

Superintendents' Perceptions of Career Development

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Dedication

This dissertation is dedicated to Kimberly, Michael, Brandon, Kristi and Kaylynn, who are now searching to find their path as they become adults.

Abstract

Perceptions held by superintendents' regarding federal and state career education policy influence the implementation of career education development activities at the local level. There are limited research resources available that explore the thoughts of superintendents regarding the issue of career education; this research project conducted a study in which five superintendents from Northeastern Minnesota were interviewed regarding their perceptions of career development and implementation practices. As leaders, superintendents influence the school curriculum, so it is important to consider their role in the process of creating, implementing, evaluating, and maintaining career education. The subjects' perceptions were studied in regards to their interpretations of career development legislation at the federal level, the state level, and the local level.

The research has found a variety of insights which has resulted in an array of implementation practices and career development advocating strategies used by current superintendents in the study. Regarding legislation, all superintendents were in agreement that the action to combine previous legislation into the Perkins IV was a good move, easier to understand and implement. Each administrator differed in their approaches regarding how they viewed career development programming; one superintendent was content with current legislation and programming as career development has advanced since this administrator's youth, whereas the other four felt more could be done. School leaders varied on their opinions regarding the success rate of the program; some leaders felt that the children were simply too young, so the current career education did not influence

future actions, other superintendents felt it was imperative and it would help ensure global competition in the workplace for our nation. All superintendents perceived career development as a benefit to the school curriculum but were concerned about the implied messages students were receiving from teachers and thought that teachers needed more training in the career development field. However, the resonating common theme of thought amongst all administrators was their concern for sustainability due to the lack of existing funding, complicated further by future potential funding cuts.

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Chapter One

Career development in the schools has a long history of federal legislation. To set the stage for this research a brief description of how career development has changed over the last few decades up to the time of the interviews for this research is provided.

Vocational training started the process which subsequently evolved into comprehensive career development programs that supported the formalization of partnerships between secondary schools and the local community. The 1960s saw the introduction of landmark federal legislation regarding vocational education in American school systems, including the 1963 Vocational Education Act and the 1969 Elementary and Secondary Act of 1965 (ESEA) Amendments. Next, in the 1970s, career education was introduced into school reform through its inclusion in more ESEA Amendments. The 1980s brought awareness of the need for technical preparation for employment to the public school system with the introduction of Tech Prep. Next, the Carl D. Perkins Vocational and Applied Technical Education Act of 1984 became the main legislation focused on improving the quality of technical education, and the problem of transitioning high school students into the workforce. The 1990s brought the School-to-Work Opportunities Act of 1994 which identified vocational education as a need for all students. School-to-Work legislation, passed in 1990, built on the partnership idea and attempted to build more community partnerships with schools. The 2006 reauthorization of the Carl Perkins Act as Perkins IV included components of the Tech Prep, School-to-Work, and previous Perkins legislation. School-to-Work focused broadly on connecting education and workforce training. Tech Prep also focused

broadly on curriculum and technical workforce skills. Perkins III focused more on Career and Technical Education courses and certifying teachers to teach these courses. Perkins IV now encompasses all of the recent initiatives bundled into one piece of legislation. The 2006 legislation, Perkins IV, incorporates Tech Prep and School to Work by requiring high schools to develop a course of study program in conjunction with postsecondary schools, and connect with businesses via partnerships.

Perkins IV requires schools to restructure the way they provide career development. In Minnesota, this restructuring has caused what was once a large Northeast Minnesota Tech Prep Consortium that supported four Carl Perkins consortia to split and restructure into two Carl Perkins consortia.

Perkins IV also requires that post-secondary education and secondary education work together more strongly than ever. One of its new requirements is that Perkins funds must be applied for by a partnership of one postsecondary institution and several high schools. These applications yield one source of funding, but the money is divided into two separate budgets meant for two separate fiscal agents into one combined plan. This model includes one advisory committee to review and contribute to the overall budget. The idea is to improve connections between high schools and postsecondary institutions.

Other new requirements of Perkins IV include creating programs of study in which the local partner college indicates courses at the high school level that will allow students to be admitted to the college program of their choice. Perkins IV also requires high schools to evaluate the high school curriculum and work to align the curriculum to support students in postsecondary achievement.

Background of the Study

Career readiness has been a focus of national policymakers because of numerous reports that affirm high school graduates are unprepared for entry-level employment (e.g., Achieve, 2010). In 2006, the National Center on Education and the Economy (NCEE) published *Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce*. The report noted American students score below students in other nations in mathematics, science, and general literacy on international academic assessments. The global market has a surplus of highly skilled workers willing to work for lower wages than American workers. Many routine jobs that were once lucrative are now automated, which is unfortunate for American youth as these types of positions were ideal for a student with only a high school education. Therefore, American youth need to improve their academic skills to compete in the global market, and educational reform is necessary (Achieve, 2010; Act, 2010; Conley, 2009; Rosenbaum, Stephan, & Rosenbaum, 2010; NCEE, 2006).

Many claim American high school graduates are not prepared for the workforce (Achieve, 2010; Act, 2010; Carnevale & Desrochers, 2003; Doty & Weissman, 1984; Feller, 2003; McWhirter, Rasheed, & Crothers, 2000; NCEE, 2006; Rosenbaum, 1996; SCANS, 1991; Stone III, 2005; Wallis & Steptoe, 2006). Wallis and Steptoe (2006) contrasted 20th century schools and 21st century needs, expressing concern that this generation is unprepared because U.S. teachers focus on unimportant details, and have failed to teach global economy skills such as: world awareness, creativity, critical reading skills, and interpersonal skills. The global economy has changed, and American public education is not producing qualified and skilled workers that can compete in it

(Achieve, 2011; ACT, 2011; Carnevale & Desrochers, 2003; Carnevale, Smith & Strohl, 2010; Feller, 2003; Friedman, 2003; Hargreaves, 2003; Symonds, Schartz & Ferguson, 2011). Friedman (2003) offers a poignant example: “. . . [O]ne of America’s premier technology companies feels compelled to meet its engineering needs by going to the broken-down former Soviet Union, where the only thing that seems to work is old-school mathematics and science education . . . ” (p. 274). Stone (2005) reports that the National Association of Manufacturers has identified areas where students are deficient when compared to workforce entry standards, which are as follows: basic employability skills, mathematics, science, reading, and comprehension. Numerous profitable manufacturing jobs remain unfilled because of the lack of skilled workers available for hire.

