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**Simoneau, Matthew, W. *Alignment of the Carl D. Perkins Act: A Multi-State Study of Two-Year Institutions***

**Abstract**

This study sought to identify alignment and allocation habits of public, two-year postsecondary institutions with the purpose and intent of the Carl D. Perkins Act. More specifically, it aimed at determining the primary areas of use of the grant and attempted to identify ambiguities and success of the Act. Subjects of this study encompassed Perkins grant administrators in geographically diverse regions of the country. Both qualitative and quantitative data was collected utilizing thematic analysis and interviews with Perkins grant administrators.

The study reveals that there is a philosophical divide regarding the focus of the Act as either a mechanism for programmatic improvements or a means to support career and technical education students. The study also revealed ongoing challenges regarding ambiguous language, definitions, data measures, and reporting in the Act. Additionally, the findings revealed that funded positions are the predominate method used by institutions to meet Perkins performance metrics. Recommendations of the study have implications at the national, state, and local levels as to best practices regarding effective and strategic use of Perkins Funds.

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## **Chapter I: Introduction**

The Carl D. Perkins Career and Technical Education Act has provided funding to develop more fully the academic and career and technical skills of secondary and postsecondary students who elect to enroll in career and technical education (CTE) programs (One hundred-ninth Congress, 2006). However, anecdotal evidence suggests that there may be a misalignment with the current use of the grant funds and the original purpose and intent of the grant. In an informal survey conducted in summer of 2013 by the researcher, respondents from across the country referred to the use of the grant on their campuses as “a slush fund,” “used to balance the budget,” “funding for positions,” and “to offset the equipment budget.” In addition, respondents also indicated that their grant was “housed in the wrong department” and “managed by an accountant with no experience with CTE.” These responses signified that this issue is prolific and not limited to one institution.

### **Perkins Funding Allocations and Process**

The Carl D. Perkins Act, also known as Perkins IV (hereafter referred to as the Act) was last authorized in 2006 and accounts for more than \$1.3 billion federal funds annually for K-12 and postsecondary CTE. The purpose of the Act is to provide individuals with the academic and technical skills needed to succeed in a knowledge- and skills-based economy. The Act supports CTE that prepares its students both for postsecondary education and the careers of their choice (Association for Career and Technical Education [ACTE], 2015a).

The U.S. Department of Education’s Office of Career, Technical, and Adult Education (OCTAE) is the federal agency responsible for administering the Act. The majority of funds appropriated under the Act are awarded as grants (known as State Basic Grants) to state education agencies. All states receive funds for both secondary and postsecondary education.

Each state develops a State Plan that is submitted to the Secretary of Education for approval. Once approved, each state allocates 85% of their State local grant to local agencies. Each local agency (public secondary and postsecondary nonprofit educational institutions, educational service agencies, or a consortium of local eligible agencies) submits a local plan to the state in order to receive Perkins funds.

### **Perkins Accountability and Performance Measures**

The Act requires specific accountability and performance measures designed to assess the effectiveness of the state and local funding recipients in achieving progress in CTE (ACTE, 2006). The Act includes six required core performance indicators at the secondary level and five indicators at the postsecondary level (ACTE, 2006). Each state develops performance indicators as part of their State Plan that must consist of the core indicators, any additional indicators the state determines, and the state adjusted levels of performance.

The states must work with local eligible recipients to establish levels of performance for each core indicator as well as any other indicators established by the state. The levels of performance must be expressed in percentages or numerical form and must require continual improvement in the performance of CTE students (ACTE, 2006). Similar to the state process, local recipients must also establish performance goals and agree to accept the state levels of performance as their own local levels of performance or negotiate with the state to establish new levels of performance for each core indicator (ACTE, 2006).

Both state and local agencies are required to report the progression of their performance targets. All states must submit a report to the Secretary of Education each year regarding the progress in achieving their performance levels. State and local agencies must identify and quantify gaps in performance between groups of students and describe the progress of these

students (ACTE, 2006). Should a state or local agency fail to meet at least 90% of an agreed upon performance level for any of the indicators, they are required to develop and implement an improvement plan.

### **Perkins Uses of Funds**

According to the Association for Career and Technical Education (ACTE) (2015a), Perkins funds are typically used in the broad areas of program improvement, accountability, integration of academics in CTE, professional development, CTE curricula, career guidance and academic counseling, technology, and career and technical student organizations. More specific uses of funds at both the state and local levels are detailed in the Act and are categorized as required and permissible activities. The required activities are those that the state and local agencies must use to improve CTE programs and the permissible activities are those that agencies choose to undertake as part of their overall CTE plan and agenda. The current Act contains nine required activities and 17 permissible activities at the state level and nine required and 22 permissible activities at the local level.

Each state and local agency that receives Perkins funding may not use more than five percent of the funds for administrative purposes, the remainder of the funds must be used to improve CTE programs (ACTE, 2006). In all cases, funds made available under the Act for career and technical education activities shall supplement, and not supplant, non-federal funds expended to carry out career and technical education activities and tech prep program activities (One hundred-ninth Congress, 2006).

### **Challenges With the Carl D. Perkins Act**

Contemporary reports and literature have been critical as to the purpose of the Act due to its broad objectives and ambiguity of the language. According to Silverberg, Warner, Fong, and

Goodwin (2004), there is a lack of clarity over the program's fundamental purpose and goals. According to the ACTE (2015b), the goals of the federal investment in CTE has changed dramatically since the Vocational Education Act of 1963 and over time the purpose of the legislation has become blurred. The addition of more requirements and ideas to the Act in each successive reauthorization has resulted the lack of a clear consistent focus.

The accountability and assessment requirements of the Act were intended to encourage continuous improvement, enable data-driven and research-based decision making to improve CTE programs (Kotamraju, 2012). However, such goals have fallen far short of expectations, the data collection system is an agglomeration of 50 separate state accountability systems and every state defines Perkins input, output, and outcome measures somewhat differently (Kotamraju, 2012). The inclusion of specific local accountability measures resulted in frustration and confusion among state directors of CTE as well as local CTE providers. Postsecondary Perkins administrators found defining Perkins accountability results confusing and the cost of meeting Perkins accountability requirements prohibitive (Klein, Richards, White, Staklis, Alfeld, Dailey, Charner, & Poliakoff, 2014).

### **Statement of the Problem**

Anecdotal evidence suggests that the use of Carl Perkins funds may be misaligned with the original purpose and intent of the Act. In addition, it is unknown how Perkins grant proposals are aligned with strategic planning measures at two-year institutions when developing the grant and what accountability measures are used to ensure alignment with the purpose and intent of the Act. Furthermore, research in this area is scant at best.

## **Purpose of the Study**

The purpose of this study was to examine the alignment and current allocation habits of public, two-year postsecondary institutions with the original purpose and intent of the Carl D. Perkins Act. This study aimed to determine the primary uses of the grant and attempted to identify ambiguities and facilitators (successes) of the Act. The results of this study may be used to inform policymakers and grant administrators as to effective and strategic use of Carl Perkins funds.

## **Research Questions/Objectives**

This study attempted to answer the following questions:

1. What are the primary areas of use of the Act at two-year institutions?
2. To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?
3. What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?
4. What are the perceived facilitators and barriers when developing the grant?
5. What are the perceived facilitators and barriers when implementing the Act?

## **Importance of the Study**

The following statements indicate the importance of the study:

1. Funding for public, two-year postsecondary institutions has, in some instances, been in a decline. In addition, Perkins allocations have been reduced at the federal level by \$140 million between 2010 and 2012 (Gordon, 2014), and at times, have been threatened with extinction. The results from this study may help two-year institutions

- effectively utilize Perkins funds to stabilize their budgets and ensure the viability of their CTE programs.
2. The results of this study may have applications and implications for Perkins grant administrators at public, two-year postsecondary institutions around the country.
  3. The Carl Perkins Act is currently under reauthorization. Research in this area may yield information that will inform policymakers about the current status and future direction of the Act.
  4. The findings of this study could result in a common language, common interpretation, and strategic guide for Perkins grant administrators.

### **Assumptions of the Study**

Based on experience and involvement as and with Perkins Administrators at the postsecondary level, the following are assumptions of the study:

1. The researcher assumes that Carl Perkins funds have strayed from the original purpose and intent of the legislation.
2. The researcher assumes that Carl Perkins fund requests need to be prioritized.
3. The researcher assumes that Carl Perkins funds must be aligned with the purpose and intent of the Act.
4. The results from this study can extrapolated to help understand the use of Carl Perkins funds at other public, two-year postsecondary institutions.

### **Definition of Terms**

The definitions for the terms listed below are provided to aid the reader in a better understanding of topics that are contained throughout the paper



**Academic affairs.** Departments or divisions organized around a cluster of academic disciplines or related teaching fields (Cohen & Brawer, 2008).

**Career and technical/vocational education.** Learning experiences that help students explore career areas and prepare for employment and independent living (Scott, 2014).

**Community college.** A two-year institution of higher education that offers different levels of instruction adapted to fit the needs of the community. Community colleges are characterized by open, equitable admissions, a community-based philosophy, lower tuition and a quality education (College of Western Idaho, 2015).

**Eligible agency.** A state board designated or created consistent with state law as the sole state agency responsible for the administration of career and technical education in the state (One hundred-ninth Congress, 2006).

**Eligible institution.** A public nonprofit private institution of higher education that offers career and technical education courses (One hundred-ninth Congress, 2006).

**Eligible recipient.** A local educational agency, an area career and technical education school, an educational service agency, or a consortium eligible to receive assistance (One hundred-ninth Congress, 2006).

**Full-time equivalent (FTE).** A measurement equal to one student enrolled full time for one academic year. Total FTE enrollment includes full time plus the calculated equivalent of the part-time enrollment (Campus Compact, 2015)

**Local plan.** A document submitted to the state agency that details how the local eligible recipient will utilize Perkins funds (ACTE, 2006).

**Program prioritization.** The activity or process in which an academic institution assesses and prioritizes its programs for the purpose of more strategically allocating its funding and resources (Dickeson, 2010).

**Programs of study.** Sequences of academic and Career Technical Education coursework to help students attain a postsecondary degree or industry-recognized certificate or credential (National Association of State Directors of Career Technical Education Consortium, 2015).

**Special populations.** Individuals with disabilities, individuals from economically disadvantaged families including foster children, individuals preparing for nontraditional fields single parents including single pregnant women, displaced homemakers, and individuals with limited English proficiency (ACTE, 2006).

**State plan.** A document submitted to the Secretary of Education that details how state eligible agencies intend on utilizing Perkins funds (ACTE, 2006).

**Student affairs.** Supplemental administrative services needed to assist students as they make their way through college (Cohen & Brawer, 2008).

**Supplant.** The displacement of existing funds for a project and its activities with federal funds and reallocated for other organizational expenses (Tiernan, 2012).

**Technical college.** Also referred to as vocational colleges or trade schools, are an educational institution that prepares students for a career in a specific field (St. Paul Public Schools, 2012).

### **Limitations of the Study**

The following items are the author's perception of the limitations of this study:

1. The study was limited to public, two-year postsecondary institutions.

2. The data collected in this study represented institutions located in five states as identified by the Director of Public Policy for the Association for Career and Technical Education.
3. The data collected in this study represented institutions as identified by State Directors of Career and Technical Education and therefore cannot be generalized beyond these states.
4. There is limited prior research on effective and aligned use of Carl Perkins funds.

## **Chapter II: Literature Review**

The purpose of this study was to examine the alignment of current allocation habits of public, two-year postsecondary institutions with the original purpose and intent of the Carl D. Perkins Act. This study aimed to determine the primary uses of the grant and attempted to identify ambiguities and facilitators (successes) of the Act. The following narrative will present the context that guides and impacts the purpose of this study. This is presented through the following literature structure: development of federal legislation for postsecondary career and technical education, Perkins connection to federal workforce development legislation, Perkins required and permissible activities and accountability measures, Perkins grant structure and processes, and current issues surrounding the Carl D. Perkins Act.

### **Development of Federal Legislation for Postsecondary Career and Technical Education**

Federal legislation has played a critical role in CTE since the passing of the Smith-Hughes Act in 1917. An understanding of the historical context of the federal governments' role in supporting postsecondary career and technical education (CTE) is essential to understanding the importance of the study. It is also necessary to be mindful of the social, political, and economic context in which federal legislation was influenced, informed, and developed. Public priorities and national policies are reflected in the purpose and intent of the many iterations of federal legislation aimed at improving CTE. Although there are numerous pieces of legislation that have affected postsecondary education, the following narrative describes only the significant funding legislation that has impacted postsecondary CTE and that are germane to the research questions.

### **The Smith-Hughes Vocational Education Act of 1917 (PL 64-347)**

The Smith-Hughes Act was created based on the recommendations from the Commission of National Aid to Vocational Education and was signed into law on February 23, 1917. The significance of this legislation is that it was influenced by a variety of social, economic, and political forces at that time, namely Germany's superior vocational preparation for World War I (Gordon, 2014). The Commission of National Aid to Vocational Education recommendations included the need for federal funds to support vocational education to deal with the social and industrial unrest that resulted from the industrialization of the nation and the influx of cheap foreign labor (Lazerson & Grubb, 1974).

The purpose of the Smith-Hughes Act was to:

To provide for the promotion of vocational education; to provide for cooperation with the States in the promotion of such education in agriculture and the trades and industries; to provide for cooperation with the States in the preparation of teachers of vocational subjects; and to appropriate money and regulate its expenditure. (Lafollette, 2011, p. 16)

According to Gordon (2014), the primary objective of the Act was to offer youth an alternative to the general curriculum that existed at that particular period of time. The Act also established the Federal Board for Vocational Education, which, among other provisions of the Act, helped shape America's vocational education for years (Scott, 2014). It is significant to note that the Act applied only to vocational education of less than college grade (Scott, 2014) and it was not until the Vocational Education Act of 1963 that funds were allocated to support programs at postsecondary institutions, including junior colleges and community colleges (Eighty-eighth Congress, 1963a). However, the significance of this legislation cannot be

undervalued as to its influence on public opinion and policies regarding all levels of vocational education.

### **The Servicemen's Readjustment Act of 1944 (PL 78-346)**

The purpose of this Act was to assist World War II veterans in readjustment to civilian life. An estimated 15 million men and women returned to civilian life after the war ended. In order to reduce the possibility of postwar depression brought on by widespread unemployment, the National Resources Planning Board studied postwar manpower needs as early as 1942 and in June 1943 recommended a series of programs for education and training: the result was the Serviceman's Readjustment Act which was also known as the GI Bill of Rights (U.S. National Archives & Records Administration, 2016).

