Roundtable Discussion: What is a Postsecondary Subbaccalaureate Credential?
November 3rd and 4th

The roundtable is being convened by the Bill and Melinda Gates Foundation in support of its Postsecondary Success Initiative. The U.S. Department of Education, responsible for implementing the president's recently announced American Graduation Initiative, has agreed to be a key roundtable participant. Both initiatives seek to dramatically increase the number of young adults in the United States with a postsecondary credential and emphasize the attainment of subbaccalaureate awards in achieving their respective goals.

The intent of the roundtable is to identify and define the nature of the array of postsecondary subbaccalaureate credentials (e.g., certificates, certifications, licenses), ascertain the nature of the institutions involved in granting and overseeing such credentials, and discuss the implications for public policy.

The first day's session will have opening remarks by Cecilia Rouse, Member, Council of Economic Advisers, followed by short presentations by the U.S. Department of Education, the U.S. Department of Labor, the Bill & Melinda Gates Foundation, the American National Standards Institute, the National Association for Competency Assurance, and the American Council on Education. The remainder of the first day and all of the second will be devoted to facilitated discussion.

Participants

Department of Education
Jon O'Bergh, Under Secretary's Office
Glenn Cummings, OVAE (Deputy Asst Secy)
Sharon Lee Miller, OVAE
Scott Hess, OVAE
Sharon Boivin, NCES
Chris Chapman, NCES
Lisa Hudson, NCES
Andrew Zukerberg, NCES

Department of Labor
Jane Oates, ETA (Asst Secy)
Gerri Fiala, ETA (Deputy Asst Secy)
Amy Young, ETA
Stephen Wandner, ETA
Dixie Sommers, BLS (Asst Comm)
Tom Nardone, BLS (Asst Comm)

Department of Commerce
Patricia Buckley, Secretary's Policy Office
Robert Kominski, Census Bureau
David Johnson, Census Bureau
Sarah Crissey, Census Bureau
Tim Marshall, Census Bureau

Other Federal
Cecilia Rouse, Council of Economic Advisers (Member)
Jesse Rothstein, Council of Economic Advisers
Scott Cheney, Senate HELP Committee

Foundations
Parminder Jassal, Gates Foundation
Mark Popovich, Hitachi Foundation
Holly Zanville, Lumina Foundation
Whitney Smith, Joyce Foundation

Nonprofits
James Selbe, American Council on Education
Jim Kendzel, National Organization for Competency Assurance
Michelle Van Noy, Community College Research Center
Josh Wyner, Complete College America
Stan Jones, Complete College America
Kathryn Jo Mannes, American Association of Community Colleges
Jim Hermes, American Association of Community Colleges
Dave Buonora, NASDCTEc
Roy Swift, American National Standards Institute
Aimee Guidera, Data Quality Campaign
Bi Vuong, Data Quality Campaign
Richard Reeves, National Student Clearinghouse
Anthony Carnevale, Center on Education and the Workforce, Georgetown University
Jeff Strohl, Center on Education and the Workforce, Georgetown University
Ron Painter, National Association of Workforce Boards
Maria Flynn, Jobs for the Future
Evelyn Ganzglas, CLASP
Brandon Roberts, Working Poor Families Project
Elyse Rosenblum, Corporate Voices for Working Families
Ann Randazzo, Center for Energy Workforce Development
Emily DeRocco, The Manufacturing Institute, National Association of Manufacturers
Martin Simon, National Governors Association
Chris Whatley, Council of State Governments
Andrew Reamer, Brookings Institution
Martha Ross, Brookings Institution

Other
Michelle Tolbert, MPR

Tuesday, November 3

Parminder Jassal, Gates Foundation

Purpose of meeting:
- To discuss postsecondary credentials that aren't degrees.
- To identify why this subject is important and how it fit into the agenda of the President, Gates, and others.
- To learn about work completed to date, including a credential model developed by Gates.