Whether referred to as the knowledge society, the flattening of the world, the information economy, or the global economy, economic change is occurring (Achieve, 2011; ACT, 2011; Carnevale & Desrochers, 2003; Carnevale, Smith & Strohl, 2010; DeBell, 2001; Feller, 2003; Friedman, 2005; Hargreaves, 2003; Rosenbaum, Stephan, & Rosenbaum, 2010). In the early 1900s, changes in the economy from agriculture to industrialization raised criticisms that youth were not prepared for the industrial workplace (Carnevale & Desrochers, 2003; Feller, 2003; Friedman, 2005; Hargreaves, 2003; Hoyt & Wickwire, 2001). Over the last 40 years, the economy adapted to another labor market change, from low-skill, entry-level production jobs to “knowledge jobs” (Carnevale & Desrochers, 2003, p. 228) that require advanced soft skills and cognitive skills such as (a) critical thinking, (b) collaborative problem solving, (c) cultural awareness, and (d) good people skills (Carnevale & Desrochers, 2003; Conley, 2009;

Feller, 2003; Friedman, 2005; Hargreaves, 2003; Wallis & Steptoe, 2006). These skills must be taught in high school in order for students to hold competitive jobs in the global economy (Aldeman, 2010; Carnevale & Desrochers, 2003; Feller, 2003; Friedman, 2005; Hargreaves, 2003; Wallis & Steptoe, 2006; Ward & Lee, 2002). The global economy is becoming more dynamic; workers are required to respond quickly and add value to the employer that is globally competitive. (Carnevale, Smith & Strohl, 2010; Feller, 2003; Rosenbaum, Stephan, & Rosenbaum, 2010).

The new global economy uses technology to complete many of the routine tasks that once provided wages for workers (Achieve, 2011; Carnevale, Smith & Strohl, 2010; NCEE, 2006). Manufacturing is no longer the largest U.S. industry, and by the late 20th century, service industries such as (a) transportation, (b) finance, (c) wholesale and retail trade, (d) government assistance, and (e) general services had replaced manufacturing as the most common industries by using a variety of telecommunication methods (DeBell, 2001; Symonds, Schartz & Ferguson, 2011). As a result, businesses are calling for more appropriately trained workers, yet students and parents are still offered limited information about the economic need of existing and future jobs. One effort to connect student expectations with workplace realities was the School-to-Work Opportunities Act of 1994 (STWOA). The STWOA tried to address misperceptions of the future workplace on a nationwide scale, but failed to move the nation forward. Even after several years of implementation, first-time workers were entering the workforce ignorant about workforce behaviors that are required to be successful in a global economy. The STWOA attempted to alert the U.S. education system about the incongruence that global U.S. employers face when novice employees are not prepared

to enter the workforce. Yet, the STWOA initiative ended, with its impact not having extended beyond the local level (Feller, 2003).

At one time, Northern Minnesota thrived on industries such as iron ore mines, logging, and shipping. Northern Minnesota shares a rural corner of the land next to Canada, with an international border that is north, and Lake Superior is an international shipping port to the east. However, over the last 40 years, changes in the global economy have influenced Northern Minnesota, and now the area focuses on tourism and service as its main industries.

Minnesota has a graduation rate of 91.83% for the overall population, but the breakdown by subcategory, such as race/ethnicity, shows disproportionate dropout rates (Minnesota Department of Education, *School Report Card*, 2010). Years ago, students who had difficulty with school were able to connect with manual labor jobs that provided a livable wage, but today many technological advances have changed the employment opportunities. The manual labor market with suitable wages is gone. Employers need employees who have technical skills, and can get along with others in order to keep their businesses thriving (Achieve, 2011; Carnevale, Smith, & Strohl, 2010; Symonds, Schartz & Ferguson, 2011; www.thenorthlandworks.org, June 2007). Based on the occupational data and workforce trends, 70% of Minnesota jobs will require postsecondary education by 2018 (Carnevale, Smith & Strohl, 2010).

Over the years, the Northern Minnesota Tech Prep consortium worked with the business community to learn what employers in the area wanted from students. Businesses wanted students with the interpersonal skills needed to cooperate in the workplace, as well as have proficient mathematical writing and communication skills.

Schools have created programs that expose all students to the notion of career development through career education. The Tech Prep movement focused on integrating academics and work-related skills, but this is being pushed aside. Now schools are scaling back career education programs, and the integrated approach has been losing its hold in the curriculum due to the No Child Left Behind legislation, and its increased focus on reading, mathematics, and science. It seems school leaders focus on the current legislation's emphasis on reading, mathematics, and sciences, and ignore connecting students to employment in fields that connect the subject content that the schools are teaching.

There is policy that guides career education at the federal and state levels, but districts and schools must decide how to carry it out at the local level; therefore, the implementations in individual schools within districts vary widely in their practices. Each administrator has an individual view of the importance of career development, and may vary in the perception of what aspects of career education are important. In order to gain a more complete picture of the perceptions of career education, it is important to look at the career development programs that students in high schools are experiencing, and study the perceptions of administrators who provide the leadership for implementation of the career development programming in the district.

This paper explores superintendent perceptions of federal and state career education policy, and how these perceptions influence the implementation of career education at the local level. When students leave the secondary education system, the assumption is that students have the necessary skills to enter the workforce or a postsecondary education program. While there is research describing the benefits of

career education, there are still concerns about student preparation for the next step after high school (Achive, 2011, Act, 2010; Brown & Lent, 2005; Carnevale, Smith & Strohl, 2010; Pekel, 2007; Rosenbaum, Stephan & Rosenbaum, 2010; Symonds, Schwartz & Ferguson, 2011; Turner, 2005). This research is a qualitative case study to focus on the perceptions of superintendents in an effort to understand the development and implementation career education in several school districts in Northeastern Minnesota. School counselors, organizational behavior economists, and counseling psychologists have completed research describing scientifically proven interventions that promote career development during elementary and secondary education, yet many of the proven interventions are not implemented in school curriculum. Therefore the next step is to understand the perceptions of school leaders; explicitly the superintendents and their perceptions of how these proven interventions are or are not incorporated into the secondary academic curriculum.

It is important to examine current perspectives on career development so that schools can better prepare students for the global economy that our students live. This chapter reviews (a) the history of career education, (b) how career education has become integrated within the school system, and (c) the influence of career education interventions within the school setting.

Problem Statement

There is a lack of research regarding superintendents' perceptions of federal and state career education policy, and how these perceptions influence the implementation of career education at the local level.

Purpose Statement

The purpose of this qualitative study is to describe superintendents' perceptions of career education at the local level and how these perceptions influence the implementation of federal and state career education policy.

Research Questions

1. What are superintendents' interpretations of the current career development legislation at the federal level and at the state level?
2. What are superintendents' perceptions of the current career development curriculum in high schools?
3. What are superintendents' perceptions of the strengths and weaknesses of a high school career development program?
4. What are superintendents' perceptions of students' career knowledge prior to and after their engagement in a high school career development program?
5. Do superintendents perceive a benefit to integrating career development into academic curriculum?