The impact of this Act on postsecondary CTE is that it encouraged the inclusion of occupational oriented programs in higher education institutions (Scott, 2014). It also encouraged veterans to enroll in adult education programs, which helped develop a network of postsecondary vocational-technical schools in each state. As a result of this act, a large number of veterans majored in vocational teacher education and taught in vocational programs (Gordon, 2014). Approximately 2,300,000 veterans attended colleges or universities and the number of college degrees awarded more than doubled between 1940 and 1950, and the percentage of Americans with bachelor degrees, or advanced degrees, rose from 4.6 percent in 1945 to 25 percent a half-century later (U.S. National Archives & Records Administration, 2016).

### **National Defense Education Act (NDEA) of 1958 (PL 85-864)**

The relatively prosperous post-war years of the early 1950's started to wane as the country moved into a recession. In addition, an event that would change the face of education in the country also changed public opinions about vocational education and compelled congress to

take immediate action. The launching of the Russian Satellite Sputnik I in 1957 instilled a sense of fear among Americans that U.S. technology could not compete with that of the USSR. This resulted in a fiercely competitive desire to reform the U.S. educational system, particularly in the sciences (Gordon, 2014).

Congress quickly responded by passing the National Defense Education Act (NDEA), which unlike most previous legislation geared towards vocational programs for secondary students, focused on supporting postsecondary training (Scott, 2014). The purpose of this Act was to provide vocational and related training for youths, adults, and older persons and included related instruction for apprentices, designed to fit them for employment as technicians or skilled workers in scientific or technical fields (Scott, 2014). The Act also created the area school concept and provided funds for the operation of these postsecondary schools in each state.

According to Gordon (2014), the intent of Congress was to extend vocational education to residents of areas inadequately served and to encourage the development of postsecondary programs. The NDEA became one of the most successful legislative initiatives in higher education. It established the legitimacy of federal funding of higher education and made substantial funds available for student loans, boosting both public and private colleges and universities (United States Senate, n.d.).

### **Higher Education Facilities Act (HEFA) of 1963 (PL 88-204)**

The 1960's ushered in a new era of civil unrest, high unemployment, and advancing technology that was displacing unskilled workers. In addition, college enrollment had reached an all-time high, due in part by the influence of the National Defense Education Act (Scott, 2014). In response, congress passed the Higher Education Facilities Act in 1963 to authorize assistance to public and other nonprofit institutions of higher education in financing the

construction, rehabilitation, or improvement of needed academic and related facilities in undergraduate and graduate institutions (Eighty-eighth Congress, 1963b).

In response to the social, economic, and political climate of the time, Congress issued the following findings:

The Congress hereby finds that the security and welfare of the United States require that this and future generations of American youth be assured ample opportunity for the fullest development of their intellectual capacities, and that this opportunity will be jeopardized unless the Nation's colleges and universities are encouraged and assisted in their efforts to accommodate rapidly growing numbers of youth who aspire to a higher education. The Congress further finds and declares that these needs are so great and these steps are so urgent that it is incumbent upon the Nation to take positive and immediate action to meet these needs through assistance to institutions of higher education, including graduate and undergraduate institutions, junior and community colleges, and technical institutions, in providing certain academic facilities. (Eighty-eighth Congress, 1963, p. 1)

President Lyndon B. Johnson referred to the Act as dramatic and concrete evidence of a renewed and continuing national commitment to education. In addition, President Johnson cited the act as proving funding to build 25 to 30 new public community colleges each year and help construct the technical institutes that are needed to close the gap in this crucial area of trained manpower (Peters & Woolley, 2016). The Act provided much-needed assistance to junior colleges, undergraduate programs, and graduate programs involved in training skilled technicians. In addition, many of the existing occupational programs in various community colleges owe a large part of their physical facilities to this legislation (Scott, 2014).



### **Vocational Education Act of 1963 (PL 88-210)**

In the early 1960s vocational education became prominent in educational circles. High unemployment rates prevailed among untrained workers and accelerating technology was making many jobs obsolete (Lazerson & Grubb, 1974). Often described as the most significant piece of legislation for vocational education since the Smith-Hughes Act of 1917, the Vocational Education Act of 1963, also known as the Perkins-Morse Act, marked a new era for vocational education. The Act affirmed the federal governments' commitment to vocational education as an essential program for the common welfare and national defense of the country (Scott, 2014). The purpose of the Act was to strengthen and improve the quality of vocational education and to expand the vocational education opportunities to the nation (Eighty-eighth Congress, 1963b). In addition, the Act states that:

It is the purpose of this part to authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis, so that persons of all ages in all communities of the State—those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, and those with special educational handicaps—will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training. (Eighty-eighth Congress, 1963b, p. 403)

According to Gordon (2014), the intent of the Act was to ensure that persons of all ages and communities would have ready access to vocational training or retraining of high quality, suited to their personal needs, interests, and abilities. The act was an attempt to redirect vocational training by broadening its scope and flexibility and focusing on the economically and educationally disadvantaged (Lazerson & Grubb, 1974). The Act expanded the definition of area vocational education schools, which was instrumental in developing the vocational education system used to day (Scott, 2014). In addition to specialized high schools, the Act defined area vocational education schools as; a technical or vocational school used exclusively or principally for the provisions of vocational education to persons who have completed or left high school and, the department or division of a junior college or community college or university which provides vocational education in no less than five different occupational fields that lead to immediate employment, but not leading to a baccalaureate degree (Scott, 2014).

### **Vocational Education Amendments of 1968 (PL 90-576)**

The Vocational Education Act of 1963 also created an Advisory commission on Vocational Education to evaluate the Act's effectiveness. A report submitted by the committee in 1967 showed little evidence that the 1963 Act's two major objectives had been achieved because of its permissive nature and the lack of a concerted effort to overcome resistance to change (Lazerson & Grubb, 1974). In addition, by 1967 the problems of technological unemployment and poverty among minority groups were perceived as even more serious (Lazerson & Grubb, 1974).

Seeing the need for a consolidation of vocational legislation, eliminate duplication, and to improve administrative efficiency Congress passed the Vocational Education Amendments,

which were essentially a rewrite of the Vocational Education Act of 1963 (Scott, 2014). The purpose of the amendments were:

To authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis, so that persons of all ages in all communities of the State—those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, those with special educational handicaps, and those in postsecondary schools—will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training. (Ninetyeth Congress, 1968, p. 1064)

The amendments replaced all previous federal legislation for vocational education with the exception of the Smith-Hughes Act, which was retained primary for sentimental reasons as the first federal legislation for vocational education (Gordon, 2014).

The purpose of the amendments were essentially the same as the purpose of the Vocational Education Act of 1963, however, there were subtle yet significant differences. The amendments emphasized vocational education in postsecondary schools and broadened the definition of vocational education to bring it closer to general education (Gordon, 2014; Scott, 2014). In addition, the amendments also broaden the scope of the National Advisory Council on Vocational Education to include membership of a person having special knowledge of

postsecondary and adult vocational education programs (Ninetieth Congress, 1968). The amendments authorized millions of dollars for vocational education in an attempt to find solutions to the nations' social and economic problems (Scott, 2014).

### **Education Amendments of 1972 (PL 92-318)**

The next significant piece of federal legislation to impact postsecondary vocational education were the Education Amendments of 1972. The amendments were an attempt by congress to consolidate previously enacted legislation, which included the Higher Education Act of 1965, the Elementary and Secondary Education Act of 1965, the Vocational Education Act of 1963, and others (Scott, 2014). In addition to consolidation, the purpose of the legislation was to continue support of programs begun under the Vocational Education Act of 1963.

Most significant to postsecondary education was the establishment of the National Institute of Education (NIE) to conduct educational research for the improvement of the quality of education for every American (Scott, 2014). The amendments also provided funds for community colleges and the expansion of occupational programs at the postsecondary and adult levels. The amendments required states to complete a comprehensive plan for the establishment of occupational programs at the secondary level (Scott, 2014). In addition, the amendments earmarked funds to states for providing academic facilities for public community colleges and public technical institutes (Ninety-second Congress, 1972).

### **Carl D. Perkins Vocational Education Act of 1984 (PL 98-524)**

Educational reforms of the early 1980s received major impetus from the National Commission on Excellence in Education's report *A Nation at Risk*. The report observed that the United States was losing ground in international economic competition and attributed this decline in large part to the relatively low standards and poor performance of the American educational

system (Gordon, 2014). President Reagan's desire to reduce federal responsibility in education and increase local and state control along with the recommendations from the National Assessment on Vocational Education and the recently published report *A Nation at Risk* served as the foundation for the Perkins legislation (Lafollette, 2011).

Originally titled the Vocational Education Act of 1984, the title was changed due to the passing of Kentucky Representative Carl Perkins in honor of the late Congressman (Lafollette, 2011). The purpose of the Act was:

To amend the Vocational Education Act of 1963 to strengthen and expand the economic base of the Nation, develop human resources, reduce structural unemployment, increase productivity, and strengthen the Nation's defense capabilities by assisting the States to expand, improve, and update the high-quality programs of vocational-technical education, and for other purposes. (Ninety-eighth Congress, 1984, p. 2435)

According to Gordon (2014), the Act consisted of two major goals, one economic, and one social. The economic goals were to improve the skills of the labor force and prepare adults for job opportunities and the social goal was to provide equal opportunities for adults in vocational education. The act changed the emphasis of the funding from primarily expansion to program improvement and at-risk populations (Gordon, 2014). The act cited nine specific goals:

1. Assist the States to expand, improve, modernize, and develop quality vocational education programs in order to meet the needs of the Nation's existing and future work force for marketable skills and to improve productivity and promote economic growth;
2. Assure that individuals who are inadequately served under vocational education programs are assured access to quality vocational education programs, especially

- individuals who are disadvantaged, who are handicapped, men and women who are entering nontraditional occupations, adults who are in need of training and retraining, individuals who are single parents or homemakers, individuals with limited English proficiency, and individuals who are incarcerated in correctional institutions;
3. Promote greater cooperation between public agencies and the private sector in preparing individuals for employment, in promoting the quality of vocational education in the States, and in making the vocational system more responsive to the labor market in the States;
  4. Improve the academic foundations of vocational students and to aid in the application of newer technologies (including the use of computers) in terms of employment or occupational goals;
  5. Provide vocational education services to train, retrain, and upgrade employed and unemployed workers in new skills for which there is a demand in that State or employment market;
  6. Assist the most economically depressed areas of a State to raise employment and occupational competencies of its citizens;
  7. To assist the State to utilize a full range of supportive services, special programs, and guidance counseling and placement to achieve the basic purposes of this Act;
  8. Improve the effectiveness of consumer and homemaking education and to reduce the limiting effects of sex-role stereotyping on occupations, job skills, levels of competency, and careers; and

9. Authorize national programs designed to meet designated vocational education needs and to strengthen the vocational education research process (Ninety-eighth Congress, 1984, p. 2437).

The legislation was also responsible for; the creation of the National Council on Vocational Education, new measurements for the effectiveness of programs, requirement for states to produce annual progress reports and to use these tools in planning and improving programs, and it specified a national assessment of vocational education to be conducted by the National Institute of Education, with the results reported to Congress (Scott, 2014). The shift to higher accountability measures was a result of the educational reforms of the early 1980's. The Carl D. Perkins Act reflected the philosophy of Congress that vocational education programs are best administered by local communities who are in best position to make educational decisions (Scott, 2014).

#### **Carl D. Perkins Vocational and Applied Technology Act of 1990 (PL 101-392)**

By the early 1990s, growing economic uncertainty stemming from international economic competition, worsening distribution of wealth, welfare reforms, efforts to balance the budget, and partisan politics led to national and state efforts to improve the public sector workforce education (Gray & Herr, 1998). An early indicator of reform direction were the 1990 amendments to the Perkins Act. The federal intent was to reform workforce education into a comprehensive system that assisted graduates in making a smooth transition from preparation programs to the next level of preparation, to careers (Gray & Herr, 1998).

The enactment of the Carl D. Perkins Applied Technology Act represented a major shift in the ways vocational education has been provided to America. In addition, the Act reflected concern regarding the lack of coordination in the existing educational system (Gray & Herr,

1998). Earlier provisions of vocational education tended to separate and isolate vocational teachers, students, and curriculum from the rest of the school community (Gordon, 2014). The Act set the stage for a three-pronged approach to better workforce preparation: (1) the integration of academic and vocational education, (2) articulation between segments of education engaged in workforce preparation-epitomized by congressional support for Tech Prep, and (3) closer linkages between school and work (Gordon, 2014). The purpose of the Act was:

To make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population. This purpose will principally be achieved through concentrating resources on improving educational programs leading to academic and occupational skill competencies needed to work in a technologically advanced society. (One hundredth-one Congress, 1990, p. 756)

There were two more components of the Act marking a serious departure from past practices dealing with fund distribution and accountability (Gordon, 2014). In a response to perceived problems in the previous Perkins Act, Congress bypassed the state agency decision makers by allocating the vast bulk of the funds directly to local education agencies, thus removing virtually all distributional discretion from state officials (Gordon, 2014). In addition, the Act explicitly required states to develop systems of performance measures and standards for secondary and postsecondary vocational education (Gordon, 2014) in the following areas:

1. Integration of academic and vocational education;
2. Sequential course of study leading to both academic and occupational competencies;
3. Increased student work skill attainment and job placement;
4. Increased linkages between secondary and postsecondary educational institutions;



5. Instruction and experience, to the extent practicable, in all aspects of the industry the students are preparing to enter;
6. The ability of the eligible recipients to meet the needs of special populations with respect to vocational education;
7. Raising the quality of vocational education programs in schools with high concentrations of poor and low-achieving students;
8. The relevance of programs to the workplace and to the occupations for which students are to be trained, and the extent to which such programs reflect a realistic assessment of current and future labor market needs, including needs in areas of emerging technologies;
9. The ability of the vocational curriculum, equipment, and instructional materials to meet the demands of the workforce;
10. Basic and higher order current and future workplace competencies which will reflect the hiring needs of employers; and
11. Other factors considered appropriate by the State board (One hundredth-one Congress, 1990).

### **Carl D. Perkins Vocational and Technical Education Act of 1998 (PL 105-332)**

Political debate in the mid-1990s involved the effectiveness of the federal investment in workforce education (Gray & Herr, 1998). Meanwhile, debate in Congress centered over the focus of the Perkins Act on specific populations and a desire for legislation that would better prepare students for the global marketplace (Scott, 2014). In addition, vocational educators were demanding increased flexibility in administering programs and allocating federal dollars.

