Measuring Skills Acquisition: Discussion

Jesse Rothstein FESAC December 11, 2015



President Obama, 2009:

President Obama challenged every American to commit to at least one year of higher education or post-secondary training. The President has also set a new goal for the country: that by 2020, America would once again have the highest proportion of college graduates in the world.



OECD Education at a Glance 2015

Table A1.1a. Educational attainment of 25-64 year-olds (2014)

Percentage of adults with a given level of education as the highest level attained

	Below upper secondary					Upper secondary or post-secondary non-tertiary		Tertiary				
	Less than primary	Primary	Completion of intermediate lower secondary programmes	Lower secondary	Completion of intermediate upper secondary programmes	Upper secondary	Post-secondary non-tertiary	Short cycle tertiary	Bachelor's or equivalent	Master's or equivalent	Doctoral or equivalent	All levels of education
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Australia Austria	x(2)	6 ^d	a	17	a	30	5	11	24	6	1	100
Austria	x(2)	1 ^d	a	15	a	52	2	15	2	11	1	100
Belgium	4	7	a	16	a	35	1	0	20	16	1	100
Canada	x(2)	3^{d}	a	7	a	25	11	25	19	9 ^d	x(10)	100
Chile ¹	9	6	a	23	a	40	a	7	13	1 ^d	x(10)	100
Czech Republic	0	С	a	7	a	72 ^d	x(6)	0	5	16	0	100
Denmark	x(2)	4 ^d	a	16	a	43	0	4	19	11	1	100
Estonia	0	0	a	8	a	45	8	7	10	20	1	100
Finland	x(2)	4	a	9	a	44	1	12	15	13	1	100
France ¹	1	8	a	16	a	43	0	14	9	8	1	100
Germany	x(2)	3^{d}	a	10	a	49	11	1	14	11	1	100
United Kingdom United States	0 1	1 3	a a	20 7	18 a	19 45 ^d	a x(6)	11 11	22 22	8 10	1 2	100 100
OECD average	2	7	m	15	m	39	5	8	16	11	1	100
EU21 average	1	6	m	14	m	42	4	6	12	13	1	100



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What is "Post-secondary non-tertiary education"?

Programmes at the post-secondary non-tertiary education level are **not significantly more complex than those at the upper secondary level**. They generally serve to **broaden rather than deepen** the knowledge, skills and competencies already gained through successful (full) level completion of upper secondary education. They may be **designed to increase options for participants in the labour market, for further studies at the tertiary level, or both.**

Usually, programmes at ISCED level 4 are **vocationally oriented**. They may be referred to in many ways, for example: technician diploma, primary professional education or *préparation aux carrières* administratives. For international comparability purposes, the term "post-secondary non-tertiary education" is used to label ISCED level 4.



Measurement goals

- How much postsecondary, non-tertiary education we are providing?
- How much has our adult population received?



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- How much postsecondary, non-tertiary education we are providing?
- How much has our adult population received?
- Stock (and flows) of skills / human capital.
- Workers' job qualifications.
- Employers' training needs.
- Return to non-traditional types of college.



Workforce Data Needs

- 1. What is the stock of credentials with labor market value in the U.S. adult population?
- 2. What is the process by which adults acquire the knowledge and skills to attain those credentials?





Measuring Credential Attainment

- Certifications = for specific occupation/skill, time limited, earned through exam, awarded by industry associations or employers
- Licenses = allows practice in specialized field, time limited, awarded by state agency
- Efforts underway to get better administrative data on these credentials





2016 Adult Training and Education Survey

6. Do you have a <u>currently active</u> professional certification or a state or industry license? Do <u>not</u> include business licenses, such as a liquor license or vending license.

A professional certification or license shows you are qualified to perform a specific job and includes things like Licensed Realtor, Certified Medical Assistant, Certified Teacher, or an IT certification.

- 30. People sometimes earn certificates from an education or training program. These are different from certifications or licenses. Do <u>not</u> include certifications or licenses here. Have you ever earned any of the following types of certificates?
 - d. A certificate—not a degree—for completing a program at a community or technical college, or other school after high school. Do <u>not</u> include teaching certificates or college degrees



Lesson 1: You have to decide what you are looking for before you can find it.

- There's more than one interesting thing to look for in this space.
- What are our measurement priorities?
 - Skills?
 - Job qualifications?
 - Credentials?
 - Educational attainment?



Lesson 2: Just because you've decided, respondents may not agree/understand.



Defining the object(s) of interest

- Peña: "How can we ensure that data systems at all levels of government include a wider range of relevant credentials with agreed upon definitions?"
- GEMEnA: Lengthy discussions of what "<u>certificate</u>," "<u>certification</u>," and "<u>license</u>" mean, leading to questions for large-scale surveys.



Defining the Constructs

- Certification: A credential awarded by a <u>certification body</u> 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 either written, oral, or performance-based. Certification is a time-limited credential that is renewed through a recertification process.
- License: A credential awarded by a government agency that
 constitutes legal authority to do a specific job. Licenses are based on
 some combination of degree or certificate attainment, certifications,
 assessments, or work experience; are time-limited; and must be
 renewed periodically.





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The U.S. school-to-work transition is unregulated and unstandardized

- As a result, no non-ambiguous definitions.
- If we knew someone's complete history, we could debate how to code it.
- In large-scale surveys, we learn how the respondent thinks of his/her history.



Could we come at things from the other direction?

- 1. Meet respondents where they are.
- 2. Do our best to understand where that is.
- 3. Maintain sharp distinction between tabulation & assessment of value/return.
- 4. Merged survey & administrative data may have especially high value here.



Thank you!