Cecelia Rouse, Council of Economic Advisors

Council's position on the importance of better documenting credentials:
- Will help us meet the President's 2020 goal.
- Will widen the focus on postsecondary education. Looking at OECD data, there are three different ways to measure credentials: (1) individual reported data (e.g., asking what credentials they eared, when they began the program, etc.), which we don't current collect; (2) cohort data, which helps address the mobility issue; and (3) data from different levels of education, including labor force surveys.
- ACS and CPS measure degree attainment, but don't ask about certificates/certifications. Those with some college, for example, but who didn't complete the program, are lumped into the high school graduate category.
- We can do better with the CPS. The questions don't align with what's actually happening. Also, the questions yield different answers, depending on the respondent (e.g., proxy respondents). So, we'll need to come up with questions that will get us the answers we're looking for.
- A 2010 CPS Supplement is a goal, but we can't delay if we want to achieve that goal.

Andrew Reamer, Brookings Institution

Meeting objectives:
- Goal for today is lay out the landscape, share information/data, and learn about the departments' related programs/initiatives. Also, will hear from foundations doing work in this area.
- Tomorrow's goal is to address a set of questions identified today.

Jon O'Bergh, U.S. Department of Education

Why now?:
- The President's initiative is providing the impetus to move forward with this.
- The federal government is putting significant money behind raising educational attainment, so we need to have a better handle on how many certificates are being awarded.

Glenn Cummings, U.S. Department of Education

OVAE's Position:
- We have to set goals that are strong and lofty, but practical.
- Should convene people who can help with nationally recognized standards and credentials.

- Should try to find things that we can realistically achieve.
- Three possible criteria for the credentials include: pre and post tested; nationally recognized; and have credibility.

Tom Weko, U.S. Department of Education

Overview of NCES data collection process:
- Title IV of the higher education act and those institutions that participate are the main focus of NCES data collection.
- NCES doesn't collect data from institutions that don't participate in Title IV and aren't primarily PSE.
- NCES does have student level data, but it's collected via a sampling mechanism and therefore has the same limitations that have already been discussed.

Gerri Fiala, U.S. Department of Labor

U.S. Department of Labor's Activities/Position:
- We look at the president's charge as a way to look at things differently. Need to look at new strategies for engaging people in postsecondary education/training.
- Community colleges play a unique role in workforce system and PSE.
- We need to focus on recruitment, retention, completion, and employment.
- Should consider registered apprenticeship programs, where the academic skills are provided by community colleges, among others, and are often tied to college credit.
- Should also look at stackable credentials; it's a broad definition and still needs to further defined.
- Information about certificates and licensing, etc., needs to be disseminated. DOL's Career One Stop website collects this information. DOL wants to figure out how to communicate this information to the individual, but that requires a definition of credentials, stackable credentials, etc.
- Public workforce system, education system, community training, the industry and industry associations (e.g., NAM) are all part of this and have already worked on this in varying degrees.

Parminder Jassal, Gates Foundation

"Doubling the Number" – Gates Related Activities: (see PPT slides)
- USP: US Libraries, Pacific Northwest (only area where you can solicit funds), Education College Ready & Postsecondary Success.
- PSE was selected as a focus for Gates b/c it's the lever that breaks the cycle of poverty. But, persistence and completion need to be improved.
- Want to double the number of individuals that earn a PSE credential (e.g., degree or other certifications that don't have credit hours associated with them).
- Whatever credential is obtained, it must have labor market value – this is core to the mission.
- Three areas of focus: Improve PSE performance, support young adult success, and build commitment (we need to get stakeholders to rally around the completion goal).
- Idea: What if we didn't pay for education upfront (like we do with everything else)? Could be a model for going forward.
- Want to strengthen connections between PSE and the labor market.

- Have been focused on accelerated pathways. Programs have to be flexible and need to be prescriptive in terms of the path that can be taken. The experience shouldn't be linear b/c it's not the reality.
- Student Outcomes (all three together connect students/workers): PSE credential (credit hours); related industry credentials; and a resume that highlights the various supporting education-career experiences.
- Target audiences: College ready, non-college ready, and adult basic education students.
- ABE/ESL: need to accelerate the GED attainment.
- Lots of policy overlays – state policy and institutional policy.
- Focus for acceleration/completion: stackable credentials, credit for prior learning, industry certifications (employer led).