Limitations

Northern Minnesota is a rural site and this study will examine the perceptions of a small sample of superintendents involved with career development in Northern Minnesota. Creswell (1998) identifies limitations of interviewing as a methodology as only perceptions of the selected interviewees are reported; information is provided for a designated place only and not the population in general. Limitations include that information can only be provided about specific places. The researcher's presence may bias responses, and research subjects are not equally articulate and perceptive, so the

quality of the information they provide to the researcher may vary. Finally, the limitation of perceptions must be addressed such as the perceptions of selected individuals (within a limited timeframe and a designated school district) are not representative of the general population (Creswell, 2003).

Advantages

Creswell (1998) identifies as one of the advantages of interviewing: the value of participants and the historical information they can provide. This method also allows the researcher to control the line of questioning so correlations can be observed.

Assumptions

The process of interacting with others influences the superintendents' leadership. Further, humans construct meaning as they engage and interact in the social world. Therefore, humans make sense of their world based on their previous experience historically and socially (Creswell, 2003).

Most of the literature on the subject of career development dates from the turn of the 20th century, and focuses on a Western model of career development that connects employment and education. Career development literature in the U.S. disregards other cultures, and other ways of thinking about career development (Dumont & Carlson, 1995; Menninger, 1964). Western society, using a modernist paradigm, associates work with a way of life. One view of work within the Western society in a modernist paradigm is learning to accept responsibility, and find motivation in work as a means to an end as opposed to expressing defiance towards authority and failing to work. Western literature describes work as offering unconscious motivators such as (a) finding approval, (b) satisfying relationships, (c) independence, and (d) a feeling of

connectedness to society in general (Menninger, 1964). Therefore, this research has a modernist bias simply because the career education literature in the U.S. originated within this paradigm.

Definitions of Terms

In the context of this study, *career education* is the curriculum used to teach concepts of career awareness, exploration, preparation, and *career development* is the application of skills and knowledge that are learned to design a path to follow and achieve the end goal of a specific career. In the framework of this study the following terms will be defined as follows:

Career Development: The process through which individuals come to understand their place in the world of work. People develop and identify career choices through a continuum of career awareness, exploration, preparation, and application (MDE, 2010).

Career Education: The process of helping individuals acquire and use attitudes, skills, and knowledge needed to develop and manage a reasoned, socially purposeful, and personally valued life pattern in relation to work of whatever kind (Minnesota Rules 3505.1000 Subp. 5, MDE, 2010). Many schools implement career education through a separate career course or an integration of career development curriculum into an English or Social Studies course.

College and Career Readiness: Postsecondary and Workforce Readiness includes the knowledge and skills that high school graduates need in order to successfully complete credit-bearing coursework at a [two- or four-year] college or university and/or to embark successfully on a career-track employment position (i.e., one that pays a living wage, provides benefits, and offers clear pathways for advancement through further

education and training) (The Postsecondary and Work Force Readiness Working Group, June 2009).

Carl D. Perkins Vocational and Technical Education Act of 2006 (Perkins IV): Perkins IV stresses accountability more than previous versions of the law and attempts to connect high school reform, career pathways, and American competitiveness (MDE 2010).

Perception: is “the subject as the perceiver, the act of perceiving, and the content of the perceived. The perceiving subject, from an embodied location, approaches the world as a lived horizontal field. The act of perceiving unites the subject with the perceived. And the content of the perceived, which results from the act, affects the subject’s hearing in the world. Perception is therefore a reflexive, integral whole, involving the perceiver, the act of perceiving, and the content of the perceived” (Denzin & Lincoln, 2005, p. 1007).

Transition: The process of secondary transition planning involves preparing all students for life after high school. This includes making plans for postsecondary education or training, employment, as well as independent living (MDE, 2011). Transition activities are intended to prepare students to move from the world of school to the world of adulthood (NICHCY, 2010).

In summary, students in the U.S. are not prepared to compete with students from other nations in the global economy (Achieve, 2010; NCEE, 2006; SCANS, 1991; Symonds, Schwartz & Ferguson, 2011; Wallis & Steptoe, 2006). The economy is changing, and American public education is not keeping up with the education of youth in other countries regarding work skills is the main argument (Carnevale & Desrochers,

2003; Friedman, 2003; Hargreaves, 2003; Stone III, 2005; Symonds, Schwartz & Ferguson, 2011). The federal government has stepped in occasionally to support education reform with limited success (Feller, 2003; McWirter, Rasheed, & Crothers, 2000; Perkins Act of 2006; School to Work Opportunities Act of 1994). Employers are saying that high school is a good start, but the social skills needed to get along with others, as well as other skills are lacking in high school graduates (Achieve, 2011; Carnevale & Desrochers, 2003; Feller, 2003; <http://www.thenorthlandworks.org>, June 2007; Symonds, Schwartz & Ferguson, 2011). To understand this issue, the next chapter provides an overview of the history of career education, and describes how career education has become a component of the public school system.

Chapter Two: Review of the Literature

The gatekeepers of education have included career education and career development in every revision of secondary education curriculum expectations for over 100 years, hence the long history of federal legislation behind career education. Vocational training was the original inspiration for career education in the schools, which subsequently evolved into a comprehensive career development program that supported the formalized partnerships between secondary schools and the local businesses or industries in the community. School-to-Work legislation, passed in 1990, built on the partnership idea and attempted to build more school/community partnerships. In 2006 Perkins IV (2006) introduced a new term, *Program of Study*, that was defined by a secondary and postsecondary partnership that incorporates career education with rigorous content, aligned with challenging academic standards, that allow secondary students to participate at the postsecondary level, to acquire postsecondary credit and work concepts towards an industry-recognized credential or a baccalaureate degree (Lewis, Kosine, 2008). The Perkins IV (2006) legislation incorporates Tech Prep and School-to-Work by requiring high schools to develop a Program of Study curriculum in conjunction with postsecondary schools that connect with businesses via partnerships.

As leaders, superintendents influence the school curriculum. Superintendents' perception of career development influences the direction of the secondary education. The United States has shifted from an industrialized nation to a global economy; secondary education is seeing the influence of this change in perceptions at the federal

level by the changes in legislation, such as the new Programs of Study now required by the most recent Perkins revision.

Perceptions of career development have varied and changed over the years. Career education has a history in federal policy beginning with the Morrill Act of 1862 that focused on postsecondary programs and the Smith-Hughes Act of 1917 that focused on secondary-age youth. Both policies emphasized training students for entry-level positions in the workforce in the region in which they lived. Today, postsecondary programs are available that focus on advanced training to enter mid-level employment positions in the region where the postsecondary facility is located (Perkins Act, 2006). Today is an extension of the trend begun by these laws that started to connect education with employment opportunities many years ago that linked students to a beginning wage; now education is connecting students to a elevated wage above entry level.

This literature review focuses on career education. The first section presents the legislative foundation of career education. The second section provides an overview of the history of career education in the United States. The third section explains how career education was integrated into the origins of secondary school counseling. The fourth section discusses the influence of school-based career development initiatives. The final section synthesizes the research presented in this literature review.

