Developing New Federal Survey Data on Credentials for Work

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Presented at the Association of Public Data Users 2012 Annual Conference September 13, 2012
Background

- The need for better data on credentials (other than degrees) that have labor market value became apparent during the recession.
- President’s 2009 State of the Nation address called for every American to have at least one year of education or training beyond high school.
- Interagency Working Group on Certificates and Certifications formed in fall of 2009.
Interagency Working Group (IWG) Members

Bureau of Labor Statistics
Dori Allard
Harley Frazis
Tom Nardone (past)

Census Bureau
Stephanie Ewert
Bob Kominski

Council of Economic Advisors
Elizabeth Ananat (past)
Sarena Goodman (past)
Jessie Rothstein (past)
Chuck Pierret (past)
Chinhui Juhn

Dep of Ed Office of the Under Secretary
Jon O’Bergh

National Center for Education Statistics
Sharon Boivin
Sarah Crissey
Lisa Hudson
Kashka Kubzdela
Isaiah O’Rear
Matthew Soldner
Andy Zukerberg

National Science Foundation
John Finamore
Dan Foley

Office of Management and Budget
Shelly Martinez
Goals

• Measure prevalence of certificates and certifications
• Design a short series of survey items that can be used in federal statistical surveys
  – Improve measurement of subbaccalaureate educational attainment (certificates)
  – Begin counting certifications and licenses
Item Development Activities

- Expert input
- Review of literature and extant data sources
- Focus groups
- Cognitive interviews
- Pilot study
Definition of a Certificate

- A credential awarded by a training program or educational institution based on completion of coursework.
- A certificate is awarded once and carries no requirements for continuing education or repeated demonstration of knowledge.
- Certificates of attendance or participation are not in scope for this work.
Definition of a Certification

• A credential awarded by a certification body based on an individual demonstrating, through an examination process, that he or she has acquired the designated knowledge, skills, and abilities to perform a specific job.
• The examination can be written, oral, or performance-based.
• Certification is a time-limited credential that is renewed through a recertification process.
Key Focus Group Findings

• Participants’ terminology and understanding of certifications was in line with the experts
• Certification and licensure are linked
• Participants interpreted the term “certificate” broadly when not given additional context or examples
Key Cognitive Interview Findings

• Respondents who have a certification or license easily report correctly about “professional certification” and “state or industry license”

• Respondents will report a certificate of completion as an educational certificate if no context or definition of a certificate is provided

• When certification is the process leading to licensure, the respondent uses the term “license”

• Respondents do not think about their industry-recognized certifications when answering about their educational attainment
Objective of the Pilot

- Test a small set of items developed to measure the prevalence of certifications and certificates among the US adult population

The Adult Training and Education Study (ATES)
Overview of Pilot Design

• Address-based sample
• Seeded sample
• Mail screener to obtain phone contact information
• Postcard reminder + 2 nonresponse follow-up mailings
• Telephone follow-up with a CATI instrument
Seeded Sample

- Opportunity sample of 1,250 respondents with known credentials
- Lists from states, accrediting bodies, community colleges
- Evaluate false negatives
- Same data collection procedures as main sample with minor modifications to personalize communication
Main Certification Item

Now I’d like to ask you about professional certification and licensure. Do you have a professional certification or a state or industry license?

Probe: A professional certification or license shows you are qualified to perform a specific job and includes things like Licensed Realtor, Certified Medical Assistant, Certified Construction Manager, a Project Management Professional or PMP certification, or an IT certification.
Main Certificate Item

Some people decide to enroll at a college, university, community college, or trade school to earn a certificate rather than a degree. Have you ever earned this type of certificate?

Probe: An educational certificate is typically earned by completing a program of study offered by a college or university, a community college, or a trade school, but it does not lead to an associate’s, bachelor’s, or graduate degree. Sometimes these are also called vocational diplomas, for example, a cosmetology or mechanics diploma, which differs from a high school diploma.
Pilot Study Analysis Goals

- Estimate overall percent of credential holders by type and by group (prevalence analysis)
- Analyze true positives from seeded sample to determine “key characteristics” of known credentials
- Determine incidence of underreporting (seeded sample) and overreporting (national sample)
- Completed cases: 3,743 (main) and 343 (seeded)
Table 1. Number and percentage of US adults who report holding certification(s)/license(s) or educational certificate(s): 2010

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported credential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Either credential reported</td>
<td>82,348,000</td>
<td>37.5</td>
</tr>
<tr>
<td>Professional certification(s) or license(s)</td>
<td>65,324,000</td>
<td>29.8</td>
</tr>
<tr>
<td>Educational certificate(s)</td>
<td>29,901,000</td>
<td>13.6</td>
</tr>
<tr>
<td>No credential reported</td>
<td>137,076,000</td>
<td>62.5</td>
</tr>
</tbody>
</table>


NOTE: Figures represent weighted estimates. Respondents were able to select multiple credentials; therefore, details may not sum to totals.
Table 2. Comparison of estimates of percentage of US adults who report holding certification(s)/license(s) and educational certificates, by educational attainment