Certificates? Certifications? Licensure? (see PPT slides)
- There are over 3000 certificate agencies. Over 10,000 certification programs. No standards of quality and no common definitions. A large majority aren't accredited.
- Three different areas: (all three overlap – which is why there is so much confusion)
    o Government regulations (licensure) – licensure process, the license you get, certification, and registry (but this could be at the credit level)
    o Certificates: those that are curriculum based, knowledge based, and completion based.
    o Professional and occupational industry certifications – all have assessments attached to them and once you pass the assessment (which needs to be a valid test), you get the certification.
- The education and sitting for the assessment are two separate processes/activities.
- Certification: roots are in industry; professional industry occupation focused (must look at the job and then work backwards to the test).
- Certificate: roots come out of education and training (courses and content) that gets you to the end result, the certificate. No updating of skills are necessary.
- Licensure: The agency determines the standards – sometimes you have to take a test and sometimes you don't. You have to update your skills to keep the license current.
- Accreditation:
    o 1918 - ANSI was created
    o 1947 – ISO
    o 1993 – IAF (personnel certification)
    o Specialty accreditation (ABNS 1991)
    o Specialty accreditation (CESB 1990)
    o National Accreditation (NCCA 1970)
- ACE credit – run by the American Council of Education. Serves as the bridge between employers needs and accreditation.
- Showed model (see PPT slides) that includes PSE leading to certification, degree; ACE bridging PSE and credentialing bodies; credentialing bodies; government legislation; and then a new area for credentials, certification, and degrees that aren't currently being captured.

Discussion:
- There are a number of rules surrounding financial aid that influence the achievement of credentials. Currently, stackable credential programs are being created around these rules. These rules are also totally disconnected from one another and what's actually needed.

<u>Roy Swift, American National Standards Institute</u> (see PPT slides)

- ISO is taking hold.
- ANSI/ISO/IEC 17024 – Conformity Assessment – General Requirements for Bodies Operation Certification Personas:
  - Approved by over 80 countries
  - Objective of achieving and promoting a globally accepted benchmark for certification bodies
  - Basis for the recognition of certification bodies to facilitate their acceptance at the national and international levels
- Takes 3 years to revise an ISO standard.
- American Nat'l Standards Institute ensures something has met a certain standard, has received/addressed public comment, etc.
- Accreditation Standard: ISO/IEC 17001
  - Mandates 3rd Party conformity assessment (must be neutral)
  - Designed to ensure the purchaser, regulator, and the public that the certification body is competent to perform their functions
  - Ultimate goal to achieve one-stop accreditation and acceptance around the world (the monitoring of this is the IAF)
- IAF – International Accreditation Forum (ISO doesn't certify – just creates standards, but IAF does certify)
  - IAF is the enforcer of the ISO standards
  - 95% who represent IAF, represent their governments
  - Consists of 58 accreditation bodies (accrediting systems, products, and persons)
- All must meet the requirements of ISO/IEC 17001 via a peer review process that is structured within the organization:
  - Purpose: to increase mobility and reduce barriers to services
  - Create documents to further enhance harmonization
  - Establish multi-lateral recognition arrangements (MLA)
- 17024 TC Working Group
  - 23 countries participating
  - Goal is to work toward a peer review process
  - Goal: Implement in 2011
- Globalization of the Professions
  - Examples of American certification bodies going Int'l
    - Project Management Institute
    - Amer. Registry for Diagnostic Medical Sonography
    - Int'l Information Systems Security Certification Consortium Inc.
- US Gov't – Int'l Focus (the below areas are looking at ISO standards)
  - DOD – Cyber Security
  - Dept. of Energy
  - FDA
  - Importing of American Credentials – India
- Foreign certification bodies seeking US recognition (e.g., adhesive bonding certification – Germany)
- The next frontier: certificate programs

