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Catherine Imperatore & Alisha Hyslop

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CTE Policy Past, Present, and Future: Driving Forces Behind the Evolution of Federal Priorities

Catherine Imperatore and Alisha Hyslop Association for Career and Technical Education

Federal legislation has driven and been receptive to the vision of a rigorous, relevant career and technical education (CTE) system integrated with academics and aligned across middle school, secondary school, and postsecondary education. This article uses a social policy analysis approach to trace the history of federal CTE policy throughout the 20th century and the beginning of the 21st century. Through this overview, we demonstrate how federal CTE policy has repeatedly evolved and responded to changing economic and social needs, while also incorporating policy flexibility that has led to variation in program implementation on the state and local levels.

The benefits of career and technical education (CTE), formerly known as vocational education, have been a topic of interest for some time to education and workforce experts and advocates, but in recent years have also captured the attention of the media, been mooted from the podiums of policymakers during speeches and Congressional hearings, and driven legislative priorities at both the state and local level. The Great Recession and the slow economic recovery have placed the relationship between a rigorous, relevant education and a career that pays well and offers the prospect of advancement at the forefront of the minds of policymakers, the media, educators, parents, and employers.

Federal legislation has both driven and been receptive to this vision of a rigorous, relevant CTE system integrated with academics and aligned across middle school, secondary school, and postsecondary education. This article uses a social policy analysis approach to trace the history of federal CTE policy from the 20th century through the early 21st century. We examine relevant federal legislation during this time period, discuss current challenges facing CTE, and explore what the future may hold for CTE policy. Through this overview, we demonstrate how federal CTE policy has repeatedly evolved and responded to changing economic and social needs throughout its first century, while becoming more flexible and allowing for more variation in program implementation on the state and local levels.

SOCIAL POLICY ANALYSIS

Our analytic approach, derived from Popple and Leighninger's (2004) framework, employs a descriptive model to analyze 13 legislative acts concerning vocational education/CTE enacted

Correspondence should be sent to Catherine Imperatore, Association for Career and Technical Education, 1410 King Street, Alexandria, VA 22314. E-mail: cimperatore@acteonline.org

in the 20th and 21st centuries by detailing the relevant policies, their historical and legislative contexts, and evaluations of those policies.

We have grouped the major vocational education/CTE legislation into four different categories that represent major transition points. These shifts capture the evolution of CTE through four phases: first, the establishment and formalization of vocational education in the early part of the 20th century; next, mid-century efforts to expand CTE programs and the populations that could access them; then, latter-century efforts to integrate academics with CTE and enhance performance standards; and finally, the current act and its emphasis on programs of study.

THE FORMALIZATION OF CTE

Policy Description

The passage of the Smith-Hughes Act of 1917 began a century of federal investment in secondary vocational education, and heralded the beginning of a more formalized system of vocational education across the country (we will use the term "vocational education" to describe relevant policies up through the end of the 20th century, when "career and technical education" became the favored term). Prior to 1917, the major piece of federal legislation for vocational education was the Morrill Act of 1862. Unlike Smith-Hughes, it fostered vocational education at the college level, providing federal lands to the states to be sold in order to fund universities to develop skills in agriculture and industrial fields (Gordon, 2014).

The Smith-Hughes Act called for a state board of vocational education and provided federal funding to the states for education in the areas of agriculture, trade and industry, and homemaking, including paying for vocational teacher and state staff salaries (Lynch, 2000). The bill also required that vocational students spend at least half of their time in instruction related to "practical work" (Hayward & Benson, 1993).

A number of bills followed up on this initial legislation. Most significantly, the George-Deen Act of 1936 funded teacher education and added marketing occupations to the list of vocational areas (Gordon, 2014). A decade later, the George-Barden Act of 1946 more than doubled the money authorized to support vocational education, in addition to funding two vocational student organizations for agriculture and limiting the percentage of funding that could be spent on equipment (Gordon, 2014). In addition, the George-Barden Amendments of 1956 added training in practical nursing and fishery operations, and funded area vocational centers (Gordon, 2014).