In response to these issues, Congress passed the Carl D. Perkins Vocational and Technical Education Act of 1998. The hallmark of this legislation was the increased accountability as a result of the increased flexibility of the Act (Scott, 2104). The purpose of the Act was to:

Develop more fully the academic, vocational, and technical skills of secondary students and post-secondary students who elect to enroll in vocational and technical education programs, by: (1) building on the efforts of States and localities to develop challenging academic standards; (2) promoting the development of services and activities that integrate academic, vocational, and technical instruction, and that link secondary and postsecondary education for participating vocational and technical education students; (3) increasing State and local flexibility in providing services and activities designed to develop, implement, and improve vocational and technical education, including tech-prep education; and (4) disseminating national research, and providing professional development and technical assistance, that will improve vocational and technical education programs, services, and activities. (One hundred-fifth Congress, 1998, p. 2)

The new Act required that 85 percent of funds allocated to the state be distributed to local programs with 15 percent reserved for the state level (Gordon, 2014). The act also required eligible agencies to establish state performance measures consisting of core indicators of performance in the areas of:

Student attainment of challenging State established academic, and vocational and technical, skill proficiencies; Student attainment of a secondary school diploma or its recognized equivalent, a proficiency credential in conjunction with a secondary school diploma, or a postsecondary degree or credential; Placement in, retention in, and

completion of, postsecondary education or advanced training, placement in military service, or placement or retention in employment; Student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment. (One Hundred-fifth Congress, 1998, p. 13)

In addition to the performance measures, states would have to develop new data collection and reporting systems, report on student achievement using a common language that allowed for nationwide comparisons, and be able to document the impact of their programs (Scott, 2014).

### **Carl D. Perkins Career and Technical Education Improvement Act of 2006 (PL 109-270)**

During the early 2000's there was wide public concern about the state of education, especially the growing achievement gap between white and minority students. In addition, a substantial increase in immigrants to the U.S. during this same time span created a job market in which competition was fierce for low-paying unskilled jobs (Kymes, 2004). In response, Congress passed the No Child Left Behind (NCLB) act in 2001. The purpose of NCLB was to close the achievement gap between disadvantaged and minority students and their peers. In addition, NCLB included four principles of stronger accountability, expanding flexibility and local control, expanding options for parents, and emphasis on effective teaching methods (Scott, 2014). The subsequent reauthorization of the Perkins Act was in direct alignment with the NCLB movement (Threeton, 2007).

One of the most significant changes to the Perkins Act was the name change from vocational education to career and technical education. The Act provided and increased focus on academic achievement, strengthened the connection between secondary and postsecondary

education, and improved state and local accountability (Scott, 2014). The original four purposes of the Act were expanded to a total of seven:

1. Building on the efforts of States and localities to develop challenging academic and technical standards and to assist students in meeting such standards, including preparation for high skill, high wage, or high demand occupations in current or emerging professions;
2. Promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instruction, and that link secondary education and postsecondary education for participating career and technical education students;
3. Increasing State and local flexibility in providing services and activities designed to develop, implement, and improve career and technical education, including tech prep education;
4. Conducting and disseminating national research and disseminating information on best practices that improve career and technical education programs, services, and activities;
5. Providing technical assistance that:
  - a. promotes leadership, initial preparation, and professional development at the State and local levels; and
  - b. improves the quality of career and technical education teachers, faculty, administrators, and counselors;
6. Supporting partnerships among secondary schools, postsecondary institutions, baccalaureate degree granting institutions, area career and technical education

- schools, local workforce investment boards, business and industry, and intermediaries; and
7. Providing individuals with opportunities throughout their lifetimes to develop, in conjunction with other education and training programs, the knowledge and skills needed to keep the United States competitive (One-hundredth Ninth Congress, 2006).

The major themes of the new Act included accountability and program improvement, secondary-postsecondary connections, links to rigorous academics, a stronger focus on business and industry (Gordon, 2014). The Act also contained numerous increased accountability measures. Overall accountability measures included separate secondary and postsecondary indicators, new local requirements, more specific improvement plan and sanction language, and agencies must have valid and reliable measures (Gordon, 2014). At the postsecondary level new performance indicators included: technical attainment-industry standards when possible; attainment of industry recognized credential, certificate, or degree; retention in postsecondary (including transfer to four-year); placement in military or apprenticeship, or placement and retention in employment-including high skill, high wage, or high demand; and participation and completion of non-traditional programs (One hundred-ninth Congress, 2006).

### **Perkins Funding Allocations and Process**

The Carl D. Perkins Act, also known as Perkins IV (hereafter referred to as the Act) was last authorized in 2006 and accounts for more than \$1.3 billion federal funds annually for K-12 and postsecondary CTE. The purpose of the Act is to provide individuals with the academic and technical skills needed to succeed in a knowledge- and skills-based economy. The Act supports CTE that prepares its students both for postsecondary education and the careers of their choice (Association for Career and Technical Education [ACTE], 2015a).

## **State Basic Grants and State Plans**

The U.S. Department of Education's Office of Career, Technical, and Adult Education (OCTAE) is the federal agency responsible for administering the Act. The majority of funds appropriated under the Act are awarded as grants (known as State Basic Grants) to state education agencies. All states receive funds for both secondary and postsecondary education. The State Basic Grants are allocated to states based on the states' populations in certain age groups and their per capita income (ACTE, 2006). State allocations are based on a formula that determines how much money a state will receive in a fiscal year. The formula that determines the amount each state will receive is based on the following: 50% for population aged 15-19; 20% for population aged 20-24; 15% for population aged 25-65; and 15% for population aged 15-65 (ACTE, 2006).

State education agencies apply for the State Basic Grants by submitting either a six-year State Plan or a transition plan followed by a five-year State Plan to the Secretary of Education. The State Plan is developed through a series of public hearings, consultation with other state agencies responsible for secondary and postsecondary CTE, and consultation with the Governor of the state (ACTE, 2006). The State Plan must address 20 specific requirements that include such areas as secondary and postsecondary CTE activities, Programs of Study, Special Populations, identification of performance measures, rigorous academics, and reporting of CTE data.

Once the Secretary of Education has approved the State Plan, the states receive their funds, which are then distributed to local eligible recipients in the form of sub-grants. Each state must allocate 85% of their State Basic Grant to local agencies and they may retain five percent for state administration of the Act and ten percent for state leadership activities (ACTE, 2006).

Local eligible agencies include public secondary and postsecondary nonprofit educational institutions, educational service agencies, or a consortium of local eligible agencies. Each local secondary or postsecondary eligible agency must submit a local plan to the state in order to qualify to receive Perkins funds. The Local Plan must correspond with the time period covered in the State Plan and must address 12 specific requirements in the areas of coherent and rigorous content, teacher professional development, programs of study, special populations, nontraditional populations, and career guidance and academic counseling. Local funds are distributed through sub-grants using different funding formulas for secondary and postsecondary eligible agencies. Secondary local education agencies are allocated 30% of funds based on the number of 5 to 17 year olds residing in the school district and 70% of funds based on the number of 5 to 17 year olds in families below the poverty line. Postsecondary eligible agencies receive funds based on the number of individuals receiving Pell grants or assistance from the Bureau of Indian Affairs (ACTE, 2006). A complete list of allocations to states can be found in Appendix A.

### **Perkins Accountability and Performance Measures**

Strategic and effective use of funding at two-year institutions is especially important in this current climate of accountability in higher education. The Act currently contains accountability measures at both the state and local levels based off of the U.S. Department of Education's (2002a) two guiding principles: accountability and doing what works. The accountability principle means state education agencies, schools, and colleges will be held accountable for results. The principle of doing what works, or evidence-based education, promotes the use of empirically based methods to identify and implement educational solutions with proven results (U.S. Department of Education, 2002).

The Act requires specific accountability and performance measures designed to assess the effectiveness of the state and local funding recipients in achieving progress in CTE (ACTE, 2006). The Act includes six required core performance indicators at the secondary level and five indicators at the postsecondary level (ACTE, 2006). Each state develops performance indicators as part of their State Plan and must consist of the core indicators, any additional indicators the state determines, and the state adjusted levels of performance. Previous iterations of the Act have included accountability measures, however, in 2006 the Act included the addition of specific *local* accountability measures. According to the ACTE (2006) the local requirements necessitated each program to think more strategically about the use of Perkins funds, and to focus activities on efforts that help to meet performance targets.

Required core indicators at the secondary level include student achievement of challenging academic content standards, attainment of CTE skills, attainment of a secondary diploma or proficiency credential, graduation rates, placement in postsecondary, and completion of CTE programs that lead to nontraditional fields. Postsecondary required core indicators include student attainment of skill proficiencies, attainment of industry-recognized credentials, retention in postsecondary education or transfer to a baccalaureate degree program, placement in employment, participation or completion of CTE programs that lead to nontraditional fields (ACTE, 2006).

The states must work with local eligible recipients to establish levels of performance for each core indicator as well as any other indicators established by the state. The levels of performance must be expressed in percentages or numerical form and must require continual improvement in the performance of CTE students (ACTE, 2006). The Secretary of Education and the state agency must reach agreement on the levels of performance and take into account



how the state's level of performance compares to other states and the extent to which the levels of performance promote continuous improvement. Similar to the state process, local recipients must also establish performance goals and agree to accept the state levels of performance as their own local levels of performance or negotiate with the state to establish new levels of performance for each core indicator (ACTE, 2006).

To ensure high levels of accountability, both state and local agencies are required to report the progression of their performance targets. All states must submit a report to the Secretary of Education each year regarding the progress in achieving their performance levels. The data must be disaggregated for each indicator of performance by student demographics including special populations, race, ethnicity, gender, disability status, migrant status, English proficiency, and status as economically disadvantaged. The state must identify and quantify gaps in performance between groups of students and describe the progress of these students (ACTE, 2006). Local agencies are required to submit a report to the state agency following the same protocols described above. The Secretary of Education uses the data to make state-by-state comparisons that are reported to congress and are available to the public (ACTE, 2006). In addition, the ACTE (2006) recommends using data derived from these indicators to establish program improvement priorities.

Should a state or local agency fail to meet at least 90% of an agreed upon performance level for any of the indicators, they are required to develop and implement an improvement plan. The improvement plan must give consideration to performance gaps between populations and subgroups and must be developed and implemented within the first program year after the year that the performance measure was not met (ACTE, 2006). The Secretary of Education works with the state agencies to implement improvement activities and provide technical assistance and

the state agencies work with the local agencies. At both the state and local levels, funds may be withheld if the agency fails to meet any one of the following three criteria: failure to implement the improvement plan; makes no improvements within one year of implanting the plan and; failure to meet at least 90% of a performance level for the same performance indicator three years in a row (ACTE, 2006).

### **Perkins Uses of Funds**

According to the Association for Career and Technical Education (ACTE) (2015a), Perkins funds are typically used in the broad areas of program improvement, accountability, integration of academics in CTE, professional development, CTE curricula, career guidance and academic counseling, technology, and career and technical student organizations. More specific uses of funds at both the state and local levels are detailed in the Act and are categorized as required and permissible activities. The required activities are those that the state and local agencies must use to improve CTE programs and the permissible activities are those that agencies choose to undertake as part of their overall CTE plan and agenda.

State agencies are allowed to retain five percent of their allocation for administration of the grant. Required administrative activities include development of the state plan, consulting with stakeholders, meetings, and coordination with state workforce investment boards (ACTE, 2006). State agencies are also allowed to retain ten percent of their funds for state leadership activities. The Act includes nine required and 17 permissible state leadership activities. Each state must determine how much is spent on the activities (ACTE, 2006).

Each local recipient of Perkins funds may not use more than five percent for administrative purposes. The balance of local funds must be used to improve CTE programs (ACTE, 2006). Unlike at the state level, required administrative activities are not detailed in the

Act for the local level. Detailed in the Act are nine required activities that include broad areas such as the integration of academics in CTE, Programs of Study, professional development, evaluation of CTE programs, technology, and special populations. The Act also cites 22 permissible activities that range from assisting career and technical student organization to providing support for training programs in automotive technologies (ACTE, 2006).

In all cases, funds made available under the Act for career and technical education activities shall supplement, and not supplant, non-federal funds expended to carry out career and technical education activities and tech prep program activities (One hundred-ninth Congress, 2006). A table of total allocations to states is located in Appendix A.

### **Carl D. Perkins Act Required and Permissible Activities**

The iterations of Perkins since 1984 have reflected the social, economic, and political influences of the time. With each authorization, key elements were added to the Act that attempted to address public perception and policy issues aimed at fixing secondary and postsecondary educational systems. Increased accountability in education has also influenced the Act and resulted in more specific and numerous requirements in each successive version. The inclusion of required and permissible activities at both the state and local levels attempted to focus expenditures; however, they also resulted in unintended consequences that are discussed later in this chapter.

The Perkins Act is generally divided into Titles, which are a concise statement of the subject and the contents of a bill (National Conference of State Legislators, 2016). With the exception of general provisions, each Title details allocation methods and uses of funds, expressed as required and permissible activities, at both the state and local levels. Required activities are those activities that *must* be carried out with the funds and permissible activities are

those that *may* be carried out with the funds in accordance with either a state or local approved plan. The following narrative details the progression of Perkins required and permissible activities as well as highlights the salient themes of the activities.

#### **Carl D. Perkins Vocational Education Act of 1984 (PL 98-524)**

Consistent with both the social and economic goals of the Act (improve the skills of the labor force and to provide equal opportunities for adults in vocational education) were the introduction of activities to be carried out under the Act aimed at reaching these goals. Table 1 depicts the uses of funds for the Act. The Perkins Act of 1984 cites uses of funds as either *Shall* or *May*. *Shall* are those activities that *must* be carried out with the funds and *may* are activities that *could* be carried out with the funds. Title II of the Act denotes the focus of activities on providing opportunities for underserved populations including handicapped individuals, single parents, and the elimination of sex bias in vocational education, as well as the expansion and improvement of vocational education programs. Title III of the Act emphasized the promotion of linkages between public school needs and private sector sources of support (Scott, 2014).

Table 1

*Perkins Act of 1984 Uses of Funds*

Title II				
Basic State Grants for Vocational Education				
Part A	Part B			
Vocational Education Opportunities	Vocational Education Program Improvement, Innovation, and Expansion			
Shall-5	May-24			
May-4				
Title III				
Special Programs				
Part A	Part B	Part C	Part D	Part E
State Assistance for Vocational Education Support Programs by Community Based Organizations	Consumer and Homemaker Education	Adult Retraining, and Employment Development	Comprehensive Career Guidance and Counseling Programs	Industry Education Partnership for Training in High Technology
May-7	Shall-5 May-2	May-10	Shall-8	May-5

**Carl D. Perkins Vocational and Applied Technology Act of 1990 (PL 101-392)**

As the name of the Act applies, the focus on the 1990 Perkins Act was on teaching the competencies necessary for students to acquire work in a technologically advanced society (Scott, 2014). Table 2 outlines the required and authorized activities for the Act. New language includes the use of the terms *required* and *authorized*. Required are those activities that *must* be

carried out with the funds and authorized are activities that *could* be carried out with the funds. The Act included new Tech-Prep Program requirements that aimed at providing cooperative arrangements that combine two-years of technology-oriented preparatory education in high school with two-years of advanced technology studies at a community or technical college (Scott, 2014). The Act continued its focus on consumer and homemaker Education as well as career guidance and counseling (Scott, 2014). Part C of the 1984 Act *Adult Training, Retraining, and Employment Development* was repealed in the reauthorization (One hundred-ninth Congress, 2006).