- o Two American Nat'l Standards
    - ▪ NOCA 1100
    - ▪ ASTM E 2659-09
  - o Also an ISO standard is being developed
  - o Ten certificate programs selected for an ANSI Pilot to try to validate the ASTM standard b/c it's new and never has been used before.
  - o Federal gov't are participating (FBI academy, FDA, and US Army Combat Readiness Center)
- As the above shows, ISO has looked at certifications for a long time now and are now starting to look at certificates.
- Quality of certification – we have to have some way to help the consumer to understand that when they take the certification route, there will be a positive outcome. So, in his view, ISO is necessary. The catch is that this entire system is currently voluntary, but you're starting to see federal agencies starting to mandate that ISO standards are met.
- Certification: national security, safety, and health – are the three reasons you want certification.

James Kendzel, National Organization for Competency Assurance

- US system today: provider requirements (ISO certification, ASTM certificate, NOCA certificate, NCCA certification), accreditation body requirements (ISO, under development, etc.), and accreditation bodies
- Credentials:
  - o Certification – the evaluation of one's knowledge and skills that based on as valid assessment and has a lifecycle. You must sit and you must go through a formal assessment and you must go through a re-evaluation process (?).
  - o Certificate – is based on a learning event and results in an assessment that the person has achieved the skill set, but doesn't have a lifecycle tied to it. Being enrolled in a certificate program could be a requirement to sit for a certification evaluation.
  - o License – recognized by government body. There's a myriad of ways this can happen.
- Accreditation:
  - o Accreditation is separate from a lot of the above and there's a lot of confusion.
  - o Key elements of accreditation: (ISO and NCCA Policies) – US System
  - o Governance of the accreditation body – we have to provide a structure that allows for open participation of stakeholders and allows for the prevention of undue influence.
  - o Impartial/Confidential (has to be open to all)
  - o Management System (look at continuous improvement; documented procedures; internal audits, etc.)
  - o Assessment (includes an application process, review of documents and records, the process leading to the decision, auditing system)
  - o Decision (the decision can't be delegated, but has to be made by the accreditation body)
  - o Monitoring (needs to be on-going)
  - o Validated program (end result)
- Key elements of certification program:
  - o Governance (the separation b/w education and a certification program)
  - o Management system
  - o Subcontracting
  - o Confidentiality/security

- o Assessment (need to provide statistically valid reasons for cut scores, etc.)
  - o Monitoring recertification (there's a lifecycle to it)
  - o Results in verified knowledge skills competencies
- Key elements of certificate programs:
  - o Governance
  - o Management systems
  - o Confidentiality/security
  - o Education/Training/Design and Delivery
  - o Evaluation/assessment
  - o Issuance of certificates
  - o Result: Achieve intended learning outcomes (all focused on an event as opposed to certification that is focused on a skill set)
- Value of Accreditation:
  - o Third party validation of systems against defined standards
  - o Confidence building for stakeholders (federal agencies & state agencies)
- NOCA is moving to the Institute for Credentialing Excellence

Discussion:
- Europe is in the process of aligning certification among eastern and western countries – is there something we can learn from what they're doing? EU is overriding what countries have done. They are taking a simplification approach.

James Selbe, American Council on Education

- Secondary equivalencies are recognized by the American Council on Education. Learning can be acquired outside the traditional classroom (e.g., award of credit for workplace and military training).
- More than 7.5 million adult learners reside in three adult learner registries.
- Showed an example of how the training outside of education institutions can be cross-walked.

Discussion:
- Important to figure out where the certifications and certificates are to help figure out the earnings return.
- Data suggests that 8% of the population has a credential, but the assumption is that credentials are underreported.
- Certification allows for multiple routes to attain skills that are validated by a third-party and nationally/internationally recognized.
- CFR (DOL's office of apprenticeship) has a revised definition of certificate. Also, has a definition for registered apprenticeship (has DOL's seal of approval).
- Differences b/w states:
  - o State infrastructures (at the state level and institutional level) have a lot of impact on this.
  - o Also, some states have initiatives that support looking across systems (e.g., Oregon – started with state benchmarks and then pathways were developed around regions).