The legislation enacted between the Smith-Hughes Act and the amendments of 1956 made few substantive changes to the definition of vocational education, its priorities, and the respective federal and state roles. The most important change was the increased appropriation for vocational education, which grew from \$3 million in 1934 to almost 10 times as much in the 1946 bill (Gordon, 2014).

Historical Context

Vocational education was formalized within the context of industrialization and a growing working class, and against a backdrop of two World Wars. Working-class children who were no longer employed in factories, owing to the decline of child labor, and the children of immigrants arriving in the country added to the population of school-age youth (Hayward & Benson, 1993). Education reformers wanted to make education more relevant to these children, who would likely grow up and enter the agricultural or industrial workforce. Vocational education was seen as a way to keep students in school, benefiting employers of producing more informed citizens, a skilled workforce, and higher economic productivity (Miller, 1985, as cited in Wonacott, 2003).

The need for national defense through the large-scale conflicts of the century was another motivation for the birth of a federalized system of vocational education. The Smith-Hughes Act was not passed because the First World War was on the horizon, but the new Federal Board for Vocational Education quickly answered requests to train new soldiers as mechanics and technicians before their induction into the military (Gordon, 2014). World War II brought more training needs for soldiers and returning veterans.

Related Legislation

Concurrently with the Smith-Hughes Act and its successors, other legislation linked vocational education, national defense, and the needs of veterans in the twentieth century, including the 1940s Rural War Production Training Program, which prepared workers for high-demand industrial jobs and later for food production and farm machinery repair (Staff of the Rural War Production Training Program, 1946). Other legislation provided vocational rehabilitation for disabled veterans (LaFollette, 2011). Most well-known, the Serviceman's Readjustment Act of 1944 (GI Bill) provided funds for disabled veterans and, for the first time, money to cover tuition and books for able-bodied veterans (Bureau of Employment Security & Office of the Executive Director, 1944).

Evaluation

A concern leading up to passage in 1917—and one that has been repeated in analysis after analysis since—is the separation of vocational and academic education in the Smith-Hughes Act, which became the defining feature of vocational education in its first century and contributed to the perception of the vocational student as less able academically (Gordon, 2014; Hayward & Benson, 1993).

Elements of the Smith-Hughes Act were meant to protect vocational education funds from being used for other purposes, but they had consequences. For instance, some states fulfilled the requirement to create a state board of vocational education by creating a board distinct from other state education governance (Hayward & Benson, 1993). Provisions in the legislation also led to the mandated 50-25-25 rule, in which 50% of time was spent in the shop, 25% of time on "closely related subjects," and only 25% of time on academic courses—creating the "vocational student" as a separate type of student (Hayward & Benson, 1993).

Problems with vocational education cited in the 1930s and 1940s are similar to challenges we face today, from a shortage of trained teachers to conflict with core academic courses (Hayward & Benson, 1993). A committee appointed by the Roosevelt Administration in 1936 to study vocational education recommended that the legislation be less restrictive and that training in plant

facilities be expanded, which are also concerns held by contemporary vocational advocates (LaFollette, 2011).

THE EXPANSION OF CTE

Policy Description

Vocational education legislation in the late 1950s through the 1984 Perkins Act was characterized by an expansion of the federal oversight of vocational education, a growth of equal opportunity access, and changes in funding. Over this period, legislation increasingly called for funding to be allocated for specific uses, with a particular focus on disabled and disadvantaged students, and later women. Thus, planning and administrative requirements were greatly increased. The legislation increasingly restricted the relatively free reign that states had to carry out vocational education.

The Vocational Education Act of 1963 expanded the provision of vocational education to "persons of all ages in all communities," including funding for programs for academically and economically disadvantaged and disabled students (Vocational Education Act of 1963). Money was authorized to states by student population rather than by specific fields of study, with a formula that included a per capita income ratio (Calhoun and Finch, 1982, as cited in Gordon, 2014; Vocational Education Act of 1963). The new act also "set aside" specific funding within a state's allocation for other purposes such as the construction of area vocational schools or for serving students who had completed or left high school. In addition, 10% of the federal allocation went directly to research, training, and pilot or experimental projects, with a focus on youth in economically depressed communities (Hayward & Benson, 1993; LaFollette, 2011; Vocational Education Act of 1963).

