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TO: President-elect Trump
FROM: Robert Schwartz (Harvard Graduate School of Education)
DATE: December 13, 2016
RE: Career and technical education

THE SITUATION

Twenty-five years into the movement to raise academic standards and provide all students with a solid foundation of core academic knowledge and skills, it is clear that we have made only modest progress in improving educational outcomes. We have succeeded in reducing the dropout rate—over 80 percent of students are now graduating high school, [an all-time high](#)—and increasing enrollment in higher education. We have also succeeded in [reducing the gap](#) in graduation rates between Caucasian and Asian students on the one hand and African-American and Latino students on the other, an encouraging sign of progress.

However, the results are much less encouraging if we look at college attainment rates of young people in their mid-twenties. Only one young American in three succeeds in attaining a four-year degree. When you add into the equation those with two year degrees and even those with one-year occupational certificates with value in the labor market, [fewer than 50 percent](#) of those in their mid-twenties have any kind of postsecondary credential, while economists tell us that by 2020 [two-thirds of the jobs](#) will require some education or training beyond high school. And even those with degrees can swirl in the labor market. In 2013 [over half of young Americans](#) with four-year degrees were either unemployed (6 percent) or underemployed (44 percent).

Meanwhile, survey after survey tells us that employers can't find people with the skills they need to fill today's jobs, especially middle-skill technical jobs in fields like IT, health care, and advanced manufacturing. These factors taken together would seem to argue for a much stronger push to better align our education system, especially our high schools and community colleges, with the needs of our economy in order to equip more young people with the skills they will need to take advantage of career opportunities in these

high-demand, high-growth fields. This is the role that high quality career and technical education (CTE) is designed to play.

CTE today comes in many flavors. There are standalone vocational high schools, which typically provide a range of occupational programs from which students can choose along with the required core academic subjects. In some states there are part-time occupational centers, where students remain in their home high schools for their academic courses but receive specialized occupational training on a half-day basis. Perhaps the most rapidly growing CTE-related model is the career academy, which typically occurs either as a separate program within a comprehensive high school or as a freestanding small school. Career academies aim to integrate academic and technical education and focus mainly on fields like health care and IT and financial services, not the traditional trades and crafts. What is common across all forms of what I prefer to call “career-focused” education is that participants in these programs typically have [higher high school graduation and postsecondary enrollment](#) rates than their counterparts in comprehensive high schools with no career focus.

Why is support for CTE not a higher priority at all levels of government, especially the federal level? There are several reasons, but one has to do with parental attitudes. Simply put, career and technical education is viewed as a great thing ... for other people’s children. It continues to be seen as primarily for young people who do not have sufficient academic skills to attend a four-year college or university. Most people associate CTE with preparation for a limited number of traditional trades and crafts: electrician, plumber, carpenter, auto mechanic, beautician, welder, etc. While most of these jobs today in fact require solid academic as well as technical skills and most pay middle class wages, until CTE is seen by parents, educators, and employers as a vehicle for preparing a very broad range of young people for a very broad range of careers, it is unlikely to be able to generate the degree of support needed from policymakers and the public to overcome this perception of CTE as a second-class system.

THE FEDERAL ROLE

Federal support for vocational education (the prior term for CTE) is nearly 100 years old. The Vocational Education Act of 1917 (known as Smith-Hughes, for its legislative sponsors) predated the Elementary and Secondary Education Act by nearly 50 years and was the first major federal aid program for elementary or secondary education. Smith-Hughes provided matching funds to states to support separate vocational high schools or, more typically, vocational programs in comprehensive high schools. While the development of comprehensive high schools sprang from a democratizing impulse—the laudable desire to bring students with diverse interests and talents together under a single roof—one consequence of having a separate federal funding stream dedicated to vocational programs was to encourage high schools to create a separate track for vocational students, isolating them from students pursuing a more academic education.

Since the passage of the Carl Perkins Vocational and Technical Education Act in 1984, federal support to the states has been slowly but steadily encouraging the states to move toward a broader conception of CTE. In its most recent reauthorization (2006) the Perkins Act not only underwent a name change, substituting “Career” for “Vocational,” but more substantively emphasized the integration of strong academic preparation with strong technical education. It emphasized the importance of focusing on programs that prepare students for careers in high-growth, high-demand fields, and on “programs of study” that span secondary and postsecondary education.

Funding for the Perkins Act started at \$950 million for FY 1985 (about \$2.1 billion in 2016 constant dollars) and has not kept up with inflation. In FY 2000 it was \$1.179 billion; in FY 2015, \$1.125 billion. It is currently about \$1.3 billion, against a roughly \$32 billion federal appropriation for all other elementary and secondary education programs. Of the \$33.3 billion appropriated in FY 2017 for elementary and secondary education, only \$3.1 billion supported high schools. This suggests that despite its title, the “Elementary and Secondary Education Act” (ESEA) has in reality been the Elementary Education Act.

Although Perkins represents a small percentage of what most states spend on vocational education, the 15 percent states are allowed to set aside from Perkins funds to support state leadership and administration is typically the principal source of support for these activities at the state level. States like Tennessee and Delaware, two leaders in building statewide career pathways systems, have used these dedicated funds very creatively to drive innovation in the use of locally distributed Perkins funds as well as state CTE dollars.