Table 2

*Perkins Act of 1990 Uses of Funds*

Title II						
Basic State Grants for Vocational Education						
	Part A	Part B	Part C			
	State Programs	Other State Administere d Programs	Secondary, Postsecondary, and Adult Education Programs			
Uses of Funds	Required-3 Authorized-5	Required-12	Required-14			
Title III						
Special Programs						
	Part A	Part B	Part C	Part D	Part E	Part F
	State Assistance for Vocational Education Support Programs by Community Based Organizations	Consumer and Homemakin g Education	Comprehen sive Career Guidance and Counseling Programs	Business Labor Education Partnership for Training	Tech-Prep Education	Supplemen tary State Grants for Facilities and Equipment and Other Program Improveme nt Activities
Uses of Funds	Required-7	Required-5 Authorized- 2	Required-8	Required-10	Required- 7 Authorize d-2	Required-2

### Carl D. Perkins Vocational and Technical Education Act of 1998 (PL 105-332)

In addition to increased accountability requirements and reporting structures in the Act, there was also a greater flexibility for state and local agencies in designing, delivering, and funding CTE programs (Scott, 2014). Table 3 depicts the uses of funds in the Act. New language includes the term *permissible* activities. Permissible activities are those that *may* be carried out with the funds. The focus of the activities was on improving CTE programs, developing accountability systems, improving curriculum, purchasing equipment to ensure classrooms have the latest technologies, providing career guidance and counseling, professional development for teachers, and supporting career and technical student organizations (Scott, 2014).

Table 3

#### *Perkins Act of 1998 Uses of Funds*

Title I		
Vocational and Technical Assistance to the States		
	Part B	Part C
	State Provisions (State Leadership Activities)	Local Provisions (Local Uses of Funds)
Use of Funds	Required-8	Required-8
	Permissible-12	Permissible- 15
Title II		
Tech-Prep Education		
Use of Funds	Required-7	
	Authorized-3	



**Carl D. Perkins Career and Technical Education Improvement Act of 2006 (PL 109-270)**

The 2006 reauthorization of the Act put a greater focus on the academic achievement of CTE students and stronger connections between secondary and postsecondary education (Scott, 2014). This increased focus is evident in the new required and permissible activities described in the Act. Table 4 details the required and permissible activities of the Act. Additions to the required activities for state leadership activities included a requirement for professional development of both secondary and postsecondary teachers. The professional development requirements were much more prescriptive than previous versions of the Act (Scott, 2104). Notable inclusions to the state permissible activities included the facilitation of transition from two-year to four-year institutions, career academies and career clusters, technical assessments and data systems, and the recruitment and retention of educators (Gordon, 2014).

Local required activities included an emphasis on professional development of secondary and postsecondary teachers and the development and implementation of CTE program evaluations (Gordon, 2014). Notable additions to the permissible activities included the facilitation of transition from two-year to four-year institutions, development of alternative delivery systems for CTE, developing career-themed learning communities, and the development of programs of study (Gordon, 2014; Scott, 2014).

Table 4

*Perkins Act of 2006 Uses of Funds*

Title I		
Career and Technical Education Assistance to the States		
	Part B	Part C
	State Provisions (State Leadership Activities)	Local Provisions (Local Uses of Funds)
Use of Funds	Required-9	Required-9
	Permissible-17	Permissible- 20
Title II		
Tech-Prep Education		
Use of Funds	Required-8	
	Authorized-5	

Each successive reauthorizations of the Act has resulted in the progressive addition of more requirements aimed at addressing public policy as well as the purpose, intent, and goals of the Act. The required and permissible activities are an attempt to clarify the uses of the funds, however, as the literature suggests, it has also resulted in confusion amongst grant administrators and state directors of CTE.

### **Challenges with the Carl D. Perkins Act**

Contemporary reports and literature have been critical as to the purpose of the Act due to its broad objectives and ambiguity of the language. Earlier versions of the Act offered a conflicted picture of federal priorities for vocational education improvement. Swanson (1991) cited the Perkins Act of 1990 as having major flaws that included a mismatch between the

purpose and funding, increased requirements, and congressional micromanagement of the Act. Swanson (1991) called the Act the worst piece of educational legislation ever passed. According to Silverberg, Warner, Fong, and Goodwin (2004), the 1998 Perkins act resulted in a lack of clarity over the program's fundamental purpose and goals and without a clearer focus for the federal investment, ongoing program progress in any particular direction was less certain. In addition, the Act authorized a stream of funds that provided wide latitude to state and local grantees in terms of implementation and goals and should be transformed into a program with clear, focused, and limited objectives (Silverberg, Warner, Fong, & Goodwin, 2004).

According to the ACTE (2015b), the goals of the federal investment in CTE has changed dramatically since the Vocational Education Act of 1963 and over time the purpose of the legislation has become blurred. The addition of more requirements and ideas to the Act in each successive reauthorization has resulted the lack of a clear consistent focus. The ACTE (2015) recommends that the purpose of the federal investment in CTE should be clearly focused on ensuring that all students have access to high-quality CTE programs and this purpose should drive Perkins legislation. In addition, the ACTE (2015) recommends that as the purpose of the Act is redefined and narrowed, so too should funding be more targeted, clearer, more exact, and fewer in number.

Lack of clarity in the Act has also lead to implementation and reporting issues regarding accountability and evaluation of CTE programs. The Carl D. Perkins Act of 2006 requires states to meet or exceed six negotiated target areas: technical skill attainment, graduation rate, retention and transfer rate, employment placement rate, nontraditional participation rate, and nontraditional completions rate (One-hundred ninth Congress, 2006). These accountability and assessment requirements were intended to encourage the principles of continuous improvement,

enable data-driven and research-based decision making to improve CTE programs (Kotamraju, 2012). However, such goals have fallen far short of expectations, the data collection system is an agglomeration of 50 separate state accountability systems and every state defines Perkins input, output, and outcome measures somewhat differently (Kotamraju, 2012). As a result, this flexibility inherent in the act may hinder the U.S. Department of Education's ability to gain a broader perspective on the success of state CTE programs (Government Accountability Office, 2009).

Perkins funds were also not immune from the tight budgeting and accountability culture that pervades higher education. With academic programs and services all competing for scarce resources, it is not surprising that the use of Perkins funds may have strayed from its original purpose and intent on some campuses (Simoneau, 2015). This is not a suggestion that the funds are being misused; it is simply a suggestion that there is an opportunity to more effectively use Perkins funds to address both CTE priorities and to support overall college targets related to program quality, retention, completion, and credentialing. In addition, Simoneau (2015) suggests that strategic and effective use of Perkins funding to support an institutions completion and employment agenda is essential to ensuring that CTE programs remain viable.

The increased accountability measures and the inclusion of specific local accountability measures resulted in frustration and confusion among state directors of CTE as well as local CTE providers. In a 2014 study, interviews with local postsecondary administrators revealed that they found defining Perkins accountability results confusing and that "we do what we think we're supposed to do, and then the wording gets changed slightly and we have to go back and redo it all. It truly is a nightmare" (Klein, Richards, White, Staklis, Alfeld, Dailey, Charner, & Poliakoff, 2014, p. 151).

The Klein, et al. study (2014) also revealed that both state and local administrators found the cost of meeting Perkins accountability requirements are prohibitive and they do not either have the staff or funds needed to meet all the requirements. More than one suggested that the accountability requirements are an unfunded mandate. Also, one state director and two local directors noted the possibility of giving up Perkins funds because of the burden imposed and the complexity of the reporting requirements (Klein et al., 2014).

The current Perkins Act allows states to create their own definitions and performance indicators. According to the U.S. Department of Education (2012) the inconsistencies and incompatibilities of these indicators hinder the objective, valid, and externally verifiable analysis of student program outcomes. The Department recommends “meaningful accountability for improving academic outcomes and building technical and employability skills in CTE programs for all students, based upon common definitions and clear metrics for performance” (U.S. Department of Education, 2012, p. 2). The Department also suggests that common performance definitions would enable CTE educators, researchers, and other key stakeholders to compare and analyze national outcome data for CTE students for the first time ever.

### **Accountability in Higher Education**

Increased accountability in higher education has caused a paradigm shift in the way that postsecondary institutions operate. According to Brown (2012), since 2006 there has been a pronounced sense of urgency for greater accountability in higher education, with profound implications for two-year colleges. Policymakers are focusing more on the need to connect public policy priorities and investments to measurable results. This renewed emphasis on accountability stems from growing concerns about a diminished focus on college, increased

federal investment in student aid and international comparisons that show the United States is slipping on key indicators of educational attainment (Brown, 2012).

According to Dickeson (2010), public colleges and universities have always been the subjects of legislative and executive oversight as the states routinely probe the activities and expenditures of its governing boards and institutions. Because of the \$111 billion investment in higher education there are increasing demands made by the federal government for information, compliance, and action. There is an expectation that these dollars will be well and properly spent (Brown, 2012; Dickeson, 2010). In addition, it is disingenuous for higher education to ask for and receive billions of federal dollars without expecting concomitant, conditions, reporting requirements, and other forms of accountability that inevitably accompany appropriations (Dickeson, 2010).

The accountability culture that pervades higher education has made an impact on policy recommendations for the reauthorization of Perkins. The U.S. Department of Education's report *Investing in America's Future: A Blueprint for Transforming Career and Technical Education* (hereafter know as *Blueprint*) addresses the accountability concerns. The report recommends meaningful accountability for improving academic outcomes and building technical and employability skills for all students based upon common definitions and clear performance metrics (U.S. Department of Education, 2012). Effectively transforming CTE involves strengthening the accountability systems used by states so that performance data are collected, analyzed, and used to identify student results as well as gaps in educational attainment (U.S. Department of Education, 2012).

The ACTE (2016b) recommends, as a reauthorization priority, an overhaul of the Perkins accountability system to ensure fewer and more meaningful measures that are more consistent

across states and federal programs. Provisions must be included to improve and incentivize connections between secondary and postsecondary education and workforce data systems to track students' education and employment outcomes. In addition, a consideration should be given to the use of indicators for reporting purposes that are not negotiated related to performance and accountability (ACTE, 2016b).

### **Perkins Act Connection to Other Federal Workforce Development Legislation**

Throughout its development the Perkins Act has had strong ties to other federal legislation aimed at improving workforce development in the country. In some instances the connection to other legislation has been intentional and detailed in the act; in other instances the connection has been subtle and hints of other federal legislation can be gleaned from the language of the Act.

### **Carl Perkins Act of 1984 and the Job Training Partnership Act of 1982**

Educational reforms in the early 1980's spawned from complaints from the business community about the low level of skills and abilities found in high school dropouts (Gordon, 2015). In addition, there was an increasing focus on preparing unskilled adults to enter the workforce and providing job training to economically disadvantaged individuals. Both the Job Training Partnership Act of 1982 (JTPA) and the Perkins Act of 1984 aimed at addressing these congressional priorities.

The intent of congress in the JTPA was to increase the role of private business and industry in the training and employment of unskilled adults and disadvantaged youth and adults (Gordon, 2014). The Acts focus on economic development and skill development was intended to strengthen the partnership between private industry and education. Under the Act regional service areas were responsible for determining training needs and identifying training agencies.

The Act also provided benefits to vocational education that are reflected in the 1984 Perkins Act. According to Griffin (1983), the JTPA was responsible for additional funds to reach out and serve more disadvantaged individuals and groups, additional services for disadvantaged individuals, new vocational programs, and more interest and involvement in vocational education from private industry and the community.

The Perkins Act of 1984 reflected many of the same congressional priorities found in the JTPA. The goals of the Perkins Act specified developing quality vocational education to meet the marketable skills needs of the nation's future workforce, improve productivity, and promote economic growth. In addition, the Act expanded funding to disadvantaged and underserved populations and included language about promoting greater cooperation between private industry and public agencies. Almost verbatim to the JTPA, language in the Perkins Act specified requirements for vocational education to train, retrain employed and unemployed workers with new skills demanded in a region and to assist economically depressed areas of a state (Ninety-eighth Congress, 1984). The Perkins Act also allowed the use of funds to provide additional training under the JTPA (Ninety-eighth Congress, 1984).

The Carl Perkins Act of 1990 still reflected the workforce development themes contained in both the JTPA and the Perkins Act of 1984. The Perkins Act of 1990 contained new sections that reflected the JTPA. The Perkins Act of 1990 now included Section D- *Business, Labor, Education Partnership for Training*. The purpose of this section was to fulfill the needs of business for skilled employees who meet certain minimal standards in key occupational areas (One hundred-first Congress, 1990). Funds under this section could be used for programs and activities that addressed the economic development needs of the area served, bringing representatives of business and organized labor into the classroom, and to strengthen the



coordination of vocational education programs and the labor and skill needs of business and industry (One hundred-first Congress, 1990).

### **Carl Perkins Act of 1998 and the Workforce Investment Act of 1998**

In the mid 1990's public policy debate regarding workforce education swung from programmatic concerns to dollars. Debates regarding only those workforce education programs funded by Perkins quickly became debates regarding the total federally funded workforce education effort (Grey & Herr, 1998). In an effort to streamline and strengthen America's job-training system Congress passed the Workforce Investment Act (WIA) of 1998 which, replaced the JTPA. The WIA was intended to create a locally integrated "One-Stop" delivery system of multiple employment services, job training and education programs, designed to be universally accessible to job seekers and meet local industry demands in communities across the country (ACTE, 2016). The WIA mandated the participation of partner agencies that provide such services, including postsecondary Perkins-funded CTE programs (ACTE, 2016a). Intend to work in concert, the two Acts make specific reference to each other, however it was recommended that funds be used in accordance with each Act.

During that some time period, the School-to-Work Opportunities Act (STOWA) of 1994 was enacted in response to the national skills shortage. The STWOA provided a framework to build a highly skilled workforce through partnerships between educators and employers. (Scott, 2014). The Act emphasized preparing students with the knowledge, skills, and abilities that would help them make the transition from school to employment. Thus was to be accomplished through school-based and work-based instructional components supported by connecting activities. The STWOA echoes many of the same goals as Perkins, however, there was specific

language in the Act that stated Perkins funds could not be used to Support any STWOA provisions (Scott, 2014). The same also held true for the WIA.