The Legislative Foundation of Career Education

Throughout the history of general education, prominent educational thinkers also acknowledged the need for vocational education. Krug (1972) wrote about the Cardinal Principles Report not being taken seriously and change not happening toward what the report advocated for comprehensive high school. The founding fathers did not require

that schools focus on scholarship, culture, entrance requirements for advanced schooling, or the ability to support oneself. However, the Cardinal Principles Report did spotlight seven intended purposes including (a) health, (b) citizenship, (c) worthy use of leisure, (d) worthy home membership, (e) ethical character, (f) vocation, and (g) command of fundamental processes. As the debate continued on how to transform education, Hitler invaded France and President Roosevelt involved the National Defense Advisory Commission, whereby the Commissioner of Education took responsibility for job training in the schools. In summary, the success of job training in the schools during another war was one of the revitalizing influences that pushed vocational education back to the front of education (Krug, 1972).

Historically, considerable societal changes were taking place following the Civil War. These changes were the antecedents of the Progressive Era that started in the late 1800s and continued through the early 1900s (Bohan, 2003; Button, 1989). This was also a time when people worked to improve the quality of (and access to) education (Bohan, 2003). The 1890s through the 1930s, school enrollment significantly increased; new kinds of students were attending public schools, and these students needed skills to participate in the industrial economy of the time. As enrollment increased through the late 20th century, the high school became a reflection of the increasingly complex technical, knowledge-driven society that was emerging (Symonds, Schwartz & Ferguson, 2011; Sewall, 2001).

Education critics were looking at ways to improve education in this increasingly complex, urban, and industrial time (Button, 1989). One such effort came from the National Education Association in cooperation with the American Historical

Association (Bohan, 2003; Button, 1989). In 1892, the National Education Association wanted to align high school and college curricula (Bohan, 2003; Button, 1989; Sewall, 2001). They convened an illustrious group of educators, and supported nine subject area conferences under the commissioned group called the Committee of Ten on Secondary School Studies (Sewall, 2001).

The purpose of the recognized Committee of Ten was two-fold: first, to describe the state of secondary education, and second, to recommend standards for secondary schools (Bohan, 2003; Button, 1989; Sewall, 2001). The Committee of Ten focused on social studies and new teaching methods (Bohan, 2003). By December 1893, a completed report, that was considered progressive for the time, recommended providing an academic education to all, as opposed to just the ones that could afford education in order to make higher education accessible to more people (Bohan, 2003; Button, 1989; Sewall, 2001). According to Sewall (2001), the Committee of Ten was progressive in its thinking that educators needed to change the way they teach, and leave behind the classical languages and religion that had dominated the curriculum since the 17th century. Compared to present day education curriculum expectations, the curriculum supported by the Committee of Ten would be considered narrow, but the spirit of the committee at the time was progressive (Sewall, 2001). The Committee shared a democratic attitude that education was preparation for college and overall life. All students were entitled to the best teaching methods, including educating the mind by teaching individuals to think (Bohan, 2003). The Committee of Ten supported multidisciplinary and cross-curricular learning with articulated content, objectives, methods, innovations, and ideals for America's high schools. The themed curriculum

was founded on the concept that all students should possess core knowledge in a democratic society, and engage in the same general course of study to the best of their ability (Sewall, 2001).

The report by the Committee of Ten affected the high school in three ways. First, this document ended what was called *the classical secondary education curriculum*, as well as rescinded classical languages and religion that was out of touch with the economy and new educational research. Second, this report highlighted the four core high school academic subjects: (a) english, (b) math, (c) history, and (d) science. These genres emphasized scientific inquiry and allowed for differences in student abilities. Third, the report provided the framework for college preparatory programs that were in place until the 1970s (Sewall, 2001).

The early 1900s was the beginning of implementing the new curriculum as recommended by the Committee of Ten in the public school system, and the end of the traditional curriculum. The new programming was intended to create college-bound citizens. Change was coming about again with the viewpoints of David Snedden and John Dewey, pointing the way to a more progressive education system. Next, the Vocational Bureau was founded by social reformer Frank Parsons, with the intent of providing information by trained staff, applying the scientific method to Vocational Guidance. The term *Vocational Guidance* was coined by Parsons in 1908, and marks the publication of his classic book called *Choosing a Vocation* (Savickas, 2009).

At this time, some felt that human resources were being wasted because of people entering vocations that were not right for them, and that the inclusion of vocational direction in education would be one step in the process to lead people into

vocations that were right for them (Snedden, 1910). David Snedden was one of the early vocational education leaders in the United States. In 1914, the National Education Association published Snedden's article "*Fundamental Distinctions between Liberal and Vocational Education*" which was reprinted in *Curriculum Inquiry* (1977). Snedden (1914) proposed that vocational education is different from the general education path, and required varying methods of instruction. He noted that schools do not provide vocational training (i.e., training for blue-collar jobs), but that this was the task of vocational schools or professional schools to provide training for vocations (Snedden, 1914). Snedden (1914) agreed that schools train for some professions; these could be identified as white-collar work. In addition, he stated that the goals of education are vague, and do not guide students in the choice of employment (Snedden, 1916).

As the early 1900s came, challenges to the standards set by the Committee of Ten came from three forces: in 1916, from Dewey in his book, *Democracy and Education*; in 1918, the Commission on the Reorganization of Secondary Education; and finally, continuing social and economic changes during the early decades of the 20th century (Sewall, 2001). The National Education Association perceived a need for the reorganization of the secondary school curriculum due to three important changes in society (Gagne, 1977). During this time of change, patterns of living and working were becoming more industrialized. First, by the 1890s, secondary education started to see rapid growth and changes in the secondary education population (Bennett, 1972), and second, educational theory was changing (Gagne, 1977). In addition, between 1905 and 1920, three social movements were influencing the American Education Scene. First,

the Social Efficiency movement emphasized social processes, and that the tools to create an efficient society are thought and intelligence. Snedden and Dewey were proponents of this movement. Next, *Scientific Management*, which arose out of the work of Frederick Taylor, applied time management concepts from business to education. Subsequently, the vocational movement can be traced back to 1876, when the industrial ability of the United States was challenged by Russia at the Philadelphia Centennial Exposition. The Russian exhibit demonstrated to the West that Russian educators had advanced in organizing an educational manual training program (Bennett, 1972). During this time, 29 states sponsored industrial education. In 1914, the Commission on National Aid to Vocational Education was formed. Vocational education influenced education through the governor's commission in Massachusetts called *Douglas's report of 1905*, which focused on dropouts without adequate preparation for life. This report is claimed to have impacted education across the United States by highlighting the vocational movement (Bennett, 1972).