POLICY OPTIONS

Option 1: The path of least resistance is to continue Perkins as a separate categorical program. The Obama administration put forth an ambitious “Blueprint” in 2012 that would have converted Perkins mostly into a competitive grants program, designed to support regional consortia bringing together high schools, community colleges, and employers to develop programs focused on meeting regional needs in high-growth, high-demand occupational sectors. The outcry from the CTE community over the proposed move from formula to within-state competitive funding made the Blueprint dead on arrival.

In July 2016 the House Education and the Workforce Committee unanimously reported out “The Strengthening Career and Technical Education for the 21st Century Act.” This bill would essentially represent continuity with the Perkins Act while providing more flexibility and easing both application requirements and federal oversight. It has a positive emphasis on consortial arrangements and links between secondary and postsecondary CTE. Negotiations on a Senate bill broke down during the summer so it is highly unlikely that the Perkins Act will be reauthorized during the current Congress. That said, absent a strong interest from the

next administration in rethinking the federal role, the House bill is likely to be the starting point for negotiations in the next Congress. If some version of this bill is enacted, it would represent an incremental improvement over the current law, but not the innovation needed.

Option 2: A second option would be to do something more radical: end the fiction that ESEA (now ESSA) provides anything like equitable support for secondary schools and create a separate piece of legislation focused on grades 9-12, “The College and Career Readiness Act.” The legislation would begin from the premise that the core mission of high schools in the 21st century must be to prepare all students for both college and career, and to acknowledge that all young people go to college to get a career, not just those in CTE, just as all young people benefit from the critical thinking and broad knowledge gained in humanities and social science disciplines.

The focus of the federal dollars would be to help high schools address this newly defined mission of helping all students acquire sufficient exposure to the world of work and careers to make an informed choice among the career education and training pathways open to them beyond high school. The idea would be to look across Title I and the other provisions of ESSA and other categorical programs for funds currently reaching high schools, package them together with Perkins funds, and create a new, much more flexible \$3-4 billion pot of money to help states and districts support this new “college and career readiness” mission. A significant proportion of the funds would need to be targeted on high schools serving high concentrations of low-income students in order to keep faith with the intent of the Title I program.

This move, while likely triggering some resistance from the traditional constituencies of affected categorical programs, is one that the leadership of the CTE community might be ready to support. Advance CTE, the organization representing the state CTE directors, recently put out a policy paper endorsed by several other key organizations including the Council of Chief State School Officers, the National Association of State Board of Education, and the Association for Career and Technical Education. [“Putting Learner Success First: A Shared Vision for the Future of CTE”](#) offers a vision of CTE that is much more integrated with academic education and is designed to reach a much broader range of students. If the tradeoff, for example, would be to retain a \$1 billion-funded title to continue support for the kinds of CTE programs Perkins currently funds within a new \$4 billion-funded Act more broadly focused on infusing some form of career preparation and readiness into programs serving all high school students, this would likely be seen by the CTE community as win-win.

Option 3: The downside of Option 2, at least as described above, would be that it would seem to back away from one of the most important features of Perkins, which is support for programs of study that span secondary and

postsecondary education. Therefore, one might consider a third option, even more radical than the second: replace Perkins with a “College and Career Readiness Act” explicitly designed to encourage states and localities to create programs and institutions that span grades 9-14. This option would draw heavily on the experience of the Early College High School movement, especially those early college high schools with a career focus.

We now have [a quite substantial body of evidence](#) attesting to the power of the early college high school model, especially for young people from families with little prior experience of postsecondary education. There is increasing acceptance in the US of the idea that a high school diploma is no longer the minimum education required for successful entrance into the labor market, hence the growing support for free community college. High school educators have for years bemoaned the fact that for many students the senior year is mostly running in place, with little incentive to continue to work hard. The increasing participation in dual enrollment and dual credit programs suggest that many, perhaps most students are ready to get on with the next chapter of their lives by the beginning of their junior year. If we are serious about meeting the goal established by the Lumina Foundation and many others of helping at least 60 percent of our workforce attain a postsecondary credential by 2025, why not redesign our system so that a two-year postsecondary degree, not the high school diploma, becomes the new baseline?

RECOMMENDATIONS

If the Perkins Act is reauthorized by the new Congress in its present form or with only modest tweaks, it will perpetuate the notion that career-focused education is not for all students, and that despite our rhetoric, we don’t really believe that all students need to be prepared both for college and career. Consequently, I would strongly encourage the next president to submit a “College and Career Readiness” proposal along the lines outlined above in my second option, but with a section especially focused on incentivizing the expansion of career-focused early college high schools and other models that seamlessly connect the last years of high school and the first years of postsecondary education.

One final point. The single biggest challenge in realigning our education system to more effectively meet the changing requirements of a dynamic economy is engaging employers as full partners in this enterprise, not simply as passive customers. In the states that have made the most progress in improving the alignment between education and the economy, governors or other political leaders have led the way, making the case to their business community as well as to the general public about the linkage between the state’s economic future and the need for a better educated, more highly skilled workforce. Perhaps the most important contribution the next president can make in addressing the skills mismatch is to use the bully pulpit to encourage employers to band together by

sector to act in their own economic self-interest by joining forces with the education community to address this problem.

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