### **Carl Perkins Act of 2006, the No Child Left Behind Act of 2002, and the Workforce Investment Act of 1998**

Congressional goals of streamlining educational legislation and creating a one-stop approach to workforce development continued with the reauthorization of the Perkins Act in 2006. During the reauthorization, Congress made numerous intentional connections to other federal legislation with new language added throughout the Act.

The No Child Left Behind Act (NCLB) left a permanent mark on the 2006 Perkins Act. Twenty-one separate references to NCLB were contained in the Act making it clear that Congress intended for the two acts to be closely aligned (ACTE, 2006). In addition, linkages were made in following areas of the Act: definitions, coherent and rigorous content, secondary indicators of performance, disaggregation of data, professional development, core academic subjects, academic content standards and student achievement standards, and distribution of funds.

During reauthorization of the 2006 Perkins Act, one of the priorities of the senate was to increase coordination between the Act and the Workforce Investment Act (WIA) (ACTE, 2006). The language of the Act also contained specific linkages in the following areas: eligible agency responsibilities, state and local plan development, joint Perkins and WIA plan, state plan contents, state and local uses of funds, and joint funding. Congressional intent was to reauthorize the two pieces of legislation in tandem; however, the WIA expired in 2003, was extended annually and was not reauthorized until 2014 (ACTE, 2016a; Bradley, 2013).

This chapter outlined the development of federal legislation for postsecondary education through the context of the social and economic phenomena that drove public policy and federal priorities for vocational education. The structure, accountability requirements, and allocation activities were also discussed to provide an overview of the mechanics of the legislation. This chapter also demonstrated the progressive growth of the Carl D. Perkins Act through its many iterations and discussed its connection to federal workforce legislation. In addition, challenges with the grant were discussed to contextualize the purpose of the study.

### **Chapter III: Method and Procedures**

This chapter outlines procedures and methods employed to complete this study. The purpose of this study was to examine the alignment and current allocation habits of public, two-year postsecondary institutions with the original purpose and intent of the Carl D. Perkins Act. This study aimed to determine the primary uses of the grant and attempted to identify ambiguities and facilitators (successes) of the Act.

The following research questions formed the foundation of the data collected:

1. What are the primary areas of use of the Act at public, two-year postsecondary institutions?
2. To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?
3. What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?
4. What are the perceived facilitators and barriers when developing the grant?
5. What are the perceived facilitators and barriers when implementing the Act?

#### **Research Methodology**

In order to provide a snapshot of the current use of Carl Perkins funds, this study employed a mixed methods approach with both qualitative and quantitative data collection. According to Creswell (1994), in a mixed-methods study, utilizing quantitative and qualitative data together, provide a better understanding of the research problem than either type by itself. In addition, a mixed methods study is used when one type of research (qualitative or quantitative) is not enough to address the research problem or answer the research questions.

This study employed a thematic descriptive methodology that entailed structured interviews with Perkins grant administrators and a descriptive analysis of existing Perkins grant documents. According to Gall, Gall, and Borg (2007) the purpose of a descriptive study is to examine phenomena as they exist at one point in time. In addition, descriptive studies are concerned primarily with determining *what is*. Descriptive studies generally involve the administration of questionnaires and interviews. This type of research has yielded much valuable knowledge about opinions, attitudes, and practices and this knowledge has helped shape educational policy and initiatives to improve existing conditions (Gall, Gall, & Borg, 2007). Descriptive studies are limited by the types and quality of available measures, for this reason, the researcher must develop new measures in order to describe precisely and accurately the phenomena of interest to them (Gall, Gall, & Borg, 2007).

The research was conducted as a two-phase study where both quantitative and qualitative data were collected, reported, and analyzed separately. According to Ivankova, Creswell, and Stick (2006) the rationale for this approach is that the quantitative data and their subsequent analysis provide a general understanding of the research problem and the qualitative data and their analysis refine and explain those statistical results by exploring participants' views in more depth.

**Phase one.** Phase one of the study entailed the collection of quantitative data through a descriptive analysis of Perkins grant documents. Descriptive research of this nature is intended to produce statistical information about aspects of education of interest to policymakers and educators (Gall, Gall, & Borg, 2007). Descriptive research involves reporting of characteristics of one sample at one point in time. Within the context of education descriptive research, while simple in design and execution, can yield important knowledge (Gall, Gall, & Borg, 2007).

The descriptive analysis involved the review of both state and local Perkins plans to determine the following: alignment of the grant to the purpose and intent of the Act based on the emphasis of the activities detailed in the grant; the primary areas of use of the funds based on the dollar amounts allocated to each activity required by the Act and; accountability measures other than those required by the act that are detailed in grant. The analysis was an attempt to answer the research questions; any unanswered questions were addressed through the qualitative phase of the study.

**Phase two.** Phase two of the study involved the collection of qualitative data utilizing structured (guided) interviews with local Perkins grant administrators. According to Lichtman (2013) the purpose of a structured interview is to eliminate the role of the researcher and to introduce objectivity. The distinct advantage of the structured interview versus a questionnaire is that the researcher can interact with the respondent, thereby reducing the number of unusable or *don't know* answers (Gall, Gall, & Borg, 2007). Quantitative research of this nature will yield statistical data that provides a succinct and parsimonious summary of major patterns that are essential in a descriptive study (Patton, 2015). Guided, structured interviews contain a general set of questions where the questions can be varied as the situation demands (Lichtman, 2013).

Structured interviews were used to answer any research questions that could not be answered in phase one. The interviews were also used to collect detailed information on the alignment of institutional strategic planning to Perkins grant development and implementation. In addition, structured interviews were used in order to garner the opinions and attitudes of Perkins grant administrators as to any perceived challenges and successes while developing implementing the Act.

Purely quantitative research methods administered through a survey were considered for this study. Due to the complexity and uncertainty of the responses, the use of quantitative research would have only constrained respondents to predetermined categories of analysis (Patton, 2015). In addition, both qualitative and quantitative data can be collected in the same study (Patton, 2015). This method can yield data that can be productive for descriptive, reconnoitering, exploratory, inductive, opening-up purposes (Miles & Huberman, 1994).

### **Subject Selection and Description**

The population for this study consisted of Perkins grant administrators in public two-year, postsecondary institutions identified by the Director of Public Policy for the Association of Career and Technical Education (ACTE) and State Directors of Career and Technical Education.

Purposeful random sampling was used to select the subjects for this study. According to Patton (2015), purposeful random sampling adds credibility to a qualitative study when those who will use the findings have a strong preference for random selection. Purposeful random sampling is especially appropriate when the potential number of cases within a purposeful category is more than what can be studied with the available time and resources (Patton, 2015). In addition, two distinct purposeful random sampling strategies were employed, criterion sampling and snowball or chain sampling. Criterion sampling was used to select subjects based on the criteria established by the researcher (Patton, 2015) and snowball or chain sampling was used to identify well-situated people who would be a good source or have the ability to identify further informants (McDavid, Huse, & Hawthorn, 2013).

Purposeful random sampling occurred using the following steps: First, the researcher consulted with Director of Public Policy for the ACTE. The researcher requested from the Director a list of six states in which to conduct the research. The Director selected six states

based on the following criteria; the statewide Perkins grant program is administered through a public, two-year postsecondary agency and, the states are located in geographically diverse areas. Second, the researcher contacted the State Directors of Career and Technical Education via email in each of the six respective states. The researcher asked for a recommendation of four public, two-year postsecondary institutions in which to conduct the study. The State Directors recommended institutions based on the following criteria; their knowledge of the institutions willingness to participate in the study and who will be the most responsive. Two of the institutions were used in the study and two were kept in reserve in case of non-respondents or declining to participate in the study; Step three; the researcher contacted the Perkins grant administrator/manager via email at two of the institutions and invited them to participate in the study. Should one or more institutions decline the invitation to participate; the researcher contacted other institutions on the list. The sample population for both phases of the study involved the Perkins grant administrators and the Perkins grant documents from their institution.

### **Instrumentation**

Instrumentation for this study was designed in two phases, an observation schedule for quantitative data collection and an interview schedule for qualitative data collection. All instruments were designed specifically for this study and were developed prior to data collection and analysis. According to Miles and Huberman (1994), prior instrumentation emphasizes internal validity, generalizability, and sheer management of the data. In addition, focused observation schedules and interview schedules will eliminate the collection of superfluous data which can compromise the efficiency and power of the analysis (Miles & Huberman, 1994).

**Phase one.** An observation schedule was developed using the Perkins grant categories as a guide for analysis. Observation schedules provide a common instrument to improve



explanation of the Perkins Grants (Miles & Huberman, 1994). Descriptive observational variables, such as the Perkins grant categories, require little inference on the part of the researcher and generally yield reliable data (Gall, Gall, & Borg, 2007). The observation schedule was used during both the data collection and data analysis phases of the study. A draft of the observation schedule is located in Appendix B.

**Phase two.** An interview schedule was developed using the literature review, research questions, and existing state and local Perkins plans as a guide for data collection and analysis. The interview schedule was comprised of the interview questions and a recording sheet to aid in data analysis. The interview schedule contained questions related to the research questions as well as collected basic demographic information. The interview schedule contained open-ended questions, or prompts, so that all respondents will have a nearly identical experience and to ensure that data from all responses can be compared meaningfully (Gall, Gall, & Borg, 2007). A draft of the interview protocol is located in Appendix C. The researcher also developed a recording sheet with potential responses to aid in data analysis. A copy of the recording sheet is located in Appendix D.

**Reliability and validity.** Both the interview schedule and analysis schedule were vetted for reliability and validity as described below.

**Reliability.** To maximize reliability of question items the researcher utilized a peer review process and pilot test and applied the data collection tools to a convenience sample of Perkins Administrators or CTE scholars to further make certain that subjects understood the questions. Once the questions were formulated, peers and subject matter experts were used to test the instrument to ensure that the questions are answerable, clear, and yielded meaningful results. The researcher also consulted with the UW-Stout Applied Research Center to ensure the

validity of the questions. Patton (2015) suggests that interview questions should be carefully worded and written out in advance so the researcher will ask the exact questions to each interviewee. In addition, Gall, Gall, and Borg (2007) suggest that a prototype of the observation schedule should be piloted to uncover any weaknesses in the instrument. Cultural sensitivity and awareness was addressed in the validation process. In addition, the use of biased or leading questions was avoided.

**Validity.** Since this research set out to understand and describe, it yielded data that is not generalizable beyond the programs and subjects being studied. Additionally this was a custom developed interview protocol and the data collected was a reflection of the respondent's perceptions of the phenomenon being studied. Triangulation was used to draw on corroborative evidence to validate the responses (Gall, Gall, & Borg, 2007). Member checking, which is the process of having individuals review statements made by the researcher for accuracy and completeness (Gall, Gall, & Borg, 2007), was used to validate the interview results.

To answer research question one: *What are the primary areas of use of the Act at two-year institutions?* The researcher conducted a descriptive analysis of local Perkins plans. The analysis was used to determine allocation amounts to specific activities, allocation amounts for specific initiatives, funded positions, types of activities and initiatives, student supports, programming, innovation, business and industry connections, equipment, administrative functions, and over all focus and direction of the plan.

To answer research question two: *To what extent are two-year institutions aligning their grant proposals with the purpose and intent of the Act?* A two-phase process was used. Phase one involved a pilot study, which entailed the descriptive analysis of randomly selected state and local Perkins plans to identify information related to the research question that can be gleaned

from the plans. The state Perkins plans are public documents and are available electronically and were downloaded from the Perkins Collaborative Resource Network. The pilot study was used to identify alignment at both the state and local levels with the Act's purpose, intent, and goals. Based on the availability of information from the pilot study, an interview protocol was developed to address any gaps identified in the review of the state and local plans.

To answer research question three: *What accountability strategies are two-year institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?* The researcher developed an interview protocol. The protocol was used to determine institutional specific accountability measures that are used to ensure Perkins funds are being used for their intended purpose. Areas of consideration include CTE program evaluation, program review process, and program effectiveness.

To answer research question four: *What are the perceived facilitators and barriers when developing the grant?* The researcher developed an interview protocol. The protocol was used to determine internal and external challenges, institutional priorities, institutional culture, and institutional primary focus (comprehensive community college, technical college).

To answer research question five: *What are the perceived facilitators and barriers when implementing the Act?* The researcher developed an interview protocol. The protocol was used to determine internal and external challenges, institutional priorities, institutional culture, and institutional primary focus (comprehensive community college, technical college).

### **Data Collection Procedures**

Data collection was completed using a two-phase process. The two-phase process involved the collection of quantitative first because quantitative data is typically given priority

and often represents the major aspect of the mixed methods data collection process. The qualitative follows in the second phase of the research (Ivankova, Creswell, & Stick, 2006).

**Phase one.** Phase one involved the collection of quantitative data through a descriptive analysis of state and local Perkins plans. Data collection involved the analysis of five state plans as identified by the Director of Public Policy for the ACTE and nine local plans as identified by the State Directors of CTE. Copies of the Perkins state grants were obtained through multiple methods. State Perkins plans were available electronically on the Perkins Collaborative Resource Network (PCRN) website for download (Perkins Collaborative Resource Network, n.d.). Local plans were available as they are public documents. In the event the researcher was unable to locate a local plan electronically, a written request was sent to the grant manager from the institution where the interview was conducted for a copy of the plan.

**Phase two.** Phase two involved the collection of qualitative data through structured interviews. Structured interviews were conducted via the telephone. Respondents were informed of their implied consent to participate as well as their ability to choose not to participate with any adverse consequences. Subjects were given a copy of the interview questions in advance in order to prepare for the interview. All interviews were recorded electronically using the online synchronous audio conferencing tool WisLine which also archived the interviews. The interviews were transcribed using an online transcription service.

### **Data Analysis**

Data was compiled and analyzed by the researcher using multiple methods. Frequency distribution tables were used for ease of comprehension and comparison of the quantitative statistical data. Any identifiers from the raw data were removed prior to data analysis.

Quantitative data derived from the Perkins grants was analyzed using descriptive statistical methods. Data was analyzed to determine measures of central tendency (mean) and measures of variability (range). In addition, data was disaggregated by state and institution. The final statistical analysis is presented in its entirety in Chapter Four.

Qualitative data gathered from the structured interviews was analyzed using an interpretational analysis process. Interpretational analysis is used to find constructs, themes, and patterns that can be used to describe and explain the phenomenon being studied (Gall, Gall, & Borg, 2007). An extensive process of reading and rereading the transcripts was utilized to help understand the data. The data was then placed into segments of comprehensible information and then into categories based on the type of phenomenon that was mentioned in the data (Gall, Gall, & Borg, 2007). The segments were coded according to theme and placed in one or multiple categories. The category segments will then grouped according to themes. Results were disaggregated by state and institution by utilizing an ANOVA. Finally, conclusions were drawn based on the salient themes that surfaced from the final grouping and will be detailed in Chapter Four.