During the early 1900s, there was a call for change in secondary education to meet diverse needs, not just the needs of college-bound students (Bennett, 1972). The Committee of Ten and several other committees leading up to the Commission on the Reorganization of Secondary Education (C.R.S.E.) helped create the foundation of education curriculum as it exists in American schools today (Bohan, 2003). Five years later, after Snedden's comments about the lack of focus in education, the National Education Association heard the Report of the Commission on the Reorganization of Secondary Education in July 1921. The Commission on the Reorganization of Secondary Education was organized in 1913, by order of the National Education

Association Committee on the Articulation of High School and College (Bennett, 1972). Sixteen of seventeen committees were responsible for addressing secondary school aims, methods, and course content; the seventeenth was the overseeing committee and evaluated the work of other committees, as well as outlined the fundamental principals to direct secondary education. The commission consisted of a reviewing committee and sixteen subcommittees that represented thirty states (Owen, 1921). The reviewing committee provided the fundamental principles to guide the reorganization of secondary education, which are published in the *Cardinal Principles of Secondary Education Bulletin*, and critiqued the reports of the subcommittees. Several reports were published over the years. In particular, the 1916 report was known for shaping the new field of social studies.

Three approaches were identified for curricular development: (a) subject-centered, (b) society-centered, and (c) individual-orientation. Seven recommended objectives were suggested for inclusion in the curricular development: (a) health, (b) command of fundamental processes, (c) worthy home membership, (d) vocation, (e) citizenship, (f) worthy use of leisure, and (g) ethical character. The committee also addressed the role of secondary education, interrelation of objectives, recognition of objectives, recognition of objectives in curricular planning, and recognition of objectives in organizing the school. The recommendations were to change eight years of elementary education and four years of high school to six years elementary and six years secondary, with six years organized into a junior and senior period, and all three levels should be based in seven objectives. The recommendations demonstrated the desire to meet the needs of the individual as well as society. The organization of

secondary schools recommendations were a comprehensive secondary school, with differentiated curricular tracks based on vocational interest and needs, a school guidance program, a wide range of core subjects, electives, different curriculum tracks, and adapt curricular content and methods to student interest, needs, and capacity. High school became redefined, and recommendations were made to modify college entrance requirements, so high schools could adjust to meet the needs of college-bound and non-college-bound students. The committee's recommendations were based on two beliefs (a) high school should serve needs of all students regardless of background or destination, and (b) high school should have two functions which would include both a specialization focus on the individual, and a unification focus on the individual and society. Clarence Kingsley was the head of the commission, and was influenced by people of the time, such as Dewey, Snedden, Kingsley, Spencer, and Horace Mann (Bennett, 1972).

The Report of the Commission on the Reorganization of Secondary Education by William Owen, Acting Chairman (1921), identified American high schools as unique in comparison with secondary education in other parts of the world because they are a reflection of the ideals of American life which incorporates democracy (Owen, 1921). The Cardinal Principles of Secondary Education were the official recommendations of the Commission on the Reorganization of Secondary Education, and they are noteworthy for three reasons: (a) the importance of education in the United States this report filled the gap between "moderate revision" (1890-1905) which had passed and the future progressive education (1919-1950's) by summarizing the traditions and anticipating the future of education, (b) the reorganization of curriculum planning from

focusing on the individual to more of a social process, (c) they address educational issues that persist today such a drop-outs, and individual differences (Bennett, 1972).

The Cardinal Principles of Secondary Education summarized past traditions, identified contemporary trends, and anticipated future education development (Bennett, 1972).

There are four items of curricular significance in the Cardinal Principles which includes

- a shift away from individualism and focus on social processes;
- a process for curriculum planning to include objectives, activities, educational experience, and evaluation;
- a focus on controversial issues of the time, such as (a) the dropout rate, (b) individual differences among students, (c) the organization of K-12 education, (d) general secondary education, (e) vocational education and guidance, (f) differentiated curriculum, (g) comprehensive versus specialized high schools, (h) curricular planning committees, and (i) administrators' role in curricular development; and
- a clarification of educational objectives which brought out the question "Is the school responsible for all of the major areas of living?" (Bennett, 1972, p. 3).

In summary, although there are many perceptions of how the reform efforts were implemented, the bottom line is that career education was written into each reform document since the late 1800s.

History of Career Education

Although many consider contemporary career education to have developed in the 20th century, similar principles that Parsons (1909) identifies can be traced to 15th century Italy and Spain, and basic elements of Parsons' theory can be seen in 10th

century Iraq, and the basic elements of vocational psychology (connecting a person to the right job) can be traced to the ancient Egyptian, Greek, and Chinese civilizations of the first millennium BCE (Borow, 1964; Dumont & Carlson, 1995). The beginnings of career education have also been dated from the publication of the book *Vocophy* (1881), by Lysander Richards, who proposed a new profession of “vocophers” who were trained to assess the abilities and interests of individuals and connect them to the requirements of various occupations (Borow, 1964; Brewer, 1942; Hershenson, 2006).

This section summarizes the events that gave rise to career education as an intellectual component of education to enhance our understanding of the foundations of career development. What is now called career and technical education originated from the notion that to be a successful contributing community member, people should study their strengths and find employment that matches their abilities (Parsons, 1909).

Parsons career education process included seven components. First, a client identifies personal data on paper with a counselor, and then completes a self-analysis of influences on choice of life work. Then, the client makes a vocational choice under the guidance of a counselor. Once a choice is made, the counselor analyzes and evaluates the decision. Next, the outlook of the vocational choice is studied along with options for training in the chosen field and employment opportunities. To wrap the process up is advice and general assistance to fit the client into the chosen field of employment.

Later, Snedden and Prosser viewed Parsons’ career education process through a broad political policy lens and gave little thought to the underlying learning theory that supported career and technical education (Doolittle & Camp, 1999). Focusing on societal change that allowed all individuals to thrive by finding employment based on

their interests and public education to work towards industrial reform (Camp & Hillison, 1984; Doolittle & Camp, 1999). John Dewey was opposed to the political position of Snedden, and their debates within the educational community articulated the tension between educating for the status quo (Snedden) and educating for the future (Camp & Hillison, 1984; Dewey, 1916; Doolittle & Camp, 1999). Dewey focused on the way things could be in the workplace, and Snedden was a powerful voice for the social efficiency principle (Camp & Hillison, 1984).

During this time, the economy was moving from agriculture to industry, and employers needed employees with general employment skills (Pope, 2000). The conditions of the late 1800s that evolved into industrialization, urbanization, ideological reform, and scientific change were important to the concept of career education (Borow, 1964). In response, the progressive movement in education, the government, and the public school system began to address the changes in the economy from agricultural to industrial (Pope, 2000).

Career development is looked at through different cultural, economic, and political perspectives each time the concern has arisen to change education to better educate children for the next generation's societal needs. Career development has typically been addressed via federal policies that support economic development and education policy. At the federal level, the importance of career development became obvious and links were developed with postsecondary education connecting to secondary education. The first postsecondary career development program that connected academics and employment was the Morrill Act of 1862 (Doty & Weissman, 1984; Lee, 1963).