The Vocational Education Amendments of 1968 continued to expand the accessibility of vocational education for different populations. It described the many types of students whose needs could be funded under the act, including specific references to "postsecondary" students. It also increased targeted funding for specific student populations, including students with disabilities, students who were economically or academically disadvantaged, and individuals who had completed or left secondary school and needed training (Vocational Education Amendments of 1968). It also stated that funds could be used for a variety of related activities and services, such as career guidance and program evaluation (Gordon, 2014; Hayward & Benson, 1993).

The Vocational Education Amendments of 1976 continued the focus on equality and accessibility by supporting efforts to end sex bias and sex stereotyping in all vocational education programs (Gordon, 2014; Hayward & Benson, 1993), extending the efforts of Title IX of the Education Amendments of 1972. This act also supported the development of new programs in addition to the maintenance of prior programs (Gordon, 2014), encouraged cross-agency planning and labor market assessment, and expanded set-asides (Hayward & Benson, 1993; Stevenson, 1977). The 1976 Act also called for a national assessment of vocational education, and stated that programs must collect data on and would be held accountable for student employment outcomes (Hayward & Benson, 1993).

The Career Education Incentive Act of 1977, which was wrapped back into larger education block grant funding by 1982 (LaFollette, 2011), appropriated funds for career awareness and

guidance as well as the training of career education coordinators and establishment of career education resource centers (Career Education Incentive Act of 1977).

The Carl D. Perkins Vocational Education Act of 1984, the first vocational legislation to carry the name Perkins, expanded the legislative focus on access and services for students with special needs and funded program modernization and improvement (Gordon, 2014; Lynch, 2000). Funding set-asides were increasingly directed to particular priorities: 57% for various special populations (including, for the first time, single parents and homemakers, individuals participating in programs designed to eliminate sex bias and stereotyping, and criminal offenders) and 43% for program improvement (Carl D. Perkins Vocational Education Act of 1984; Hayward & Benson, 1993).

Historical Context

As innovation accelerated in response to mid-century fears of Soviet aggression and technological prowess, workplaces became characterized by increasing automation and technical, skilled work, for which many individuals were not qualified (Hayward & Benson, 1993). A class divide grew, and social critics began to call attention to "the other America," comprising unskilled laborers, minorities, and others who had little chance to seize the American dream (Marx, 2011).

These social concerns became the backbone of President Lyndon B. Johnson's domestic agenda known as the Great Society. It focused on racial equality and the needs of the poor through such landmark legislation as the Civil Rights Act of 1964 and the Social Security Act of 1965, as well as major federal education legislation.

The progress of social reform movements shaped the 1970s, as did government distrust stemming from the Vietnam War and Watergate as well as economic recession (Reuss, 2009; "Watergate and the Legacy of Distrust," 1992), paving the way for the 1980s' focus on American competitiveness and education improvement.

Related Legislation

The broader education legislation of the 1960s and 1970s formed the foundation of federal education policy as we know it today, and more specifically, served to influence the CTE policy of this entire period, with its emphasis on equity and access. The Elementary and Secondary Education Act (ESEA) of 1965 was an expansive federal education bill that directed financial support to districts with a high percentage of children in poverty (Thomas & Brady, 2005). The Education of Handicapped Children Act of 1975, which is now known as the Individuals with Disabilities Education Act, established a mandate that required schools to educate students with disabilities and provided funding for this purpose (Gordon, 2014).

On the postsecondary level, the Higher Education Act (HEA) of 1965 extended financial assistance to students through need-based grants, student loans, work-study programs, and other campus-based aid, and allocated some targeted institutional aid (Cervantes et al., 2005). In addition, in 1972, the National Defense Education Act of 1958, which had funded education to prepare skilled technicians for the defense needs of the country (Gordon, 2014), was wrapped into HEA (Cervantes et al., 2005).