### **Limitations**

The researcher acknowledges that there were limitations to this study. The following limitations applied:

1. The study was limited to public, two-year postsecondary institutions.
2. Data collected in this study represented institutions located in five states as identified by the Director of Public Policy for the Association for Career and Technical Education and therefore cannot be generalizable beyond these states.
3. There is limited prior research on strategic and effective use of Carl Perkins funds.

**Summary**

This chapter outlined the methodology, sample, instrumentation, data collection, data analysis, and limitations of this study. This thematic descriptive study was designed to answer the research questions through structured interviews and descriptive analysis. Data was compiled and analyzed by the researcher using descriptive statistical methods and interpretational analysis, keeping in mind that certain limitations applied to this study. Salient themes were developed that provided a descriptive picture of the data collected. The analyzed data is presented and discussed in its entirety in Chapter Four.

## Chapter IV: Presentation of the Findings

The purpose of this study was to examine the alignment of current allocation habits of public, two-year postsecondary institutions with the original purpose and intent of the Carl D. Perkins Act. This study aimed to determine the primary uses of the grant and attempted to identify ambiguities and facilitators (successes) of the Act. The study was designed to answer the following questions: (1) *What are the primary areas of use of the Act at public, two-year postsecondary institutions?* (2) *To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?* (3) *What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?* (4) *What are the perceived facilitators and barriers when developing the grant?* (5) *What are the perceived facilitators and barriers when implementing the Act?*

Data for the research was collected by utilizing structured interviews and a review of Perkins grants during spring semester of 2016. A telephone interview was conducted with the National Policy Director of the Association for Career and Technical Education (ACTE). The Director identified six states that had a unique postsecondary CTE system and would be amiable to participate in the research. Email requests to identify institutions were sent out to the State Directors of CTE in the six states identified by the National Policy Director of the ACTE. Follow up emails and phone calls were made to non-respondents. A total of five State Directors responded and identified two-year postsecondary institutions within their state to contact. Email requests were then sent to the institutions' Perkins grant administrators requesting an interview and a copy of their most recent approved Perkins grant. Follow up emails and phone calls were

made to non-respondents. A total of nine institutions (two in four states and one in one state) responded and agreed to participate in the research.

Structured interviews via the telephone were then conducted with the Perkins grant administrators at the nine two-year postsecondary institutions utilizing the interview recording sheet. Each interview was recorded, transcribed, redacted, and returned to the respondents for validation. Corrections were made to the transcripts as requested by the respondents. All corrections made were either grammatical or done to remove further identifiers from the interview. None of corrections significantly altered the content or meaning from the interviews. The transcribed interviews were then analyzed by the researcher using thematic analysis. A total of nine Perkins grants were made available to the researcher electronically and were analyzed using descriptive statistics. Prior to data analysis, personal biases were removed through bracketing in order to mitigate the potential deleterious effects of unacknowledged preconceptions related to the research and thereby to increase the rigor of the project (Tufford & Newman, 2012).

In order to maintain the anonymity of the institutions and respondents, all data was reported as percentages rather than dollar amounts. This was also done in effort to further remove any identifiers from the research.

### **Demographics**

Table 5 details the demographics of the institutions that participated in the study. The institutions are categorized by geographical region, type, and number of Fulltime Equivalent (FTE) students.



Table 5

*Institution Demographics*

Institution	Region	Institution Type	FTE (2015)
Institution A	Mountain	Two-Year University	1,481
Institution B	Mountain	Two-Year University	1,283
Institution C	Pacific Northwest	Community College	2,705
Institution D	Pacific Northwest	Community College	7,905
Institution E	Midwest	Technical College	3,946
Institution F	Midwest	Technical College	7,020
Institution G	Mountain	Community College	461
Institution H	Mountain	Community College	2,363
Institution I	Southwest	Community College	1,715

**Research question 1: What are the primary areas of use of the Act at public, two-year postsecondary institutions?** Research Question 1 involved the collection of quantitative data through an analysis of Perkins grants as well as qualitative data from interview questions two and three. Interview question one asked respondents *What percent of your job is allocated for Perkins grant administration?* And research question three asked respondents *Describe the functions, activities, etc. that are undertaken with the 5% reserved for administration.* The researcher conducted an analysis of nine two-year postsecondary institutions' Perkins grants to determine the primary area of use of the grant funds. Data was taken directly from the approved grant and grouped by areas as detailed in the grants.

Analysis of the grants revealed that each state had a different format and process for grant applications. State plans submitted to the Department of Education followed the format detailed

in the Perkins Act. Local plans were developed based on the format of the state plan. The format of these documents limited the researchers' ability to determine percentages allocated for Perkins required and permissible activities. Primary areas of use were determined by the language and common categories detailed in each grant. In some instances there was language in the grant stating that all expenditure supported the nine required activities. These findings represent the analysis of Perkins grants as well as interviews with Perkins grant administrators. The following tables and narratives detail the primary areas of use of Perkins funds by institution.

**Institution A.** Table 6 details the Perkins expenditures for Institution A. The largest portion of the grant (73%) is allocated towards salaries and benefits and the smallest amounts (1%) are spent on travel and consumable supplies respectively. Faculty salaries were funded for new or expanding programs and academic advisement was geared towards aiding career and technical education students selecting appropriate career programs. Perkins grant administration was housed in the Deans office where academics, curriculum, and grant administration were also located. The respondent indicated that ten percent of their job was allocated for Perkins grant administration.

Table 6

*Institution A Uses of Funds*

Area of Use	Percentage of Grant	Themes
Salaries and Benefits	73%	Faculty and Student Advisement
Contracted Services	15%	Bridge Programs and Program Improvement
Travel	5%	Professional Development and Student Activities
Indirect Costs	5%	Grant Administration
Equipment	1%	Software
Consumable Supplies	1%	Construction Program Classroom Supplies
Total	100%	

**Institution B.** Table 7 details Perkins expenditures for Institution B. The largest portion of the grant (47%) was used for equipment and the least amount (1%) was spent on “other.” Equipment expenditures aided construction and agriculture programs along with consumable supplies. The “other” category included marketing at a state professional organization conference. Perkins grant administration was housed within an academic college where the majority of the two-year programs are housed. The respondent indicated a minimal amount of time was allocated towards Perkins grant administration.

Table 7

*Institution B Uses of Funds*

Area of Use	Percentage of Grant	Themes
Equipment	47%	Classroom Equipment
Consumable Supplies	29%	Supplies for Construction Programs
Contracted Services	13%	Accreditation and Certificate Program
Travel	5%	Professional Development
Indirect Costs	5%	Grant Administration
Other	1%	Marketing
Total	100%	

**Institution C.** Table 8 outlines Perkins expenditures for Institution C. The largest portion of the grant (67%) was allocated for salaries and benefits which include administration, student support services such as occupational counseling, student support and retention, and instructional aids. Goods and services accounted for 17% of the grant and included career exploration activities for middle and high school students as well as advisory board expenses. Five percent of the grant was used to rent space in a local workforce development center to provide services in conjunction with the requirements of the Workforce Development Act. Perkins grant administration was housed within the Workforce Education division of the college due to the institution's philosophy that the Perkins Act is workforce development policy. The respondent indicated that a quarter of their time was allocated for Perkins grant administration.

Table 8

*Institution C Uses of Funds*

Area of Use	Percentage of Grant	Themes
Salaries and Benefits	67%	Administration and Student Supports
Goods and Services	17%	Career Exploration and Marketing
Travel	8%	Professional Development
Building Rental and Utilizations	5%	Workforce Development
Administration	3%	Grant Administration
Total	100%	

**Institution D.** Table 9 details Perkins expenditures at Institution D. Forty-five percent of the grant was used for salaries and benefits which include special populations coordinator, tutors, teachers aid, support staff, faculty stipends, and marketing. Goods and services accounted for 42% of the grant and include marketing and recruitment, professional memberships, classroom supplies, library materials (17% of the goods and services budget), and startup of a new program which accounted for 53% of the goods and services budget. The respondent indicated that 40% of their duties were allocated for Perkins grant activities and administration of the grant was housed in instruction due to the instructional focus of their grant.

Table 9

*Institution D Uses of Funds*

Area of Use	Percentage of Grant	Themes
Salaries and Benefits	45%	Student Support
Goods and Services	42%	New Programs and K-12 Outreach
Travel	10%	Professional Development
Administration	3%	Travel for Professional Development
Total	100%	

**Institution E.** The state system in which institution E is located allows for multiple sub-grants to meet specific areas detailed in the state plan. More specifically, Institution E received Perkins funding in the areas of achieving student success, strengthening career and technical education programs, and nontraditional occupations. Perkins grant administration was housed within student services because of the academic advisement focus of the activities. The respondent indicated that approximately 30% of their job was allocated for Perkins grant administration. Table 10 details the Perkins expenditures by category. Under the Achieving Student Success area 96% of the grant was spent on funded positions that included student success and diversity specialists, clerical staff, disability resource assistant, and academic advisors. Equipment included laptops for students with disabilities and career assessment software.

In the Strengthening Career and Technical Education Programs category 94% of the grant was allocated for salaries and benefits for general education instructors in the areas of

mathematics, communications, and social sciences. In addition, a student success specialist and Perkins cohort assessment coordinator were also funded.

Nontraditional occupations included the funding of a diversity resources student success specialist, a diversity resources assistant, and clerical support, which accounted for 81% of the grant. Other expenditures in this category included duplicating and promotional materials as well as stipends and consumable supplies for a midterm and finals wellness event.

Table 10

*Institution E Uses of Funds*

Achieving Student Success		
Area of Use	Percentage of Grant	Themes
Salaries and Benefits	96%	Academic Advising
Administration	2%	Director of Advising Salary
Travel	1%	In-District Travel
Equipment	1%	Software, Assistive Technologies
Total	100%	
Strengthening Career and Technical Education Programs		
Salaries and Benefits	94%	General Education Instructors
Administration	5%	General Grant Administration
Supplies	1%	Office Supplies
Total	100%	
Nontraditional Occupations		
Salaries and Benefits	81%	Diversity Specialist
Supplies	14%	Duplicating, Consumable Supplies
Other	4%	Wellness Event
Travel	1%	Mileage
Total	100%	

**Institution F.** Table 11 depicts Perkins Expenditures for Institution F. Ninety-six percent of the grant was allocated for salaries and benefits, which included counselors, retention

coordinators, support services, peer advisors, peer tutors, and interpreters. Equipment expenditures included adaptive devices for students with disabilities. Perkins grant administration was housed in the student services area of the institution and the respondent indicated that Perkins grant administration was included in the “other duties as assigned” area of their job description and was not able to give a percentage of time spent on grant administration.

Table 11

*Institution F Uses of Funds*

Area of Use	Percentage of Grant	Themes
Salaries and Benefits	96%	Counseling and Faculty
Supplies	2%	Office Supplies
Equipment	1%	Adaptive Devices
Travel	1%	Professional Development
Total	100%	

**Institution G.** Table 12 details Perkins expenditures for Institution G. The greatest expenditure was on salaries and benefits (80%), which included faculty, assessment coordinators, and partial funding of the Perkins, grant administrator. Expenditures in the “Other” category included software and licensing, professional memberships, as well as accreditation site visits and fees which accounted for 42% of the “other” budget. Perkins grant administration was housed in Instructional Services and 15% of the grant administrators’ time is allocated for grant administration.



Table 12

*Institution G Uses of Funds*

Area of Use	Percentage of Grant	Themes
Salaries and Benefits	80%	Faculty
Other	11%	Classroom Technology
Equipment	5%	Classroom Technology
Travel	4%	Professional Development
Total	100%	

**Institution H.** Table 13 details Perkins expenditures for institution H. The majority of the dollars were allocated for equipment (33%), which included new simulation technologies for health care occupations and law enforcement. Salaries and benefits accounted for 28% of the expenditures and included funded faculty positions, faculty release, and coordinators. Expenditures earmarked as “other” included such items as laptop computers, software and licensing, consulting services, and tutoring. Perkins grant administration was housed in Instruction, which allowed the institution to think strategically about how they spend the money within instructional units. The respondent indicated that 25% of their job was allocated for Perkins administration.

Table 13

*Institution H Uses of Funds*

Area of Use	Percentage of Grant	Themes
Equipment	33%	Classroom Technology and Supplies
Salaries and Benefits	28%	Faculty
Other	36%	Computers and Software
Travel	3%	Professional Development
Total	100%	

**Institution I.** Table 14 details Perkins expenditures for institution I. The majority of the funds were spent on equipment (60%) with 45% of that being used to purchase laptop computers for business and veterinary tech programs. Forty percent of the budget was used for funded positions which included student facilitators who provide guidance and counseling services for students. The respondent indicated that they spent approximately 10%-15% of their time on Perkins grant administration. The respondent also indicated that Perkins grant administration was housed in the academic affairs division of the college because it oversees the associate degree programs.

Table 14

*Institution I Uses of Funds*

Area of Use	Percentage of Grant	Themes
Equipment	60%	Computers and Classroom Equipment
Salaries and Benefits	40%	Guidance and Counseling
Total	100%	

**Five percent reserved for administration.** Question three of the interview schedule asked respondents to detail the activities undertaken with the allowable 5% reserved for Perkins administration. The majority of institutions (six) utilized the reserved portion for general grant administration such as grant development, monitoring, data collection, and clerical functions. One institution reported using these funds for travel for the Perkins grant administrator. Respondents from institutions that do not utilize the 5% reserved reported that the dollars are earmarked for programs or student support services. One respondent stated that “it is the students’ money that is why we do not use it.”

**Cross Tabulation**

Table 15 details a cross tabulation of Perkins expenditures by institution and the expenditure categories common across all nine institutions. Seven institutions reported housing Perkins grant administration in the Academic Affairs division, and two reported house grant administration in the Student Affairs division. Seven institutions spent the majority of their Perkins funds on salaries and benefits; one institution reported spending zero dollars on funded positions. Two institutions reported spending the majority of their funds on equipment. These findings resulted from the analysis of the nine Perkins grant and question two of the survey

protocol which asked respondents what area of their institution was Perkins grant administration and why it was housed there.