The late 1800s and early 1900s saw numerous changes occurring in industry and technology, as well as an increase in the urban population. Consequently, apprenticeship programs were suddenly inadequate and obsolete (Doty & Weissman, 1984; Pope, 2000). In 1902, President Theodore Roosevelt spoke on the topic of vocational education to America and emphasized that America was internationally competitive with business ability and skill, but also noted that American public education was failing to provide industrial education for the average American worker (Smith, 1999). Educators, industrialists, and social reformers united, and Senator Jonathan P. Dolliver approached Congress in 1910. He proposed a bill to provide vocational education in the nation's secondary schools (Doty & Weissman, 1984; Smith, 1999). Unfortunately, Congress adjourned without taking action, but Representative Charles R. Davis kept the bill alive, and the result became the Smith-Lever Act of 1914, the precursor to the Smith-Hughes Act of 1917 (Smith, 1990). The Smith-Hughes Act was the first secondary career education program recognized by federal legislation. It focused on meeting the needs of youth in high school while connecting youth to work (Camp & Hillison, 1984; Doty & Weissman, 1984; Kim, 1982; Smith, 1999).

Modern career development literature begins with Frank Parsons and his three colleagues (a) Pauline Agassiz Shaw, (b) Meyer Bloomfield, and (c) Ralph Albertson. This group developed and expanded what is now known as career counseling (Borow, 1964; Heshenson, 2006). Shaw, Bloomfield, Albertson, and Parsons were part of the social reform movement around the beginning of the 20th century. Each contributed differently to the movement. Shaw contributed funding and foresight. Shaw developed

an interest in early education after five children of her own. Then, after opening 31 free kindergartens and eight day nursery schools in Boston, her interests turned to the settlement houses as a provider of education. One of the settlement houses she opened was the Civic Service House. Shaw hired someone that impressed her with his quality of work with young men as the director, Meyer Bloomfield. Shaw gave the directive to Bloomfield for the Civic Service House to focus on educating adult immigrants.

It is said that Bloomfield and Parsons connected at Boston University Law School. However, it was Ralph Albertson, one of the teachers at the Civic Service House, who connected Parsons with the Civic Service House. While at the Civic Service House in 1905, Parsons created an education program modeled after a program started in England. The program was so well received that Bloomfield encouraged Parsons to write a proposal to create a Vocational Guidance Bureau for youth, and to present the guide to Shaw. Pauline Shaw funded the proposal, and Parsons became the director of the Vocational Bureau of Boston (Heshenson, 2006).

Parsons (1909) is identified as the first person to focus on youth career counseling, and is frequently named as the *father of vocational/career guidance* in the literature (Aubrey, 1977; Capuzzi & Gross, 1991; Engels, Minor, Sampson, & Splete, 1995; Hershenson, 2006; Parsons, 1909; Pennington, 2011; Peterson, Sampson, & Reardon, 1991). He designed an organized structured process for career decision-making and transitioning from school-to-work, which included (a) self-understanding, (b) occupational knowledge, and synthesizing the two (Capuzzi & Gross, 1991; Peterson, Sampson, & Reardon, 1991; Pope, 2000; Worthington & Juntunen, 1997).

In 1916, Mary Woolman published an article calling attention to the grassroots labor movement, which supported the Smith-Hughes Bill, because millions of teenagers (14-16-year-olds) were entering the workforce without skills and perpetuating the lifestyle of drifting from one job to another job in quick fashion. (Smith, 1999; Woolman, 1916). At this time, there were no private or public training programs to increase industrial skills (Smith, 1999; Woolman, 1916). As a result, federal funding was being sought for schools, through the 1914 Smith-Hughes Act, to provide specialized training that was flexible around work schedules, so teenage workers, age 14 and older, could attend before, during, or after work (Woolman, 1916). Finally, after years of negotiating (in late 1917) the landmark Smith-Hughes Act was finally passed, and became the first federal legislation for vocational education, later retitled as the Smith-Hughes Act of 1917 (Camp & Hillison, 1984; Doty & Weissman, 1984; Kim, 1982; Smith, 1999). The Smith-Hughes Act of 1917 required 50% of the public school instructional time for all youth, age 14 and older, to be spent in general academic education, and 50% of students' time to be spent in training in agriculture, trades, and industry (Doty & Weissman, 1984). Since the Smith-Hughes Act of 1917, the federal government has played a large role in shaping vocational education (Barton, 1994; Borow, 1964; Smith, 1999).

Leadership in the field of vocational education also came from David Snedden and his student, Charles Prosser. Snedden grew up in poverty and continued his education through doctoral work that focused his attention to the importance of vocational education in the secondary education system. Prosser was influenced by his teacher Snedden about the importance of vocational education. Prosser connected with

Senator Hoke Smith of Georgia. Prosser's ability to write a vision for vocational education resonated with legislators. As a result, the Smith-Hughes Act was largely influenced by Prosser's writing, which illustrates his important role in the shaping of career education (Camp & Hillison, 1984; Doty & Weissman, 1984). Snedden completed doctoral work at Columbia University, which influenced his views regarding the importance of vocational education. He was also an advocate of social efficiency, and believed that schools should prepare students for occupations that matched their strengths. Prosser was the first to articulate the concern of vocational education not developing to its full potential if it became just another concern of the overburdened public education system versus a dual system of education (Camp & Hillison, 1984; Doty & Weissman, 1984).

Simultaneously, John Dewey (1916) articulated how education and work are connected; the combination of both demonstrates to students the value of education as well as how knowledge, leisure, and work activities are connected to both education and vocations simultaneously. He voiced an opinion opposite of Prosser, asserting that public education should not train for the status quo of employment as it is today, but should instead educate students for jobs of the future during elementary and secondary years (Camp & Hillison, 1984; Dewey, 1916; Stone III, 2005). Dewey envisioned public education leading the way in industrial reform to prepare workers for the future by teaching general academic skills in the public classroom (Camp & Hillison, 1984; Dewey, 1916; Stone III, 2005). Prosser viewed vocational education as focused on employment only, and public education as teaching more interpersonal qualities for the social good (Doty & Weissman, 1984).

In contrast, during the late 19th and early 20th centuries, economists and leaders in the field of vocational education viewed vocational and academic education as forums for teaching general skills to develop trainable workers for a variety of fields, which leaned towards Dewey's educational philosophy (Doty & Weissman, 1984). This discussion between economists, educators, and politicians resulted in the integration of academic and vocational education based on the idea that the education system would be able to influence the economic conditions of society more quickly and efficiently to prepare workers for mobility and job change (Doty & Weissman, 1984).

At this point in the history of career education, a transition was occurring and career education was receiving greater government attention. More legislation passed connecting school guidance programs with school-to-work programs (Joyal & Carr, 1944; Kim, 1982; Maddy-Bernstein, 2000). The grassroots efforts that resulted in the Smith-Hughes Act of 1917 shifted from training for specific vocations to generalized training to meet the economic conditions of the future. This shift continued until the creation of federal legislation for career education in 1971 (Hoyt, 2005). In order to understand this transition, the next section discusses career development and the relationship of Career and Technical Education to school counseling.