Workforce development legislation carried forward this commitment to supporting Americans in need, including the Manpower Development Training Act of 1962 for training and reskilling adults, with vocational education providers contracted to provide the training (Gordon, 2014). It was eventually replaced by the Comprehensive Employment Training Act of 1973 and the Job Training Partnership Act of 1982. As with Perkins, workforce development legislation evolved to include more provisions related to performance standards (Gordon, 2014), and early efforts to encourage cross-agency collaboration were included in workforce development policy over these years.

Evaluation

Analysis over time has identified several issues with this era of legislation. First, the increasing use of funding set-asides led to the splintering of funds into small pots of money for different purposes. Grants at the local level could be miniscule, sometimes just a few thousand dollars (Hayward & Benson, 1993). Money also failed to get to the poorest students and school districts (Hayward & Benson, 1993).

In addition, set-asides for special populations reshaped the perception of vocational education as a program not for the average student, but for the disabled and disadvantaged (Morrison, 1979). However, programs for special populations were assessed as ineffective (Stevenson, 1977). Activities that supported students who wanted to participate in programs that were not traditionally for their gender were also found to be lacking on the local level (Hayward & Benson, 1993).

In particular, the 1984 Act is remembered for directing vocational education toward disparate goals—providing technical skills for the majority of the future workforce and supporting students from special populations. Hayward and Benson (1993) pointed out that programs for the increasingly high-tech workforce and programs for students with disabilities may not, in practice, be the same. This tension between workforce and student needs would last into the next phases of vocational education policy.

Practitioners also expressed a need for greater collaboration with businesses and the community, as well as curriculum relevant to current jobs, comprehensive career guidance, and education of handicapped children and adults (Morrison, 1979). In addition, the National Commission on Secondary Vocational Education in January 1984 made many recommendations, notably that vocational education focus more on academic integration, equity and access, employability skills, postsecondary articulation, and work-based learning.

THE INTEGRATION OF CTE

Policy Description

In the 1990s, vocational education began to break with its history of isolation from other areas of education. Legislation declared that vocational education was for "all segments" of the population in order to contribute to a high-tech society (Gordon, 2014, p. 114). Funding for vocational education declined overall in this period, although it was still the largest federal investment in secondary education (Silverberg, Warner, Goodwin, & Fong, 2002).

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990 called for integration with academics, articulation across levels of education, and partnerships with industry. Planning and demonstration grants were included for consortia of secondary and postsecondary institutions to develop "Tech Prep," an articulated plan for a nonduplicative sequences of courses that spanned at least two years of high school and two years of college (known as 2 + 2) (Lynch, 2000). This act also further embraced accountability by requiring states to systematically measure performance and develop curricular standards (Gordon, 2014). Local improvement plans were required for poor-performing programs (Hayward & Benson, 1993).

Finally, the bill required 75% of funds to be allocated to local recipients via a specific formula, reducing set-asides for special populations (American Vocational Association, 1998). It required minimum grant levels to ensure that funds could make a true impact and reduced funds to state agencies for leadership and technical assistance (Hoachlander, Kaufman, Levesque, & Houser, 1992).

The School-to-Work Opportunities Act (STWOA) of 1994 called for all students to have access to work-based learning tied to school-based learning, supported by business-education partnerships (Gordon, 2014). The act encouraged school-based services to organize academics and vocational education around a career area and make curricular connections to postsecondary education (School-to-Work Opportunities Act of 1994).

The Carl D. Perkins Vocational and Technical Education Act of 1998 sustained trends toward alignment and integration begun in the 1990 Act. It altered appropriations to an 85–15 split, with 85% going to local agencies and 15% to the state, and created a flexible "reserve fund" for states to support rural districts, areas with a high number or high percentage of vocational students, and locations that were negatively impacted by changes to the funding formula (Gordon, 2014). The act also eliminated almost all the remaining special populations set-asides and repealed many of the smaller authorized programs outside the Basic State Grant (American Vocational Association, 1998; Gordon, 2014). Uses of funds within the act were clearly defined as either "required" or "permissible," with technology, professional development, secondary and postsecondary linkages, and academic integration activities all required (Gordon, 2014; Stasz & Bodilly, 2004). Tech Prep was expanded from planning and demonstration grants to its own authorized program, which could be funded by formula or competitively (Gordon, 2014; U.S. Department of Education, n.d.).