Sharon Boivin, U.S. Department of Education

Questions:
- How is the data collected?
- What does industry want? What has value in the marketplace?
- How do we define a certificate? What are the characteristics?
- How are we counting, what are we counting, and why? We need to define the terms very specifically to determine what we're even talking about. It's not simply increasing the body count to meet the President's goal, but making sure we're counting the right things.

November 4, 2009

(Facilitated by Sharon Boivin, U.S. Department of Education)

<u>Overview of Facilitated Discussion</u>

Goal for today's discussion
- What is it? (what do we call it and what do people in the real world call it)
- How do we define it? (boundary issues)
- What do we need to know about it? (20 questions)

Working Definitions
- Certificate:
  - Acknowledgment of an educational credential that led to the mastery of a set of learning goals.
  - Education focused (but still job related).
  - One time thing. May not mean, though, that they will have everything they need to get a job (like a certification does?).
  - There's a certificate of assessment, certificate of completion, etc. Even in this category, there are a lot of variables.
- Certification:
  - Based on an assessment, an acknowledgement of the acquisition of a set of skills and knowledge.
  - Job focused.
  - Are they always portable?
- Credential:
  - The umbrella term for certificate, certification, and license/licensure.
  - Also, could be a degree. But in some worlds, degrees are outside of the credential. What about diploma?
  - Is there a better term than credential?
    - National qualifications (in Europe) – may be a better term to describe all of these words.
    - What's the purpose for the use of these terms? We don't need a word to cover terms like BA, etc. because that's already well defined.

Discussion Guidelines:
- The focus for today is certificate and certification – throwing out licensure since it's focused on the government.

- o Participant question: Why are we trying to measure these terms? Why take out licensure?
- Need to be clear about the definitions to ensure that the right questions are being asked and that the rights answers are obtained.
- Need to determine what we need to have counted. Need to narrow or define the scope.
- The focus is on credentials that have a value in the marketplace.
  - o Participant question: Does DOL and ED agree or disagree on the labor market value? They're just starting to talk about it.

Discussion:
- Should be grounded in the systemic change we're trying to promote; shouldn't just focus on the statistical value. The two should work together.
- Needs to be able to stand up in court (certification) from the business perspective.
- However the information is collected, it needs to be tracked by key groups (e.g., racial, immigrant/native, gender, etc.).
- What do we mean by market value? Does this also include assistance and acceleration of achieving a higher degree? In other words, market needs to be defined.
  - o We're after something that has labor market value. So, the market we're talking about is employment, not education.
  - o How can you measure market value? Wages? Focus groups with employers to determine hiring practices?
  - o Should count what exists in the labor market today – what are the proxies that can be used right now? No rubric will be totally perfect because we don't know what all is out there and how it may change.
- There is concern about defining a credential as only one year of education since basic education and remedial education also have labor market value. Instead, the goals should be moving everyone up the ladder; it shouldn't be about what can be measured, but what direction we want everyone to go.
- How do we determine what's going on now and what's the ideal? There are a number of different steps to this process. For example, little is known about the non-credit side of college, so more research is needed in that area.
- Why do we measure some of these things well (e.g., certificates)? Money can be a motivator (e.g., NC gives the non-credit side of their institutions money, so therefore non-credit outcomes are measured in NC).
- Some associations have access to a lot of data, so they also could be a source.
- This effort could reshape the labor market that is currently shaped by the BA and AA.
- President's goal – should be inspired by it, but at the same time somewhat liberated from it. Should keep stackable certificates in mind. Need to recognize the different levels that are getting people in the direction we want them to go.

Status of Current Data Collection System:
- Credentials currently measured:
  - o For the most part, we do a decent job of measuring certificates except those provided via non-Title IV institutions and in non-credit.
- Credentials not measured:
  - o There also is a lot of education and training that's going on outside of the formal postsecondary institutions that contributes to employment. Therefore, capturing this

fringe area is important. These people in the fringe are most likely the people we want to help in terms of the American Graduation Initiative.