Table 15

*Cross Tabulation of Expenditures*

Institution	Category	Salaries and Benefits	Travel	Administration	Equipment	Supplies	Area Housed
A		73%	5%	5%	1%	1%	Academic Affairs
B		0%	5%	5%	47%	29%	Academic Affairs
C		67%	8%	3%	0%	0%	Academic Affairs
D		45%	10%	3%	0%	0%	Academic Affairs
E*		90%	1%	3.5%	1%	7.5%	Student Affairs
F		96%	1%	0%	1%	2%	Student Affairs
G		80%	5%	5%	4%	0%	Academic Affairs
H		28%	3%	0%	33%	0%	Academic Affairs
I		40%	0%	0%	60%	0%	Academic Affairs

\*Percentages for Institution E are an average of all three sub-grants

Table 16 provides a statistical analysis of Perkins expenditures by Mean and range. Salaries and benefits represent the largest amount of expenditures with a Mean of 58 and a range of 0-96. The smallest expenditure is administration with a Mean of 2.7 and a range of 0-5.

Table 16

*Statistical Analysis of Expenditures*

Category	N	Mean	Range
Salaries and Benefits	9	58	0-96
Travel	9	4	1-10
Administration	9	2.7	0-5
Equipment	9	16	0-60
Supplies	9	4.3	0-29

Table 17 depicts Perkins expenditures disaggregated by states participating in this study. State A shows the greatest inconsistency with one institution utilizing 73% of their funds for salaries and benefits and the other institution utilizing zero dollars. Conversely, both institutions located in State C utilize approximately the same amount (90%, 96%) on funded positions. In addition, there are also large variations in equipment expenditures within states A and D with 1%-47% and 4% and 33% respectively. No disaggregation was made for state E due to lack of comparable data.

Table 17

*Disaggregation by State*

State	Category	Salaries	Travel	Administration	Equipment	Supplies
		and Benefits				
A	Institution A	73%	5%	5%	1%	1%
	Institution B	0%	5%	5%	47%	29%
B	Institution C	67%	8%	3%	0%	0%
	Institution D	45%	10%	3%	0%	0%
C	Institution E	90%	1%	3.5%	1%	7.5%
	Institution F	96%	1%	0%	1%	2%
D	Institution G	80%	5%	5%	4%	0%
	Institution H	28%	3%	0%	33%	0%
E	Institution I	40%	0%	0%	60%	0%

**Research Question 2: To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?** In order to answer research question 2 qualitative data was collected utilizing structured interviews. Research question 2 contained two parts: the processes of prioritizing of Perkins funds request and the data sources utilized to prioritize those requests. Respondents were asked two questions regarding alignment of their grant: (1) *Describe the processes used to prioritize Perkins funds requests.* (2) *Does your office utilize any data in making decisions about prioritizing funds?* The following narratives detail prioritization processes and data measure used to ensure alignment with the Act.

**Prioritization of Perkins funds requests.** Three salient themes emerged regarding the prioritization of Perkins funds requests: *use of committees, integration with strategic planning, and structured internal applications*. Committees for the prioritization of funding requests were generally made up of administrators, program coordinators/leads, and Perkins grant coordinators/administrators. Regarding coordinating Perkins funds with institutional strategic planning, respondents indicated that fund requests were required to show direct alignment with the institution's strategic plan, mission, vision, or values. Institutions also utilized a structured internal application process where requestors were required to show alignment with Perkins required and permissible activities, Perkins performance indicators, or program outcomes. Respondents indicated that they have developed these processes in order to ensure alignment, reduce frivolous requests, and to create an open and transparent process.

**Data sources utilized to prioritize fund requests.** Four major themes surfaced surrounding data sources utilized by institutions to prioritize Perkins fund requests: *national data, institutional data, state and regional data, and Perkins performance data*. National data was utilized from such sources as the Department of Labor and Department of Education. Institutional data included completion rates, graduation rates, employment, and persistence within programs. State labor market data was also prevalent with one respondent indicating that the data was used to "to ensure the funds are serving the local area." Multiple respondents indicated that Perkins performance measures were important in order to avoid writing an improvement plan. Institutions also reported using a combination of multiple data sources and one institution reported using qualitative data to prioritize fund requests.

**Research question 3: What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?** Research question 3 involved the collection of qualitative data and contained two parts, the accountability measures used to ensure alignment and the strategies used to ensure that Perkins funds are being used for their intended purposes. Respondents were asked two questions regarding accountability strategies: (1) *Describe the process used to prioritize Perkins funds request.* (2) *Describe the accountability measures used to ensure alignment.* The following narratives describe the salient themes that emerged from the structured interviews.

**Accountability strategies.** Three salient themes emerged around the accountability strategies used by institutions to ensure alignment with the purpose and intent of the Act: *strategic planning, Perkins performance metrics, and coordination with other departments.* Institutions reported that Perkins grant expenditures were tied to their institutions strategic planning to ensure accountability. Respondents indicated that the connection to strategic planning was coordinated during both the development and implementation of the Act. Respondents indicated that using Perkins performance metrics aided the end users (faculty) in understanding the focus of the grant. Also, institutions reported coordination with other departments such as finance, grants, and internal accountability offices to ensure alignment.

### **Strategies Used to Ensure Alignment**

Two major themes emerged around the strategies used to ensure that Perkins funds are being used for their intended purpose: *grant administrator oversight and internal audits.* Institutions reported that strong internal oversights help ensure that all funds were being spent appropriately. The Perkins grant administrator at both small and large sized institutions



generally performed internal oversights. Internal audits utilizing multiple departments was cited as an important step of the alignment process. Respondents indicated that it was a team approach that included finance departments, grant writers, and instructional staff. Some institutions also required programs to submit quarterly reports that were used in the internal audit process. More than one responded stated that “the buck stops with me.”

**Research question 4: What are the perceived facilitators and barriers when developing the grant?** Research question 4 involved the collection of qualitative data and contained two parts, perceived successes when developing the grant and the perceived barriers when developing the grant. Respondents were asked two questions regarding grant development: (1) *What are the challenges you encountered in developing the grant?* (2) *What worked well when developing the grant?* The following narratives describe the themes that emerged from the structured interviews.

**Facilitators when developing the grant.** Common themes that emerged regarding the successes institutions encountered when developing the Perkins grant included: *transparency, communication, state involvement, and collaboration*. Respondents indicated that having a transparent process was instrumental in developing the grant. Transparent processes included an open process with all information being made available to interested parties and a clear direction of the Perkins priorities. Communication was also predominant with institutions utilizing multiple methods such as Perkins informational meetings and one-on-one conversations. Institutions also reported guidance from state agencies as aiding to the success of developing their Perkins grant. Respondents reported that the state agencies provided interpretations, assistance, and advice when developing the grant. State agencies also provided formal training on Perkins for faculty, administrators, and staff. Collaboration was a shared theme among

respondents. Collaboration included working closely with faculty, administrators, other institutions, career and technical centers, and other departments.

**Barriers when developing the grant.** Respondents provided perceived barriers institutions encountered when developing the grant application. *A lack of funds* surfaced as a theme across institutions. In addition to having more requests than dollars available, respondents cited a difficulty in denying funds due to their relationship with their colleagues. A common theme encountered was a *general misunderstanding of the Perkins Act itself*. The misunderstandings included confusing terminology, contradiction with Perkins performance metrics and internal performance metrics, inability to meet certain metrics because of the structure of their state system, and a general misunderstanding of the purpose and intent of Perkins by faculty and administrators unfamiliar with the Act. One respondent reported a philosophical difference between administration and the grant administrator as to the purpose and intent of the act, which “lead to a clash between the cabinet and the philosophy of CTE.” Internal processes included a lack of staffing, misunderstanding of the process, and determining future Perkins priorities. External processes included cumbersome state grant applications, timing (e.g. time of allocation and deadline to spend money), and a lack of communication from state agencies.

**Research question 5: What are the perceived facilitators and barriers when implementing the Act?** Research question 5 involved the collection of qualitative data through structured interviews and contained two parts: successes when implementing the Perkins Act and barriers when implementing the Act. Respondents were asked two questions regarding grant implementation: (1) *What are the challenges you encountered when implementing the Act?* (2)

*What worked well when implementing the Act?* The following narratives describe the themes gleaned from research question 5.

**Facilitators when implementing the act.** When asked about the common themes regarding implementation of the Perkins Act, respondents cited that *preplanning and strategic planning* with the development of the grant lead to successful implementation. Institutions also reported both *programmatic and student success* when implementing the Act. Programmatic successes included increased enrollments, expansion of physical space, and improvements in low-performing programs. Student successes include increased technical skill attainment, more meaningful programs of study, and more opportunities for middle and high school student career exploration.

**Barriers when implementing the act.** The themes that surfaced regarding barriers encountered by institutions while implementing the Perkins Act included: *misunderstanding of Perkins and internal and external processes*. Respondents reported both internal and external processes as a barrier to implementing the Act. Internal processes included recording keeping, financial processes, student tracking, and a misunderstanding by faculty and administrators of internal processes. External processes include timing between grant allocations and expenditures, data collection and reporting not in conjunction with school year, additional reporting mandated by the state, and a misunderstanding of state processes. Respondents also indicated a general misunderstanding of the Perkins Act in the following areas, misinterpretation of Perkins performance metrics and institutional metrics, Perkins data measures and reporting, and differences in philosophy about the purpose and intent of the Act.

**Attitudes and opinions of Perkins grant administrators.** In order to garner respondents overall opinions and attitudes regarding the Perkins Act, the following question was

asked during the structured interview: *Is there anything else about Perkins funding at your institution that you would like to add?* This question aimed at understanding respondents' reflective thoughts after completing the interview and to give respondents an opportunity to expand on any of the previous questions. Three major themes emerged from the interview question: *decrease in Perkins funding, unanticipated challenges, and Perkins funds being essential to the institution.* The most predominate theme among respondents was a concern for the decrease in Perkins funding. Respondents cited decreases in enrollment have resulted in a decrease in Perkins funding in addition to the reductions at the federal level. Respondents further indicated that Perkins funding was essential to their institutions in the areas of new programs, program improvement, student support, innovation, and new technologies so graduates can be successful in the workforce. Respondents also cited unanticipated challenges with Perkins funding in their states such as complications with Higher Learning Commission (HLC) requirements regarding credentialing of CTE teachers, and career and technical education centers being non-accredited and unable to participate in programs of study.

### **Summary**

This chapter detailed the quantitative and qualitative data collected from an analysis of Perkins grant and structured interviews with Perkins grant administrators. Quantitative data was derived from an analysis of nine Perkins grants in order to understand the primary areas of use of the funds at two-year postsecondary institutions. A statistical analysis of common expenditure categories was performed to determine the Mean and range of Perkins expenditures.

Qualitative data was collected through structured interviews with nine Perkins grant administrators. Qualitative data was gathered in an attempt to understand the alignment of Perkins funds to the purpose and intent of the Act, accountability strategies, and the facilitators

and barriers around developing and implementing the Act. Results from the structured interviews were analyzed by the research utilizing a thematic analysis in order to discover salient themes.

## Chapter V: Summary, Conclusion and Recommendation

The purpose of this study was to examine the alignment of current allocation habits of public, two-year postsecondary institutions with the original purpose and intent of the Carl D. Perkins Act. This study aimed to determine the primary uses of the grant and attempted to identify ambiguities and facilitators (successes) of the Act. The study was designed to answer the following questions: (1) *What are the primary areas of use of the Act at public, two-year postsecondary institutions?* (2) *To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?* (3) *What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?* (4) *What are the perceived facilitators and barriers when developing the grant?* (5) *What are the perceived facilitators and barriers when implementing the Act?* This chapter provides a summary of the research, conclusions from the findings, and recommendations.

### Summary

The Carl D. Perkins Career and Technical Education Act has provided funding to develop more fully the academic and career and technical skills of secondary and postsecondary students who elect to enroll in career and technical education (CTE) programs (One-hundred ninth Congress, 2006). Since the Smith-Hughes Act in 1917 federal legislation has played a significant role in CTE by providing the funds necessary for innovation, programs, student support services, and workforce development opportunities to keep the country competitive in a global economy. In the current climate of accountability that pervades higher education, it is essential that all federal funds be used judiciously to ensure future funding for CTE programs and students.

To answer the research questions a mixed methods approach was used collecting both quantitative and qualitative data. This research was conducted as a two-phase study where both quantitative and qualitative data were collected, analyzed, and reported separately. Phase one of the study entailed the collection of quantitative data through a descriptive analysis of Perkins grants. The descriptive analysis involved the review of both state and local Perkins plans to determine the following: alignment of the grant to the purpose and intent of the Act based on the emphasis of the activities detailed in the grant; the primary areas of use of the funds based on the dollar amounts allocated to each activity required by the Act and; accountability measures other than those required by the act that are detailed in grant.

Phase two of the study involved the collection of qualitative data utilizing structured (guided) interviews with local Perkins grant administrators. Structured interviews were used to answer any research questions that could not be answered in phase one. The interviews were also used to collect detailed information on the alignment of institutional strategic planning to Perkins grant development and implementation. In addition, structured interviews were used in order to garner the opinions and attitudes of Perkins grant administrators as to any perceived challenges and successes while developing implementing the Act.

A total of nine grants were analyzed and nine interviews were conducted with Perkins grant administrators in five states as identified by the Association for Career and Technical Educations' Public Policy Director. Quantitative data was analyzed using descriptive statistics to determine measures of central tendency and measures of variability. Qualitative data gathered from the structured interviews were analyzed using an interpretational analysis process.

The quantitative data revealed that the primary areas of use for Perkins funds are allocated to the salaries and benefits of funded positions at two-year postsecondary institutions.

The funded positions were either directly related to programmatic needs (e.g. faculty, lab assistants) or for student support (e.g. tutors, academic advising). The data also revealed that the focus and initiatives supported by grant dollars were in direct relation to the area (student affairs or academic affairs) where grant administration was housed. These two findings represented a philosophical divide between Perkins dollars being used for direct aid to programs or for support of CTE students. In both instances (direct support for programs, student support) institutions reported the performance indicators required by the Act were being met.

The quantitative data also revealed that the majority of institutions utilized the five percent reserved for grant administration for that purpose with the other institutions citing philosophical reasons for not using those funds. In addition, it was found that there are inconsistencies within states with allocation habits and perceptions as to the purpose and intent of the Act.

The qualitative data revealed that institutions utilizing a structured funding request process and integrated Perkins grant development with campus-wide strategic planning had greater successes when developing and implementing the grant. This surfaced as increased enrollments, expansion of physical space, and improvements in low-performing programs. The data also showed that institutions utilized multiple data sources and strategic planning to prioritize Perkins funds requests. Additionally, institutions cited grant oversight and internal audits as measures to ensure accountability of grant activities and expenditures.

Respondents in the study also reported a general misunderstanding of the Perkins grant as well as cumbersome internal and external processes that resulted in barriers to developing and implementation of the Act. Consistent with the literature, respondents reported confusing language and conflicting performance measures when reporting grant activities. Finally, Perkins



grant administrators reported a concern for the decline in Perkins funding, unanticipated challenges with conflicting requirements of other policies, as well as indicated that Perkins funding was essential to the success of their programs and students.