The legislation also upped accountability requirements to include reporting on four indicators: academic and technical skills attainment; credential attainment; placement and retention in further education or employment; and participation and completion of students in fields of study nontraditional for their gender. States were required to negotiate performance targets with the federal government, and the federal government could withhold funds for low performance (Carl D. Perkins Vocational and Technical Education Act of 1998; Lynch, 2000).

Historical Context

In the 1990s globalization provoked unease about the nation's economic competitiveness. Reform was the byword of U.S. education in the 1980s and 1990s, stemming from anxiety about our relative position in the world, as well as poor student test scores and a growing skills gap (Gordon, 2014). These concerns were captured in *A Nation at Risk: The Imperative for* *Educational Reform*, which supported increasing graduation requirements in core academic courses, among other recommendations (U.S. Department of Education, 1983).

According to Gordon (2014), there were two reform waves: the first focused almost exclusively on academic skills and test scores, while the second emphasized reorganization and transformation of schools. The latter wave opened up a space for vocational education to be part of the solution, as demonstrated by the initial report from the Secretary's Commission on Achieving Necessary Skills (SCANS) in 1991 (Lynch, 2000). Job-specific vocationalism was rejected as a narrow track for minority and disadvantaged students, and vocational education was reimagined as a wider project incorporating academic, technical, and employability skills (Lynch, 2000; Lewis, 1998, as cited in Wonacott, 2003).

Related Legislation

The education reform movement paved the way for the passage of the Goals 2000: Educate America Act in 1994 (ending in 2001), which established national goals for education attainment; supported state standards and standards-based assessments; and created the National Skills Standards Board to identify occupational clusters (Ruffing, n.d.; Stedman & Riddle, 1998). The Improving America's Schools Act, the 1994 reauthorization of ESEA, was also characterized by accountability for states and local districts (U.S. Department of Education, 1995).

Similar provisions fostering accountability and credential attainment were fundamental to the Workforce Investment Act of 1998 (WIA), which replaced the Job Training Partnership Act and established a new one-stop delivery system for the country's job training activities (Gordon, 2014). Prior to WIA's passage, there had been significant legislative efforts to block grant federal investments in education, job training, and welfare programs, including vocational legislation, to create more government efficiency. While these efforts ultimately failed, they set the tone for increased linkages across federal programs (King, 1999). These linkages were a central feature of WIA. Vocational education entities were eligible to provide training and deliver services to WIA participants. Also, if the state legislature approved of the decision, vocational education could be included in a unified state education-workforce plan (Gordon, 2014).

Evaluation

This era of vocational legislation, while ambitious, is criticized because it was not as effective at expanding vocational education opportunities as desired due to competing priorities and a lack of clarity (Lynch, 2000; Silverberg, Warner, Fong, & Goodwin, 2004; Stasz & Bodilly, 2004). Teachers reported reduced time on vocational tasks in favor of academics and test preparation (Stasz & Bodilly, 2004). Implementation of Tech Prep programs, spanning two years of high school and two years of postsecondary education, was incomplete (Silverberg et al., 2004), and the purpose of Tech Prep varied, with some consortia awarding competitive grants for innovation and others providing formula funds that effectively established a separate system of vocational education for the college-bound (K. Green, personal communication, August 11, 2016). Similarly, STWOA's overlap with Perkins provisions caused confusion and encouraged a distinct approach for college-bound students (K. Green, personal communication, August 11, 2016; Lynch, 2000).

Changes to allocations resulted in local grantees receiving more money (Silverberg et al., 2004), as was intended, and funds were often used for technology activities at the local level (Stasz & Bodilly, 2004). However, the reserve fund bypassed the poverty-weighted formula, directing funds intended to target high-poverty areas to other communities (Silverberg et al., 2004). In addition, the elimination of set-asides, notably for special populations, resulted in reduced staff for these students (Stasz & Bodilly, 2004).