- o Also, industry certifications still need to be figured out since they are likely to have a definite market value.

Issues to consider in terms of boundaries:
- Portability
- Length of education and training
- Accreditation

Need to define the scope. What is it that we're trying to do?
- Collecting data from individuals rather than providers may be a better way to get the data needed.
- Data is needed on certifications and non-credit/non Title IV certificates; both are currently not measured well.
- What do we need to know about these types of certifications/certificates?
  - o Subject?
  - o Provider?
  - o Supports used to get certificate/certification?
  - o Has the individual obtained other degrees/credentials in addition to the certificate/certification?

Questions/Topics Identified by Discussion Participants about Certifications/Certificates

1. Overview of Certificate/Credential:
   a. Name of certificate (or other meaningful way to categorize it)
   b. Industry/occupation/field
   c. Provider
   d. Level (e.g., professional, journeyman, entry, and expert)
   e. Scale (e.g., How many are issued during a particular time period? How many recipients?)
   f. Recognition/Quality/Value (e.g., recognized by industry, government, third party; accredited; standards-based; legally defensible, etc.)
   g. Eligibility criteria (e.g., pre-requisites, GED/high school diploma, etc.)
   h. Completion requirements (e.g., attendance, completion, assessment)
   i. Mobility (e.g., is it recognized industry-wide, nationally, internationally?)
   j. Shelf Life / Time Limit (e.g., Does it need to be renewed? Can an individual be de-certified?)

2. Overview of Provider:
   a. Type of provider (e.g., Title IV; accredited organizations and other members of NOCA, etc.; organizations; and registered apprenticeships)
   b. Accreditation (e.g., was the provider accredited?)
   c. Scale (e.g., How many are issued during a particular time period. How many recipients?)
   d. Level (e.g., professional, journeyman, entry, expert)

3. Overview of Education/Training:
   a. Purpose (e.g., license, certification, certificate, other? Was it required?)

b. Provider (e.g., type of provider; brand identification, such as Cisco)
c. Delivery mode (e.g., classroom-based, distance education, independent study, workplace hybrid, technology)
d. Duration/Length (intended and actual)
e. Assessment (see also assessment category listed below)
f. Time-based / competency
g. Context (e.g., part of sequence?)
h. Additional requirements (e.g., internships/apprenticeship or other on-the-job experience)

4. Overview of Assessment:
a. Type of assessment (e.g., test, performance-based, observation, portfolio, etc.)
b. Administrator
c. Series (e.g., was it one in a series of assessments?)
d. Expiration (e.g., Is it time limited? Does it need to be renewed?)
e. Quality of assessment (e.g., did it involve pre- and post-testing? Was the administrator accredited? Certifications generally have to meet a certain level of quality, whereas a certificate doesn't)

5. Cost/Funding of Certificate/Certification:
a. Who paid for it? The employer? Personal funds? Financial aid? Loan?
b. How much did it cost?
c. Did it result in debt?
d. Was there a return on investment?
e. Was it completed on employer or employee time?

6. Demand for the Certificate/Certification:
a. Industry (e.g., is it recognized as valid by employers? Is it required by employers?)
b. Government (e.g., role of government regulations/licensing at federal and state level)
c. Personal
d. Employer
e. Advance education (e.g., requirement/pre-requisite/pathway to another credential?)

7. Inputs to Individual Obtaining Certificate/Certification:
a. Why did you get the certificate? Was it needed to perform the tasks of a certain job?
b. How did you learn about it?
c. How did you pay?
d. Were there any pre-requisites? (e.g., work experience, GED/high school diploma, etc.)

8. Status of Individual at Time of Certification/Certificate:
a. Employment status
b. Socioeconomic status
c. Educational level:
   i. What was the individual's baseline coming in? What are the baseline requirements to participate or take the assessment?
   ii. Did the individual have any other degrees/credentials? What was the highest level of education at the time of enrollment?
   iii. Where on the educational pathway did the individual get it?

    iv.   How does this fit in with current qualifications.