<table>
<thead>
<tr>
<th>Respondent characteristic</th>
<th>Certifications/licenses</th>
<th>Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PDII¹</td>
<td>ATES</td>
</tr>
<tr>
<td>Total</td>
<td>34.4</td>
<td>37.8 *</td>
</tr>
<tr>
<td>Highest level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school diploma</td>
<td>18.5</td>
<td>27.2</td>
</tr>
<tr>
<td>High school diploma</td>
<td>25.7</td>
<td>27.8</td>
</tr>
<tr>
<td>Some college</td>
<td>33.9</td>
<td>38.1</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>†</td>
<td>†</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>35.1</td>
<td>42.7 *</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>50.3</td>
<td>56.8 *</td>
</tr>
</tbody>
</table>

† Not available.
* observed difference is statistically significant at .05 level
¹ Princeton Data Improvement Initiative, 2009
² Survey of Income and Program Participation, 2008
NOTE: Figures represent weighted estimates. Data for certifications/licenses limited to those currently employed or looking for work. Data for certificates limited to those who reported an income or earnings in the previous year.
Table 3. Underreporting of credentials in the ATES seeded sample: 2010

<table>
<thead>
<tr>
<th>Type of certification</th>
<th>Underreporting Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certifications/licenses</td>
</tr>
<tr>
<td>Total</td>
<td>15.0</td>
</tr>
<tr>
<td><strong>Type of certification</strong></td>
<td></td>
</tr>
<tr>
<td>Certification</td>
<td>17.1</td>
</tr>
<tr>
<td>License</td>
<td>13.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18 to 34 years</td>
<td>19.0</td>
</tr>
<tr>
<td>35 to 64 years</td>
<td>11.6</td>
</tr>
<tr>
<td>65 years and over</td>
<td>29.2</td>
</tr>
<tr>
<td><strong>Employment industry</strong></td>
<td></td>
</tr>
<tr>
<td>Private company</td>
<td>15.4</td>
</tr>
<tr>
<td>Government, non-profit, or self-employed</td>
<td>6.9</td>
</tr>
<tr>
<td>Not employed</td>
<td>45.8</td>
</tr>
</tbody>
</table>

† Not available


NOTE: Figures represent unweighted estimates. Observations with missing data for a given variable are excluded. Includes self-reported data only; data completed by proxy respondents were excluded from the analysis. Detail may not sum totals because of rounding.
Overreporting

• *True* certifications/licenses have three key characteristics:
  – Work-related (CN6)
  – Require a demonstration of skills while on the job or passing a test or exam (CN10a/b)
  – Can be used to get a job in that field (CN15b)

• Overreporting occurs when a respondent claims to have a certification/license but the credential does not have these three key characteristics.
### Table 4. Overreporting of certifications/licenses in the ATES national sample: 2010

<table>
<thead>
<tr>
<th>Bin Factors</th>
<th>% certifications/licenses miscategorized as overreports in seeded sample</th>
<th>% of certifications/licenses overreported in national sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Three Items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN6: CN was work related AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN10a/b: CN required demonstration of skills while on the job or passing a test or exam AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN15b: CN could be used to get a job with any employer in that field.</td>
<td>6.8%</td>
<td>0.0% (by definition)</td>
</tr>
<tr>
<td><strong>Two Items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN6 AND CN10a/b</td>
<td>6.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>CN6 AND CN15b</td>
<td>†</td>
<td>2.0%</td>
</tr>
<tr>
<td>CN10a/b AND CN15b</td>
<td>5.1%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Single Item</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN6</td>
<td>†</td>
<td>6.9%</td>
</tr>
<tr>
<td>CN10a/b</td>
<td>5.1%</td>
<td>8.8%</td>
</tr>
<tr>
<td>CN15b</td>
<td>0%</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Only CN1</strong>: Report Certification/License</td>
<td></td>
<td>13.3%</td>
</tr>
<tr>
<td>† Data suppressed because reporting standards were not met for disclosure.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


NOTE: Figures represent unweighted estimates. “CN” refers to certifications and licenses.
Trade-offs using key characteristics

- CN6 & CN10a/b
- CN6 & CN10a/b & CN15b
- CN10a/b
- CN10a/b & CN15b
- CN15b
- Only CN1

Underreporting
Overreporting
IWG Conclusions and Recommendations

- The main certification item is valid for measuring the prevalence of certifications/licenses in the US adult population.
- Additional certification items can provide more detail or more precision in the estimate.
- Results for certificate items are too inconclusive to make any recommendations about their use.
Next Steps on Certifications/Licenses

• Census:
  – Using certification items in field test of redesigned SIPP
  – Fielding a credential module in the last wave of the 2008 SIPP panel (fall 2012, available fall 2013)

Topical module available at:
Next Steps on Certifications/Licenses-cont.

• NCES:
  – Incorporating certification items into longitudinal studies with out-of-school youth and adult respondents
  – Evaluating response rates for a new household study on adult education and training
  – Linking credentialing data to adult literacy scores

• BLS
  – Considering options for adding certification questions to CPS
Next Steps on Certificates

- Further developmental work with new national and seeded samples
- IPEDS working group on certificate reporting
- Oversampling certificate students in the Beginning Postsecondary Students Study of 2012
New Horizons

An expanded charge to improve federal statistical measures on the education and training that adults participate in to acquire job skills.

Interagency Working Group on Expanded Measures of Enrollment and Attainment

GEMEna
For More Information


Contact Information

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