Recommendations from the National Assessment of Vocational Education (NAVE) included streamlining the goals of CTE policy and eliminating Tech Prep as a separate title (Silverberg et al., 2004). The National Assessment of Vocational Education Independent Advisory Panel (2004) suggested that future legislation instead be based on programs of study, the nonduplicative course sequence central to the Tech Prep concept, which is described more fully in the next section. It also encouraged federal support of comprehensive career exploration and counseling, better measurement and data systems, enhanced teacher development, and alignment with industry-endorsed assessment and labor market information.

CTE TODAY

Policy Description

As the next era of CTE policy began, the term "vocational education" was retired, in favor of the term "career and technical education" (ACTE, 2006). This change reflected a gradual shift in nomenclature in the field, and was representative of the broader, more rigorous set of skill development activities that were designed to prepare students for the jobs of the 21st century.

Today's CTE programs fall under the scope and influence of the Carl D. Perkins Career and Technical Education Act of 2006, which largely follows the structure of the 1998 Act, but addresses priorities reflective of the policy environment at the time of its passage. It initially provided approximately \$1.3 billion (U.S. Department of Education, 2015) through two major funding streams, the Basic State Grant and Tech Prep, although in recent years, Tech Prep funding has been eliminated and the Basic State Grant is now funded at \$1.117 billion (U.S. Department of Education, 2016).

Key themes of the law include accountability, coordination within the CTE community, academic and technical integration, and secondary-postsecondary connections (Association for Career and Technical Education [ACTE], 2006). These themes are apparent in a new organizing concept for CTE called "program of study," which facilitates students combining academic and technical education elements bridging their secondary and postsecondary educations in pursuit of an industry-recognized or postsecondary credential (Carl D. Perkins Career and Technical Education Act of 2006). Each school district and postsecondary institution that receives funds has to offer at least one program of study to be eligible for funding and incorporate alignment with academic standards, academic and CTE integration, and "coherent and rigorous content" in order to increase student achievement (ACTE, 2006).

This act focuses on creating seamless secondary-postsecondary pathways for students such as the Tech Prep program, by integrating the reforms of Tech Prep into the Basic State Grant portion of the act (ACTE, 2006). This change addressed some of the failures of the Tech Prep implementation as states were given the option of merging Title II Tech Prep funding with their Basic

State Grant allocation so that the funding could be combined for more comprehensive programs of study instead of two separate systems.

The 2006 Act also increased attention on local accountability. It expanded state requirements for negotiating targets and collecting and reporting information, and allowed each local grant recipient to be sanctioned for poor performance (ACTE, 2006). In addition, for the first time, separate accountability indicators were included in the statute for secondary and postsecondary programs, and stronger linkages were included between the Perkins measures and other federal accountability systems (ACTE, 2006).

A number of new requirements for state involvement and technical assistance to locals were included in the act to help local programs implement the changes in the law and to grow beyond their vocational silo (ACTE, 2006).

Historical Context

Rapid technological change, including innovation in wireless technology and the growth of the Internet, characterized the period of time preceding the 2006 Perkins Act reauthorization. The economy was shifting dramatically, and indications of the upcoming recession emerged in the stagnation of the construction and manufacturing sectors and the growth of service sectors. However, employment overall was still strong (Bureau of Labor Statistics, 2006).

In addition, fears of American competitiveness and security related to globalization, world conflicts, and terrorism increased the push for more and higher levels of education to upskill the workforce and continue the development of innovative technology, products, and services (Friedman, 2005).

Related Legislation

When conversations about the reauthorization of Perkins began in 2003, Congress was still basking in the recent passage of the No Child Left Behind (NCLB) Act of 2001, the latest update of ESEA. NCLB instituted new academic accountability requirements focusing on universal proficiency and tough sanctions for states and schools that did not meet adequate yearly progress toward their proficiency goals (Gordon, 2014). The focus on academic achievement dominated the Perkins reauthorization conversation and was ultimately infused throughout the Perkins Act of 2006 (ACTE, 2006).