9. Outcomes of Certificate/Credential:
   a. What occupation/industry did it prepare you for? (need to think about the level of detail needed to satisfy policymakers and to connect it to the labor market)
   b. Did you get college credit? How many credit hours? (How do you transfer the certifications into credit units? How else quantify certifications?)
   c. What was the impact on earnings? Was there an increase in wages?
   d. Did you get a job promotion? New job?
   e. Did you value having gotten the certificate/certification? Are you satisfied?
   f. Are you currently working in that field or did you work in that field following obtainment of certificate/certification. Or, were you already in the field? (Need to keep in mind what is meant by "working in the field", because not all credentials/training are strictly for a certain field, but could be broader than that and still have value. In other words, the credential may have value outside of a certain occupation/industry.)
   g. Is the certificate/certification portable within industry, across state lines, etc.
   h. Is it industry specific and is it required by the industry (not just the employer)? Did you need to get it to enter the field/industry/occupation? Or, in terms of workforce readiness certificates, is it just preparing you for work in general (e.g., soft skills / transferable skills)?
   i. Is it employer specific (e.g., McDonalds)?
   j. Could you have performed the job without the certificate/certification? (employee)

10. Next Steps for Individual:
    a. Does it lead to a career pathway? Further education? Employment?
    b. Where does it fall in the individual's career path?
    c. Is it a step in a continuum or were you planning to stop there?

11. Economic/Labor Market Context:
    a. State of economy
    b. Demand in the profession/industry

12. Overview of Employer:
    a. Does the employer require it?
       i. Is it used as part of the hiring process? (e.g., Is it required to be on resume? Is it included in the job advertisement?)
       ii. Is it linked to wage increases? Job advancement?
       iii. How is it recognized?
    b. Does the certificate/certification align with the skills/competencies of the job?
    c. Is it required by an outside body (e.g., the government, professional association, etc.)?
    d. Does it require an outside validation (e.g., the government, professional association, etc.)?

13. Employer By's:
    a. Size
    b. Industry
    c. Tuition reimbursement (e.g., direct pay or not – Sect. 127)
    d. Sector of employer (private, public, non-profit, etc.)

14. Provider By's:
    a. Type of provider (e.g., accredited, Title IV, etc.; in terms of Title IV institutions, need to know if the program is Title IV eligible, not just the institution)
    b. Graduation rate
    c. Accreditation/Accreditation Agency
    d. Sector provider (e.g., pubic, private, non-profit)

15. Individual By's:
    a. Mobility dimension (e.g., parent's education/occupation)
    b. Demographics (e.g., age, sex, nativity, etc.)
    c. Employment status
    d. Wages/earnings (personal and household)
    e. Experience in U.S. schools
    f. Geography (e.g., int'l, nat'l, regional, state, local)
    g. Previous educational attainment
    h. Current occupation
    i. Year awarded
    j. Home language/English proficiency
    k. Literacy level

Other Considerations

1. Consumer Information:
    a. Is the information publically available and collected by anyone else? (not just the data, but also information about the actual certificate/certification)
    b. Is any of the information reported to state/federal government, accreditation bodies?
    c. Where is the information housed? (e.g., DOL has 3800 certifications/certificates in their database)

2. Data Collection:
    a. How often do you need this information? (Periodicity)
    b. Definitions should be aligned with our data collection definitions; needs to be crosswalk with existing surveys (e.g., StatCan).
    c. Need to keep in mind various counting systems and when/how they count (e.g., colleges, states, feds, associations, etc.). This initiative could have an impact on how they are counting.
    d. Who can assist with collecting the data? Who should the data be collected from?
    e. What's the appropriate sample size/power?
    f. How will this information help the consumer understand what they are "buying" and the value of the certificate/certification?

3. Remaining Issues:
    a. Do we need to come up with a benchmark for quality certificate/certifications? What are the current quality standards (e.g., pre- and post-assessment, industry recognized?)
    b. How do you talk about this to real people?
    c. Survey question testing process?
    d. Which surveys are most appropriate for the questions?