## **Conclusions**

The study reveals that there is a philosophical divide regarding the focus of the Act as either a mechanism for programmatic improvements or a means to support career and technical education students. The study also revealed ongoing challenges regarding ambiguous language, definitions, data measures, and reporting in the Act. Additionally, the findings revealed that funded positions are the predominate method used by institutions to meet Perkins performance metrics.

**Research question 1: What are the primary areas of use of the Act at public, two-year postsecondary institutions?** Data collected and analyzed for research question 1 resulted in the following findings; institutions housed Perkins grant administration in either academic or student affairs depending on the focus and philosophy of their Perkins grant (e.g. programmatic or student support services), the majority of institutions (78%), regardless of where Perkins grant administration was housed, allocated the majority of their funds for salaries and benefits. It was found that funded positions had a direct relationship to the focus of the institutions Perkins grant. In institutions where Perkins funds were earmarked for programmatic improvements, funded positions included faculty and instructional aids. In institutions where the focus of the grant was on student support, funded positions included academic advisors, tutors, and counselors. This was consistent with the Silverberg et al. (2004) study which found that Perkins funds at postsecondary institutions are most likely to cover support services, particularly for special populations (e.g., child care and counseling) and for staffing.

The data also revealed that more than two-thirds of the institutions participating in this study utilized the five percent reserved for grant administration for general grant administration or to partially fund the Perkins grant administrator. Institutions that did not utilize the five percent reserved for administration cited a strong philosophical belief as to where the money was best allocated. Also, there was no consistent pattern found within states regarding whether or not institutions utilized the five percent reserved. In addition, the allocation of dollars for either direct aid to programs or student support services was not related to the type of institution (comprehensive community college or technical college).

It was also revealed that the majority of institutions spent little money on equipment for CTE programs. This was consistent with the Silverberg et al. (2004) study, which found that Perkins funds are a relatively small contribution to postsecondary equipment budgets. The study found that postsecondary institutions typically have a substantial technology budget and private donations, business partners, state grants, and college revenues largely fund equipment needs.

Based on the findings, it can be concluded that the primary areas of use for Perkins funds at two-year postsecondary institutions was dependent on the institutional area or division where grant administration is housed. It can be concluded that there were philosophical differences of interpretation about the focus of the Act as either for programmatic improvements or student support services. It can be concluded that funded positions served to support the institutional focus of the grant. It also can be concluded that the Perkins Act does not discourage the use of funded positions as long as performance metrics were being met. It can also be concluded that even within states, there were philosophical differences between institutions as to the purpose and intent of the act, which leads to inconsistent allocation habits. Furthermore, it can be

concluded that funding grant administration was not a priority when allocating Perkins funds at some institutions.

**Research question 2: To what extent are public, two-year postsecondary institutions aligning their grant activities with the purpose and intent of the Act?** Research question 2 contained two parts: the prioritization of Perkins fund requests, and the data sources used to prioritize the requests. In regards to prioritizing Perkins funds requests three major themes emerged: use of committees, integration with strategic planning, and structured internal application process.

Institutions that utilized committees reported including a broad group of stakeholders: administrators, program coordinators, and administrators. Institutions also reported prioritizing Perkins fund requests as part of their strategic planning process to ensure alignment with the institutions mission, vision, and values. Institutions also reported using an internal structured fund request application process where requestors were required to demonstrate alignment to the Perkins Act. Institutions that utilized one or more of these processes reported fewer problems when developing and implementing the Act due to the rigor of these processes.

All nine institutions reported utilizing one or more data sources to prioritize Perkins fund requests. Data sources included national, institutional, state and regional, and Perkins performance data. Institutions who reported using one or more data sources to prioritize fund requests also reported fewer problems during the development and implementation of the Act.

Based on the findings, it can be concluded that institutions that utilize data and structured prioritization processes had fewer problems during the development and implementation of the Perkins Act. It can be concluded that alignment to the Act was alignment to the institutional perception of the purpose and intent of the Perkins Act (e.g. programmatic support, student

support). Also, it can be concluded that in addition to alignment with the Act itself, many institutions prioritize Perkins expenditures that aligned with their strategic plan. Additionally, it can be concluded that Perkins grant administrators have developed these processes based on their own understandings of the Act and experiences to alleviate potential problems and to ensure alignment with Perkins goals.

**Research question 3: What accountability strategies are public, two-year postsecondary institutions using to ensure that planned grant activities are in alignment with the purpose and intent of the act?** Research question 3 was comprised of two parts: accountability measures used to ensure alignment with the act and strategic processes used to ensure that Perkins funds are being used for their intended purposes. Three themes emerged regarding accountability measures: strategic planning, utilizing Perkins performance metrics, and coordination with other departments. Two themes emerged regarding strategies used to ensure funds are being used properly: grant administrator oversight, and internal audits.

Respondents indicated that the alignment of Perkins funding to strategic planning was essential to ensure proper alignment with the Purpose and intent of the Perkins Act as well as institutional goals. Grant administrators overall had a strong working knowledge of the Perkins Act as well as an understanding of CTE. This understanding lent itself to positive oversight to ensure that allocated dollars were serving the purpose for which they were intended.

Based on the findings, it can be concluded that strong internal audits and oversights can lead to successful implementation of planned grant activities. It can also be concluded that the grant administrators' knowledge of the purpose and intent of the Act has a direct relationship to ensuring that Perkins funds are being used for their intended purposes. Furthermore, it can be

concluded that institutions that participated in this study are using Perkins funds in alignment with their institutional perceptions of the purpose and intent of the Act.

**Research question 4: What are the perceived facilitators and barriers when developing the grant?** Research question 4 was comprised of two parts: facilitators (successes) when developing the grant and barriers encountered when developing the grant. Four salient themes emerged regarding the successes institutions encountered when developing the Act: transparency, communication, state involvement, and collaboration. Three themes surfaced regarding barriers to developing the grant: lack of funds, misunderstanding of Perkins, and internal and external processes.

Institutions that reported aligning Perkins funding with strategic planning experienced greater successes when developing the grant. Respondents cited their open, inclusive, and transparent grant development processes alleviated any ambiguities as to the goals of the grant. Respondents also indicated that strong state support was essential to successful grant development. The recent \$140 million reduction in Perkins funding (Gordon, 2014) has caused anxiety among grant administrators. Respondents stated that the reduction in funds has resulted in the inability to fund programs and services and has compelled them to locate additional funding sources. Consistent with the findings from Silverberg et al. (2004) and the Government Accountability Office report (2009) there were still persistent problems regarding misunderstanding of the Act. Respondents cited ambiguous language, too many requirements, reporting issues, and a general misunderstanding of the purpose and intent of the Act.

Therefore, it can be concluded that institutions that utilized an open and inclusive grant development process experience less problems during the process. It can also be concluded that

persistent problems remain with the language, requirements, and reporting structures of the Perkins Act.

**Research question 5: What are the perceived facilitators and barriers when implementing the Act?** Research question 5 was comprised of two parts: facilitators (successes) when implementing the Act and barriers encountered when implementing the Act. Three themes surfaced regarding facilitators when implanting the Act: strategic planning, student success, and program success. Two themes emerged regarding barriers when implementing the Act: misunderstanding of Perkins and internal and external processes.

Institutions that utilized preplanning and alignment with strategic planning reported greater successes when implementing the Act. Respondents also cited other successes such as increased enrollments, expansion of physical space, and improvements in low-performing programs. One respondent stated that if it were not for Perkins, they would have no new programs. Other student successes included increased technical skill attainment, more meaningful programs of study, and more opportunities for career exploration. Respondents also reported that Perkins funding is responsible for the overall success of their CTE programs.

Consistent with the literature (Silverberg et al., 2004, Government Accountability Office, 2009) ambiguities in language, performance metrics, Perkins data measures, and reporting remained a persistent problem during the implementation of the Act. Multiple requirements, performance metrics that do not align with institutional metrics and a general misunderstanding of the Act were cited as barriers to implementation. Additionally, both internal and external processes such as the timing between allocation and expenditure, data collection and reporting, and a misunderstanding of state processes resulted in barriers when implementing the Act.

Therefore, it can be concluded that institutions that utilize preplanning and alignment with strategic planning have a greater chance of successful implementation of the Act. It can also be concluded that persistent problems with the language, requirements, and reporting structures of the Perkins Act result in barriers to its successful implementation.

### **Recommendations**

The research has shown that there were varied interpretations of the grant and ambiguous language that has influenced accurate reporting. Therefore, based on this research it is recommended that the Office of Career, Technical, and Adult Education, the Association for Career and Technical Education, and the state directors of career and technical education collaborate and develop a common language, common interpretation of grant requirements, and common definitions for grant recipients.

The research also revealed that there are both internal and external processes that hinder an institutions ability to effectively carry out grant development and implementation. Therefore, based on the research, it is recommended that state directors of career and technical education coordinate data reporting and dispersion of funds, identify streamlining opportunities and alignment with local agencies, as well as develop a consistent internal grant application process.

Finally, this research highlights that successful implementation and alignment of the Act requires strong collaboration and oversight. Therefore, based on the research, it is recommended that institutions align Perkins grant development with strategic planning and include multiple stakeholders in the process

### **Areas for Further Study**

Based on the research findings, research is recommended on the following topics:

- A study of Perkins grant administrators, national associations, faculty, administrators, and state CTE directors to determine their perceptions of the purpose and intent of the Perkins Act.
- Study of the allocation habits of secondary institutions.
- Broaden the scope of this study to include two-year postsecondary institutions represented in other states.



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### Appendix A: Perkins Expenditures by State

*Perkins Allocations by State Fiscal Year 2015*

State	Allocation	State	Allocation
ALABAMA	19,175,065	NEVADA	9,720,272
ALASKA	4,214,921	NEW HAMPSHIRE	5,488,705
ARIZONA	25,325,281	NEW JERSEY	22,297,295
ARKANSAS	11,403,785	NEW MEXICO	8,080,607
CALIFORINA	119,989,211	NEW YORK	51,361,536
COLORADO	16,027,836	NORTH CAROLINA	36,080,089
CONNECTICUT	9,487,263	NORTH DAKOTA	4,214,921
DELAWARE	4,718,450	OHIO	42,750,001
FLORIDA	62,270,060	OKALHOMA	15,094,180
GEORGIA	38,470,077	OREGON	13,518,483
HAWAII	5,488,705	PENNSYLVANIA	40,722,778
IDAHO	6,380,330	RHODE ISLAND	5,488,705
ILLINOIS	40,276,006	SOUTH CAROLINA	18,435,780
INDIANA	24,878,242	SOUTH DAKOTA	4,214,921
IOWA	11,963,946	TENNESSEE	23,070,624



KANSAS	10,245,408	TEXAS	91,909,431
KENTUCKY	17,905,647	UTAH	12,473,193
LOUISIANA	21,041,943	VERMONT	4,214,921
MAINE	5,488,705	VIRGINIA	32,902,660
MARYLAND	15,147,766	WASHINGTON	20,564,886
MICHIGAN	37,070,412	WEST VIRGINIA	8,428,617
MINNESOTA	16,648,637	WISCONSIN	20,241,685
MISSISSIPPI	13,363,550	WYOMING	4,214,921
MISSOURI	21,297,654	DISTRICT OF COLUMBIA	4,214,921
MONTANA	5,159,268	PUERTO RICO	18,458,848
NEBRASKA	6,816,893	VIRGIN ISLANDS	567,534

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TOTAL: 1,097,740,904

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Source: Miller, S. (2015). *State allocations under the Carl D. Perkins Career and Technical Education Act of 2006*.

### Appendix B: Observation Schedule

Observation Schedule-Required Activities				
Required Activities	Dollar Amount	Percent of Grant	Area of Focus	Notes
Strengthen the academic and technical skills of students in CTE				
Link secondary and postsecondary CTE				
Provide students with strong experience and understanding of all aspects of industry-including work-based learning experiences				
Develop, improve, or expand the use of technology in CTE				
Provide professional development				
Support of education programs for CTE teachers				
Evaluation of CTE programs				
Initiate, improve, expand, and modernize CTE				
Provide services and activities that are of sufficient, size scope and quality to be effective				
Provide activities to prepare special populations-single parents and displaced homemakers				

### **Appendix C: Interview Protocol**

1. What percent of your job is allocated for Perkins grant administration?
2. What area/division of your institution is Perkins grant administration housed?
  - a. Why is it housed there?
3. Describe the functions, activities, etc. that are undertaken with the 5% reserved for administration.
4. Describe the process used to prioritize Perkins funds requests?
5. Describe the accountability measures used to ensure alignment.
6. What strategies/processes are used to ensure that the funds are being used for their intended purpose?
7. Does your office utilize any data in making decisions about prioritizing grant funds?
8. What are the challenges you encountered in developing the grant?
9. What worked well when developing the grant?
10. What are the challenges you encountered when implementing the Act?
11. What worked well when implementing the Act?
12. Is there anything else about Perkins funding at your institution that you would like to add?

### Appendix D: Interview Recording Sheet

Interview Question	Possible Responses					
What percent of your job is allocated for Perkins grant administration?	0-25%	26-50%	51-75%	76-100%	Other	
What area/division of your institution is Perkins grant administration housed? Why is it housed there?	Academic Affairs	Student Affairs	Disability Services	Grant Office	Finance Department	Other
Describe the functions, activities, etc. that are undertaken with the 5% reserved for administration.	Partially funds grant administrator position	Finance department handling of grant	Professional development/training	Administrative support	Other	
Describe the process used to prioritize Perkins funds requests?	Self-decided by grant manager	Decided by administrators	Committee	First come first served	Not prioritized	Other
Describe the accountability measures used to ensure alignment.	Enrollment data	Completion data	Program review	Job placement	None	Other
What strategies/processes are used to ensure that the funds are being used for their intended purpose?	Program review	Program evaluation	Requirements for funding requests	Student data	None	Other

Does your office utilize any data in making decisions about prioritizing grant funds?	Administration	Committee	Scorecards/ dashboards	Other		
What are the challenges you encountered in developing the grant?	Ambiguity of language	Consensus with others	Completion from programs	Internal politics	Campus culture	Other
What worked well when developing the grant?	Consensus with others	Identified areas of improvement	Reallocated funds	Buy-in from others	Application was approved	Other
What are the challenges you encountered when implementing the Act?	Resistance	Unable to quantify results	Discontent from other programs that did not receive funds	Not enough funds	Reporting	Other
What worked well when implementing the Act?	Affected student success	Started new programs	Innovation	Increased enrollments/ completion /TSA's	Procurement of new equipment	Other
Is there anything else about Perkins funding at your institution that you would like to add?						