Evaluation

Although a complete evaluation of the 2006 Act is still unfolding as the law continues to be in effect, some trends are apparent. Scholars and practitioners recognize that changes made to the accountability system in particular seem to have increased the emphasis on student achievement (Klein et al., 2014). The interplay of Perkins with the other federal legislation of this time, particularly NCLB, created a data-rich environment where accountability drove many local discussions and activities. However, although positive developments in data collection and higher standards

occurred, the data collected could not be aggregated and compared nationally because states differed in the way they measured student achievement (U.S. Department of Education, Office of Planning, Evaluation and Policy Development Policy and Program Studies Service, 2014).

In addition, evidence from national assessments indicates that CTE programs, like they did under prior versions of the law, suffer from an uneven implementation of program elements, particularly programs of study (U.S. Department of Education, Office of Planning, Evaluation and Policy Development Policy and Program Studies Service, 2014).

In some cases, however, the flexibility inherent in the law has been used positively at the state level. Although Perkins IV requires that at least one program of study be implemented by each recipient of funds, almost every state has programs of study across the 16 Career Clusters (National Association of State Directors of Career Technical Education Consortium [NASDCTEc], 2013). Many states have developed program of study systems with greater depth and breadth than required, such as Mississippi's 50 statewide program of study templates (Mississippi State University Research & Curriculum Unit, n.d.).

States have also used the approval process for local programs of study to ensure that programs of study meet important objectives. Thirty-nine states use the program approval and/or evaluation process to make sure that programs of study are aligned to statewide CTE standards at the secondary level (NASDCTEc, 2013), and 35 states have tied programs of study to labor market demand (NASDCTEc, n.d.). However, even though programs of study are mandated to include secondary and postsecondary elements, not all localities have achieved this goal. Of states that have developed programs of study or given guidance to the local level on program of study development, 40 states have contributed to program of study development at the high school level, but only 24 states have participated on the postsecondary level (U.S. Department of Education, Office of Planning, Evaluation and Policy Development Policy and Program Studies Service, 2014). Addressing gaps in secondary and postsecondary alignment remains a priority.

The above examples demonstrate the flexibility in Perkins provisions, and the variations this has led to on the state level, with both positive and negative effects. This flexibility has historically been the way that CTE legislation responds to the tension between federal, state, and local authority over education, which is characteristic of U.S. education policy across the board. The flexibility serves a practical purpose as well, given that states have different labor market needs and varying ways that they deliver CTE.

Perkins has also faced fiscal challenges. Unevenness in Tech Prep implementation and tightening of the federal budget for nondefense discretionary programs led to the defunding of Tech Prep and other CTE cuts in FY 2011. Despite these challenges, the law has been recognized as helping to drive state policy and program improvement, even as available resources diminished (Klein et al., 2014). Fortunately, funding has since stabilized.

THE FUTURE OF CTE POLICY

After 10 years, Congress has once again turned to a reauthorization of the Perkins Act. The economy continues to be in a state of constant change, and this reauthorization comes on the heels of the Great Recession. Although the economy had sustained growth for nine straight quarters from 2014 to the middle of 2016 (U.S. Bureau of Economic Analysis, 2016), lingering effects of the recession are still driving education and workforce policy discussions. As the economy has recovered, federal policy focus has shifted from the unemployment rate in isolation to the notion of a "skills gap"—or a mismatch between the skills needed by employers and those seeking employment.

The reauthorization of Perkins also comes on the heels of two other major federal policy accomplishments. First, in 2014 Congress passed the long-overdue reauthorization of the Workforce Investment Act of 1998, retitled as the Workforce Innovation and Opportunity Act (WIOA). WIOA focuses on skills development, common reporting measures across programs, and coordination with emerging workforce and education reform initiatives (U.S. Department of Labor, n.d.). Then, in 2015 Congress completed work on the reauthorization of ESEA in the form of the Every Student Succeeds Act (ESSA), rolling back many of the requirements related to academic standards and accountability that had been previously driven by federal law. Under ESSA, states have the ability to build their own unique accountability systems and use measures, including those around career readiness, that are more diverse than previously prescribed under NCLB. In addition, in general ESSA recognized CTE programs more than at any point in ESEA's history, with references to academic and CTE integration, teacher preparation, and career guidance and counseling (Coppes, 2016).

