



## Measuring Certifications of Value

Because of work conducted by the federal Interagency Working Group on Expanded Measures of Enrollment and Attainment (GEMEnA) we now have data on certifications available from two sources: The Current Population Survey (CPS) and the Adult Education and Training Survey (ATES). The two surveys enable rich and different analyses. The CPS has numerous data on family structure, race, sex, highest educational attainment, income, earnings and, for our purposes, it is representative at the national and state level (and other sub national geographies such as metro areas).

The ATES data has more rich questions about adult education and training but is only representative at the national and BLS regional level; it also has rich demographic data. For the purposes of ensuring that we don't double count people with both a certification and a certificate, the ATES is important because it includes accurate measure of highest degree attained, whether someone has a certificate, and whether they have a certification. The CPS only asks about certifications, along with the standard highest degree attained. In combination, the CPS and the ATES data allow us to obtain accurate state level counts of certifications of value and ensure that we do not double count a person who has both a certificate of value and a certification of value. (multiple award holding is common).

To define 'of value' to further rarify the count of certifications and certificates we apply an earnings standard that is based on historic analyses of returns to years of postsecondary education. For certificates, we define a certificate of value as one that provides the certificate holder with at least 15% about the high school graduate; this is roughly consistent with findings that one year of post-secondary yields 4-6% return; we assume certificates take two years to obtain. We apply a 10% premium for certifications which reflects our understanding that most certification preparation in well short of a year. In both the case of certifications, and certificates, we believe these thresholds are conservative and thereby tend to undercount certificates and certifications of value. (Note: it is important that the ground level practitioner ask whether our criteria are appropriate to their local area).



Previous to Lumina including certifications in Stronger Nation, double counting was not an (realized) issue. The inclusion of both certifications and certificates exposed this potential problem – figuring out how to count just one person with two short-term credentials of value. This problem is a little tricky to resolve because we do not have state level data on certificates (see certificates counting methodology for detail on how we estimate certificates at the state level), because the CPS does not include certificates, and we are not able to discern in the cases of multiple credentials which ‘causes’ the wage premium.

Thinking through the problem, we envisioned that the universe of certificates and certifications (with value) fall into three groups:

1. Those with just a certificate with value and no certification;
2. Those with just a certification with value and no certificate; and
3. Those holding both a certification and a certification with significant earning premium above high school median earnings.

For our exercise, the first two groups are easy, but the third is where the need to deduplicate, or to ensure we do not double count, becomes important. Because we have no mechanism that lets us determine whether the certificate or the certification was the source of the earnings premium we decided to first count certifications of value to then create a ‘deflation’ factor to minimize double counting as lowering the count of certifications. (Lumina provides a combined share of short-term credentials to ensure that the ‘direction’ of deduplication is irrelevant to overall attainment counts.).

To summarize:

- We determined the percentage of each state workforce with a certificate of value (see [https://cew.georgetown.edu/wp-content/uploads/CEW-CertificatesMethodology\\_StrongerNation\\_2019.pdf](https://cew.georgetown.edu/wp-content/uploads/CEW-CertificatesMethodology_StrongerNation_2019.pdf)).
- We then use the CPS data set consisting of the March supplement restricted to people ages 25-64 where PECERT1=1 (Which does not distinguish whether the certifications holder has a license). This is further restricted to individuals with positive earnings at least 10% higher than the median high school earnings.
- We then turn to the ATES to appropriately count people who have both a certification and a certificate. To do this, we first ask whether the person’s holds a certification earns at least 10% above the high school median, if so, we remove them from the count of people with a certificate of value. If the person does not meet the 10% standard, then we already know they do not meet the 15% standard used to define certificates with value.

This process then leads to our deduplication factor of .76. In other words, at a national level, 76% of individuals who hold a certificate of value also have a certification of value. These individuals are kept in the count of peoples with certifications of value and not counted as having a certificate of value. All the state data on certificates were then deflated to 76% of the previously reported percentages.