



**Proposing Career and Technical Education (CTE) Platforms for Minority Serving Institutions  
Transforming Grades 13 and 14 and Reengineering Adult Education**

**Young Adult CTE (Grades 13 and 14)**

The argument of whether or not career and technical education (CTE) matters is over. According to data statistics from the U.S. Department of Education, in 2013 median earnings for young adults with a bachelor's degree were \$48,500, compared with \$23,900 for those without a high school credential, \$30,000 for those with a high school credential, and \$37,500 for those with an associate's degree.<sup>i</sup> For students and young adults with CTE training, the indicators are strikingly similar. For example, students who have earned a high school diploma with the most CTE credits (4.0 or more credit hours) are likely to earn more across the education spectrum. If a student with 4 or more CTE credit hours does not attend postsecondary training, their average hourly wage is \$16.15 (\$33,592/yr.). With an associate's degree (2 years of postsecondary training), the wage increases to \$18.79/hr. (\$39,225/yr.); and with a bachelor's degree it is \$19.92/hr. (\$41,600/yr.).<sup>ii</sup> So, by nearly every measurement, students with CTE training and exposure earn more than their non-CTE trained peers.

By design, CTE training is embedded in the academic disciplines of science, technology, engineering, and mathematics (STEM) – all demand fields that are available at most, if not all, U.S. Minority Serving Institutions (MSIs). Due to a number of factors, including lack of CTE exposure in secondary schooling, many underrepresented (UR) freshmen enrolled in postsecondary education are less likely overall to express interest in obtaining a STEM degree than their non-UR (white, Asian) counterparts.<sup>iii</sup> According to the National Science Foundation (NSF), **Black students are more likely than any other racial group to enroll in private for-profit academic institutions.** This has particularly disastrous consequences for African American students as many students (of all races) enrolled in for-profit postsecondary institutions rarely complete their course of academic study, are burdened by heavy student loan debt, and secure low-paying postgraduate employment as chronicled in books like Diploma Mill\$: How For-Profit Colleges Stiffed Students, Taxpayers, and the American Dream (A.J. Angulo, Johns Hopkins University Press, 2016) and articles like this one from U.S. News and World Report: "Education Department Takes Aim at Errant For-Profits" (Feb 2016).<sup>iv</sup>

However, if CTE programs can be established at the underclassmen level (freshmen and sophomore years), at MSIs, including Historically Black Colleges and Universities (HBCUs), there is promising data evidence from Organization of Economic Cooperation and Development (OECD) countries that fewer students, even those from low socioeconomic status (SES) backgrounds, will drop out in the first two years of college.<sup>v</sup> Better still, they may be encouraged to pursue academic courses related to CTE and STEM that will put them on the pathway to higher paying postgraduate employment. The Obama administration recognized the importance of CTE in postsecondary education and for the first time, the White House expanded the 2016 Presidential Scholars program to include CTE participants.<sup>vi</sup>

Overall, the benefits of CTE for all students, but most particularly underrepresented (UR) students, greatly enhances the likelihood of postsecondary student achievement and successful postgraduate

employment. As has been demonstrated with data from the U.S. Department of Education, CTE students earn more and graduate at higher rates than non-CTE students.

There is no downside to CTE.

If more U.S. colleges and universities, including MSIs, subscribed to an integrated CTE model of academic and workforce development (like our counterparts in Europe and parts of Asia), it is more likely that U.S. students and older professionals would find and sustain occupations that are satisfying, rewarding, and serve the national good.

### ***Adult CTE: Reengineering the American Workplace***

For too long, the U.S. has suffered under the illusion that a few brilliant individuals like Steve Jobs, Bill Gates, and other techno-geniuses are enough to sustain our global economic advantage. However, it will take more than the next five years of graduating classes of MIT, Cal Tech, and Harvard combined to ensure that the U.S. retains its global lead on technological advances. The U.S. needs semi- and highly skilled workers as well as innovators, and that's where CTE training for adults plays an invaluable role.

Rather than focusing exclusively on building a better mousetrap, the U.S. labor economy is faced with the need to build better beehives with strong worker bees that have the necessary skills to carry out tasks needed to maintain and grow the Nation's business sectors. To underscore the importance of skills development in CTE training, the Perkins Collaborative Network has developed an "Employability Skills Framework" that is comprised of nine key skills organized around three basic elements: (1) Applied Knowledge; (2) Effective Relationships; and (3) Workplace Skills.<sup>vii</sup> These so-called 'soft skills' are the foundation upon which most meaningful and successful employment opportunities are based. Adults as well as early career postgraduates need to have a proficient command of these skills to negotiate the workplace. CTE courses are embedded with soft skill training, thereby giving students who are exposed to CTE an advantage in the labor market.

### **Quick Facts**

- CTE postsecondary students are more likely to bypass developmental courses in college or have the necessary proficiencies to pass developmental courses they are required to take
- CTE trained students who pursue STEM degrees are more likely to earn higher wages over time than non-CTE STEM majors
- Embedding CTE in MSIs will have a multiplier effect in which UR students complete undergraduate coursework with greater confidence. This confidence can lead to successful matriculation into graduate school or gainful employment.
- CTE teaches the benefits of mastering 'soft skills' (such as managing interpersonal relationships) to secondary, postsecondary, and seasoned workers

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<sup>i</sup> <https://nces.ed.gov/fastfacts/display.asp?id=77>

<sup>ii</sup> <https://nces.ed.gov/surveys/ctes/tables/h141.asp>

<sup>iii</sup> <http://www.nsf.gov/statistics/2015/nsf15311/tables/pdf/tab2-8.pdf>

<sup>iv</sup> <http://www.usnews.com/news/articles/2016-02-08/new-education-department-unit-to-take-aim-at-errant-for-profit-colleges>

<sup>v</sup> National Assessment of Career and Technical Education, Interim Report, U.S. Department of Education (2013), xii.

<sup>vi</sup> <https://www.whitehouse.gov/blog/2015/06/23/expanding-presidential-scholars-program-honor-students-career-and-technical-educatio>

<sup>vii</sup> <http://cte.ed.gov/employabilityskills/>