The Beginning of Career Education and School Counselors

The first school guidance programs, which started in the beginning of the 20th century, focused on *vocational guidance* which matches people to jobs (Maddy-Bernstein, 2000; Marland, 1974). The first school counselor program in the public school system was created by Jesse B. Davis, who counseled high school students regarding their career plans from 1898 to 1907 (Aubrey, 1977; Hershenson, 2006;

Miller, 1964). Jesse B. Davis is considered the first school counselor in the public school system. From 1898 to 1907, he worked with high school students in Detroit to develop career plans (Aubrey, 1977; Hershenson, 2006). Then, as a principal in 1907, Davis created the first guidance curriculum, which was accomplished by integrating guidance and occupations one day a week in English class (Aubrey, 1977; Hershenson, 2006).

School-to-work programs began to gain momentum with the passage of the George-Deen Act of 1936, which allowed distributive education in high school classrooms that was provided by federal funds to support the high schools to implement programs that incorporated work and school (Joyal & Carr, 1944; Marland, 1974). The George-Deen Act allowed students to attend school part-time and work part-time (Joyal & Carr, 1944; Marland, 1974). Work was starting to be viewed as an essential ingredient in the education of all students (Joyal & Carr, 1944).

By 1941, the country was moving in the direction of work as a regular component of high school education. In the three years after Pearl Harbor, high school enrollment dropped dramatically, as youth took over the civilian jobs that were left behind by those who had gone to war (Joyal & Carr, 1944). However, government leaders encouraged youth to focus on school because the national welfare depended on educated youth entering the job market (Joyal & Carr, 1944).

The George-Barden Act provided the first funds for vocational research and development (Kim, 1982); it was not until the George-Barden Act of 1946 that funding became available for guidance, teacher training, and research (Kim, 1982; Marland, 1974). The George-Barden Act also allowed Harry Jagar (the head of the U.S.

Occupational Information and Guidance Service) to pave the way for school counselor programs at the graduate level, by supplying funds for counselor training to institutions that provided graduate level training (Hoyt, 2001). During the 1940s and 1950s, school guidance became an established part of pupil personnel services (Gysbers, 1997).

The 1960s saw a resurgence of interest in transitioning students to adult life smoothly by connecting education and work (Barton, 1994; Evans & Burck, 1992; Kenny, Blustein, Haase, Jackson, & Perry, 2006; Lent, 1996; McWhirter, Rasheed, & Crothers, 2000; Stone III, 2005). In January 1961, President Kennedy took office and faced the task of reducing the unemployment rates in the U.S. (Herr, 1974). He appointed a group of consultants to make recommendations regarding vocational education (Herr, 1974). In the meantime, Congress passed legislation regarding the reduction of poverty, such as (a) the Area Redevelopment Act of 1961, (b) the Manpower Development and Training Act of 1962, and (c) the Economic Opportunity Act of 1964, which saw education as the cutting-edge means to end poverty (Herr, 1974).

One recommendation of Kennedy's vocational education consultants panel (appointed in 1962) pertained to school counselors; it was recommended that school counselors understand the complexities of the world of work (Herr, 1974). The field of guidance and counseling needed to be modified in elementary and secondary education for all students to place stronger emphasis on occupations and realistic employment. This and other recommendations from the panel were incorporated into the landmark legislation that initiated research and development in vocational education, the Vocational Education Act of 1963 (Herr, 1974; Kim, 1982). A major paradigm shift

occurred with the Vocational Education Act: it focused on the “skills needed by people to assure their own welfare” (Herr, 1974, p. 40) instead of the needs of employers for skilled labor as the previous Smith-Hughes Act of 1917 did (Herr, 1974).

Title V-A of the National Defense Education Act was amended in 1964 to fund counseling programs in elementary schools and two-year colleges (Herr, 1974). The major intent was for guidance and counseling programs “to help students, directly and through their parents and teachers, to achieve educational and *career development* commensurate with their abilities, aptitudes, interests, and opportunities” (Herr, 1974, p. 41, “emphasis in original”).

The 1960s saw the beginnings of efforts to prioritize equal access to education for all students. Focus on providing access to free and appropriate public education for all students started in 1965 with the Elementary and Secondary Education Act of 1965, P.L. 89-10. In 1967, another panel was appointed to study the status of vocational education (Herr, 1974). It proposed school counseling reform to include education regarding the world of work for all students, not just some students (Herr, 1974). The panel also made 14 recommendations that became the foundation for what was to become career education through the Vocational Education Act Amendments of 1968 (Herr, 1974).

Beginning in the mid-1960s, school guidance programs started to generate comprehensive career development programs (Gysbers, 1997). During the same time frame, there was a focus on professional counseling as well as the connection between employment counselors and school counselors (Herr, 1974). In 1969, the Elementary and Secondary Education Act of 1965 was amended to provide for guidance and

counseling for all students. In March 1969, Edwin Herr introduced the idea of career development, and used the term *career education* to describe the formal education process in a paper presented at a national vocational education conference, proposing that education focus on a career development theme (Baker & Taylor, 1998).

In 1971, using discretionary money, a national effort to help each state develop and implement a state career education model began (Gysbers, 1997; Hoyt, 2005; Marland, 1974). The concept of career education was still developing. The next step was to establish a new term for career education: *career development*, which occurred via Section 406 of the Elementary and Secondary Education Act Amendments of 1973, another piece of federal legislation (Hoyt, 2005). A statutory base for career development effectiveness was set within the Career Education section of the ESEA Amendments of 1974, but this legislation neglected funding for program implementation (Barton, 1994; Hoyt, 2005). The Elementary and Secondary Education Act of 1974 was the official law that arranged funding to establish the Office of Career Education in the U.S. Department of Education (Hoyt, 2005). The Career Education Incentive Act of 1978, P.L. 95-207, was the next legislative act pertaining to career education, but again, there was no funding allocated for implementation of career development programs (Barton, 1994). Federal legislation now set the stage for the career education movement (Hoyt, 2005; Reardon, 2005).

On January 21, 1971, Dr. Sidney Marland, Jr. (the U.S. Commissioner of Education) introduced the term *career education* at the National Association of Secondary School Principals annual conference (Baker & Taylor, 1998; Barton, 1994; Evans & Burck, 1992; Marland, 1974). Marland's vision of career education as school

reform focused on career education becoming a motivational incentive to improve student learning and practice good work habits within the classroom setting (Hoyt, 2005). Marland has been dubbed the father of career education because of his work related to education.

