One of the most important components to the discussion of emerging careers is the recognition that the American economy will need an increasingly skilled workforce. According to the recent report, "Help Wanted: Projections of Jobs and Education Requirements Through 2018," put out by the Georgetown University Center on Education and the Workforce, by 2018, the American workforce will be in need of 22 million new college degrees as well as 4.7 million new workers with postsecondary certificates. The report also notes that America will fall short of workers with associate degrees or better by 3 million. Such disparity will no doubt enliven the push to get more students into postsecondary programs and force much needed emphasis on college completion strategies.

At the same time, the push for new college graduates is also likely to give renewed energy to the cultural mantra of a four-year degree or better being the only path to a well-paying job. This cultural shibboleth, while losing strength, still has the unfortunate result of often marginalizing career and technical education (CTE) from professional and liberal arts programs. Consequently, many students shun financially promising opportunities in CTE fields in favor of what they
"Of these hot jobs, the most significant number which require a postsecondary certificate, licensure, or an associate degree are in the fields of health care, science and technology, construction, and computers."

of young workers with licenses and certificates earn more than those with a bachelor's degree, and 31 percent of young workers with associate degrees earn more than those with a bachelor's degree. As such, the need for more workers with college degrees presents an opportunity for CTE advocates and practitioners to dispel the four-year degree myth by highlighting many of the fast-growing and well-paying jobs which, while requiring some form of postsecondary training, do not require a four-year degree.

Health Care
The largest group of these hot jobs is in the health care field. The combination of an increasingly aging population that is living longer and the shift from inpatient to outpatient and homecare will create significant need for middle-skill health care workers. According to the BLS, not only do these occupations have the highest growth projections, most of them provide salaries above the national average.

Dental hygienist positions, which require an associate degree and licensure, are projected to grow by 36 percent and have a median salary of $67,340. Registered nurse positions are projected to grow by 22 percent, require an associate degree, and earn a median salary of $63,760. Occupational therapist assistants, which require an associate degree and certification, are projected to grow by 30 percent and have a median salary of $50,250. Physical therapist assistants also require an associate degree and certification and are projected to grow slightly faster at 35 percent, with a median salary of $48,290. One of the newer health care occupations, health information technicians, requires an associate degree and credential and is projected to grow by 20 percent. And while the occupation only has a median salary of $31,290, it has an upper earning potential of $51,510.

Hot Jobs
The best examples of such jobs can be found by looking at what the Democratic Leadership Council (DLC) calls "hot jobs." The DLC defines hot jobs as occupations that the Bureau of Labor Statistics (BLS) projects will have both above-average growth (more than 10 percent) and above average wages (above the 2008 median wage of $41,056 per year). Of these hot jobs, the most significant number which require a postsecondary certificate, licensure, or an associate degree are in the fields of health care, science and technology, construction, and computers. Furthermore, as these jobs represent some of the fastest growing sectors of the American economy, filling them will be crucial to restoring economic vitality.
Science Technicians
Another area with significant growth and opportunities for well-paying jobs is in the field of science technician. The BLS projects environmental science and protection technician jobs to grow at 29 percent, making it the fastest growing occupation in this field. Technicians will be needed to help regulate waste products, collect samples for measuring levels of pollutants, monitor compliance with environmental regulations, and clean up contaminated sites. These jobs require an associate degree and earn a median salary of $40,790. However, those in the 75th percentile, just above the median salary, earn $52,610.

The BLS projects biotechnology technician jobs to grow by 13 percent. The growing number of agricultural and medicinal products developed from biotech research, and continued competition among pharmaceutical companies to produce innovative and improved drugs, both will create demand for more biotech technicians. These positions also require an associate degree and earn a median salary of $38,700. Like the environmental science technicians, those in the 75th percentile earn above the median salary at $49,340.

Construction
Despite the recent downturn in construction, construction manager positions, which require an associate degree and job experience, are projected by the BLS to grow by 17 percent and earn a median salary of $62,700. Need for construction managers will stem from both demand for commercial construction and the need to improve infrastructure—such as roads, bridges and tunnels. Furthermore, the push to retrofit buildings to make them more energy efficient will also create more openings for construction managers. Along with the need for construction managers, the BLS projects there will be

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significant need for construction estimators. Construction estimator jobs are projected to grow by 25 percent; they require an associate degree, certification, and on-the-job training and earn a median salary of $57,300.

**Computer Specialists**
With technology becoming more complex yet necessary to run a successful business, computer support specialists will be needed in greater numbers to resolve the technical problems that arise. Overall, the BLS projects these support specialist positions to grow by 14 percent. They require an associate degree or professional certification and earn a median salary of $44,300.

**Skill Development**
Regardless of industry, emerging careers will require some form of post-secondary preparation; however, as the preceding examples demonstrate, opportunities for well-paying jobs are not limited solely to occupations that require a four-year degree or better. Furthermore, according to the American Society for Training and Development, rather than being concerned about finding employees with specific degrees, employers are increasingly concerned about finding employees with specific skills, such as business acumen, leadership, technical literacy, adaptability, innovative thinking, and personal responsibility for learning.

While four-year degree programs, undoubtedly, provide training in these skill areas, CTE programs provide solid training and development in these areas as well. As such, CTE provides an excellent pathway for students to both secure well-paying jobs and develop skills that will make them marketable across multiple industries.

**Looking Ahead**
While the careers provided by CTE are promising, many students (and parents) are still unaware of the opportunities available to them. However, by explaining to students the opportunities that CTE provides to secure a strong, satisfying career and educating them on the nature of the emerging workforce, the false notion of a four-year degree being the only pathway will, hopefully, begin to dissipate for good.

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