, which leads to bias since respondents are likely to report on the credential that has the most labor market return.
  - iv. Cognitive interviewing, however, shows that people often still tell us about the most important one even when we ask about the recent one. Hence, there is a plan to switch back to asking about the *most important*.
  - v. Panelists suggested that the wording *most important* should be used with some clarification for defining importance since without such clarification it is impossible to understand our frame of reference.
  - vi. Panelist recommended testing the phrase *most valuable* instead of *most important* in cognitive interviewing because *importance* may be linked to status or another factor in addition to labor market value.
  - vii. One panelist suggested that the one labor market question included in the grid asking about “How important is this certification/license in increasing your pay?” may not be the best indicator of the credential’s value since the value of the credential may be related to getting a job instead of increasing pay.
    - Since there is only space for adding one more question to the grid, it is important to think carefully about what that should be.
  - viii. One panelist expressed interest in probing to determine people’s understanding of what a license is, since, for example, analysis of the SIPP data reveals disconnects (such as 3/4 of nurses and 2/3 of medical doctors saying they don’t have licenses).
    - Cognitive interviews will continue to probe participants to see if they can tell the difference. However, the ATES survey is not asking respondents to differentiate between certification and licensure because prior development research has found that respondents have difficulty doing this. ATES instead includes a question that asks whether the credential was awarded by Federal, State or local government (suggesting that it is a license). The employment section

also includes a question asking whether the respondent is required to have a license by Federal, State or Local government to do his or her job.

- This disconnect could possibly be due to SIPP's occupational reporting question.

4. Presentation on unit nonresponse bias in the National Adult Training and Education Survey (NATES) 2013 Pilot Study (Mickey Jackson)

- a. Presentation content: The NATES 2013 pilot study included a Nonresponse Bias Study (NRBS) in which face-to-face interviews of non-respondents to the original mail survey were conducted to evaluate unit nonresponse bias. The findings from the study showed the amount of nonresponse bias in the NATES, effectiveness of nonresponse adjustments for addressing this bias, and the practical significance of bias in the NATES. Recommendations to reduce nonresponse bias were made.
- b. Group discussion
  - i. The current analysis focuses on nonresponse at the household level but does not address the potential impact of within-household nonresponse.
  - ii. There might be some value in calculating the bias ratio based on a significance level lower than the traditional 95% confidence level. The numerator to calculate bias ratio is the difference in nonresponse bias, and it was not significantly different at the 95% confidence level.
  - iii. Another worthwhile effort may be to augment the frame with administrative data on certifications from organizations such as CompTIA or the Workforce Credentials Coalition (90% of community colleges are a part and they have also successfully engaged 3 or 4 credentialing companies).
    - However, administrative data would only be helpful if it could be linked to survey respondents.
  - iv. It is important to consider that response bias may be different across subgroups. Though this was not included in today's presentation, this type of analysis will be included in the NRBS technical report.
  - v. The group discussed whether the sampling frame might have been a cause of the bias. NATES used a complex sampling frame and stratified by race/ethnicity and poverty levels by combining an address based sample with credit bureau reports. It is a representative sample of the US based on demographics. Thus, the sampling frame was not a cause of the nonresponse bias.
    - Using other surveys such as the ACS as a sampling frame is not feasible at this stage.
  - vi. The panel discussed whether there was any mode effect at play due to the main survey being conducted via mail and the nonresponse follow-up being conducted face-to-face; this could possibly result in different rates of credential reporting across modes. An analysis conducted as part of the NRBS technical report found that mode effects on credentials generally were statistically insignificant (except for certificates). It is also important to

remember that mode of completion was not experimentally assigned; face-to-face respondents were a subset of nonrespondents to the mail survey.

- vii. The NRBS is not itself equipped for investigating measurement error, for example, due to respondents misunderstanding key concepts or terms, such as licensure. Including a seeded sample in the study design would be more suited to this purpose, and seeded samples are included in the 2014 and 2016 surveys.
- viii. The group discussed whether there would be any value in incorporating databases that included information about the holders of certain certifications (including demographic characteristics) to perform weight adjustments.