At the same time, state policy around career education and workforce development has been rapidly expanding. In 2015, there were more than 125 pieces of legislation, board rules, executive actions, and budget provisions enacted in states related to CTE (ACTE & Advance CTE, 2016). Many of these state policy changes and resulting initiatives build on both ESSA and WIOA, with accountability and alignment being major themes.

All of these factors have contributed to early work on Perkins reauthorization, but it is the impact of the economy that has shaped the tone the most. Although academic achievement has still been a priority, the pendulum has begun to swing back toward the "career" side of CTE, with a great deal of focus being placed on preparing students with the skills to meet labor market demand.

In late 2015, the Senate Health, Education, Labor, and Pensions Committee released a set of bipartisan principles guiding the reauthorization, focusing on access, program alignment across legislation and levels of education, employer involvement, career counseling, funding, and research and evaluation (Hyslop, 2015). Early legislation from the House of Representatives also echoed many of these same themes, including alignment with other federal legislation, an increased role for business and industry, more focus on meeting both student and employer needs, and state and local flexibility (Strengthening Career and Technical Education for the 21st Century Act, 2016). However, much of the prescriptiveness of the legislation that had emerged over the past few decades was eliminated in a House bill, H.R. 5587, following the trend of ESSA.

CONCLUSIONS

CTE has evolved closely over time with other legislation and with the country's needs. From the Industrial Revolution to the IT revolution, CTE and the federal policies that fund and govern its programming have responded to shifting priorities. Although CTE at times has been criticized for not keeping up with a rapidly changing labor market, this historical analysis provides evidence that programs have repeatedly evolved and are indeed responding, albeit differently state to state, to changing economic and social needs.

Within its policy evolution, CTE has greatly expanded over the last century, from serving just a few students in a few programs, to helping to meet the needs of all students—including those on a postsecondary pathway. CTE policy now reflects the fact that the enterprise serves learners in K–12, postsecondary, and adult education, and increasingly requires collaboration with workforce and economic development sectors, health and human services programs, and other players on the federal, state, and local levels to provide cross-agency solutions to learner needs.

At the same time, we are beginning to see similarities reemerge from prior policy eras. For example, today's focus on the need for more employer involvement harkens back to criticisms in the 1936 Roosevelt study that more training needed to be provided directly in places of employment. Also, calls to break down silos between academic and technical education continue; however, this time, they are finally being heeded in many circles, with ESSA paving the way not just for CTE teachers to integrate academic skills, but also for academic leaders to recognize the value of CTE.

Much has been accomplished in CTE, but there is room for improvement to better serve all students. CTE advocates are turning their attention to developing better solutions for equity in CTE, which has remained a critical issue since it emerged in the 1960s, and defining the elements of a high-quality CTE program of study. It is likely that future policy discussions will consider these concerns and activities.

While it is impossible to predict at this time when work on a new law will be complete, or what factors might intervene in the meantime to influence its final shape, current discussions indicate that the next law will be a strong reflection of the country's evolving priorities—as it has been throughout the past century.

AUTHOR BIOS

Catherine Imperatore has 10 years of experience with CTE. As Research Manager at the Association for Career and Technical Education, Catherine conducts research evaluating high-quality CTE frameworks, produces publications, tracks data and accountability issues in CTE, and coordinates a project to improve access to third-party industry certification data.

Alisha Hyslop has spent almost 20 years working in CTE and is currently the Director of Public Policy at the Association for Career and Technical Education (ACTE). At ACTE, Alisha leads the organization's legislative, advocacy, and research efforts that cover both secondary and post-secondary policy issues and is particularly involved in efforts related to the Perkins Act.

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