Early in 1974, Kenneth Hoyt, one of the founders of career education, became the driving force of federal efforts behind career education (Baker & Taylor, 1998; Barton, 1994). Hoyt (1977) established the most stable definition of career education, according to Baker & Taylor (1998), which is proclaimed as “a process of concentrating educational and community efforts on interventions targeting children and adolescents that will aid in the acquisition and use of knowledge, skills, and attitudes for making work meaningful and satisfying”(p. 376). Due to Hoyt’s efforts, a small amount of federal funding became available during the late 1970s for career development programming (Barton, 1994). Unfortunately, in 1981, the Career Education Incentive Act of 1978, P.L. 95-207 was repealed without explanation (Barton, 1994; Hoyt, 2005). In addition, other policy programs were picking up on the career concept at the high school level. The 1970s were known to have emphasized procedural safeguards for students that needed additional educational services with the Education of the Handicapped Act, P.L. 91-230 and subsequent amendments.

By the 1980s and 1990s, the career emphasis was fully integrated into school guidance, and a resurgence of interest in a state model of career guidance emerged, now known as the *Comprehensive Guidance Program* (Gysbers, 1997). At the close of the 1980s, Dale Parnell, at the time who was president of the American Association of Community and Junior Colleges, introduced *Tech Prep* to the secondary and

postsecondary education systems. Briefly, Parnell's idea of Tech Prep was to connect two years of high school that was linked with two years of community college, which would result in an Associate Degree from the community college for the neglected majority or the non-college bound students transitioning from school-to-work. Tech Prep was one of the efforts to reengage academic education with vocational education, which had become more oriented on training and less on academics (Barton, 1994). Tech Prep was founded to address the neglected majority, which was one of the weaknesses of the program, because it did not meet the needs of all students. During the 1980s, the primary legislation addressing the needs of education and workforce preparation for all students was the Carl D. Perkins Vocational and Applied Technology Education Act of 1984 (Ruthland, Jurgens, & Ballard, 2003). During the 1990s, the Individuals with Disabilities Education Act of 1990, P.L. 101-176, began the focus on accountability and transition into employment for students in special education.

In 1991, the Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) focused on the need for students to learn decision-making, reasoning, and problem-solving skills (Engel, 2000). The overall result of the SCANS (1991) report turned out to be a national priority on educating the basics of problem-based learning; thus, how to collect data, brainstorm solutions, evaluate solutions, implement solutions, and assess the results were important skills to teach (Engel, 2000). Ideally, problem-based learning was supposed to model the future workplace environment for students by merging academic and vocational education (Engel, 2000). This notion also supported the published report from the Commission on the Skills of the American Workforce

(1991) that identified American youth as lacking employment skills (McWhirter, Rasheed, & Crothers, 2000; Worthington & Juntunen, 1997).

In response to SCANS (1991), the early 1990s saw several pieces of legislation linked to career education and transition, such as the School-to-Work Opportunities Act (1994), the Goals 2000: Educate America Act, and the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (McWirther et al, 2000). The Perkins legislation was reauthorized in 1990 (Perkins II), and included the Tech Prep Education Act, focused on workforce reform and broad education reform (Ruthland et al, 2003). Tech Prep legislation was influenced by Parnell's (1986) writing about the neglected majority, non-college bound students transitioning from school-to-work (Ruthland et al, 2003). Parnell described how work-bound youth tended to drift from job-to-job and lacked continued training for workforce competitiveness (Woolman, 1916; Worthington & Juntunen, 1997). While Perkins II focused on the integration of academic education with career and technical education, its Tech Prep subcomponent focused on broad education for all and workforce reform (Ruthland et al, 2003). Perkins II also required state accountability for vocational program funding; performance and academic gains were to be documented (Gordon, 1998).

President Clinton signed the School-to-Work Opportunities Act (STWOA) on May 4, 1994 (Worthington & Juntunen, 1997), authorizing \$300 million during the first year to support school-to-work (Engel, 2000). School-to-work had four major components: (a) general program requirements, (b) a school-based learning component, (c) a work-based learning component, and (d) a connecting activities component (Worthington & Juntunen, 1997). Unique from the previous programs, STWOA

specified that career training be available to all students, and was an effort to mainstream career education rather than compartmentalize the program (Engel, 2000; Gordon, 1998). Because of the STWOA, a national framework that supported the development of school-to-work activities was created for all states (Worthington & Juntunen, 1997). For the first time, vocational education was identified as a universal need for all students (Engel, 2000).

The STWOA endeavored to build an infrastructure of partnerships between school systems and local businesses in order to meet the needs of local communities (Worthington & Juntunen, 1997). STWOA initiatives included goals from the comprehensive programming of elementary and secondary guidance programs, such as teaching lessons that demonstrate connections between the classroom and employment, build self-awareness, and foster skill development (Gysbers, 1997; McWirter et al, 2000). This legislative focus changed school guidance from an ancillary support system to a comprehensive program supported by school districts (Gysbers, 1997). The passage of the STWOA brought national attention to the need for collaboration with secondary schools to provide guidance as youth transitioned from high school to employment or postsecondary education (Engels, Minor, Sampson, & Splete, 1995; McWhirter et al, 2000; Worthington & Juntunen, 1997).

An important component of the STWOA was the idea that occupational success was achievable by entering the workforce immediately after high school as opposed to attending college first (Worthington & Juntunen, 1997). The STWOA proposed to bridge the gap between vocational education and academic education that had existed since the Smith-Hughes Act of 1917 by mainstreaming career education into the

academic curriculum. *SCANS* competencies were put into practice across the curriculum for all students (Engel, 2000). Implementing the *SCANS* meant training high school students to become competitive technical workers in the emerging global economy (Worthington & Juntunen, 1997).

In the 1990s, discontent with the employee pool public education was providing emerged once again. As reinforced with the 12 misconceptions of high school educators that Rosenbaum (2002) identified, three related to the labor market trends over the last 40 years: (a) wages for college graduates have increased in conjunction with the skills required, (b) community colleges have become a major component of postsecondary education, and (c) the community college open door policy has allowed students who have not graduated or who barely made it through high school into a college setting. The increased emphases on academics per the No Child Left Behind legislation and the less restrictive entrance policies of community colleges have perpetuated the paradigm of “college for all” (Rosenbaum, 2002, p. 3). However, despite NCLB’s emphasis on academics, many students are enrolling in college without basic high school skills. Consequently, colleges are spending time teaching remedial high school skills to approximately half of the students that enroll in two-year and four-year colleges. The labor market change prompted high school counselors to encourage students to go to college to develop the skills they need to find a good job to achieve livable wages; the idea that college is the only path to good employment is perpetuated. In addition, employers fed into this perception by not requesting high school transcripts and recommendations from high school teachers (Rosenbaum, 2002).

Employers value teacher partnerships and employees that have strong connections with teachers who teach students skills related to their profession. Employers are willing to teach skills, if necessary, but the greatest needs employers have are for soft skills, such as work habits and social skills. Employers look for attendance, dependability, attention to detail, perseverance, and ability to work with others. These are skills employers do not have the patience or the time to teach (Rosenbaum, 2002).

Research has found that high school graduates who found work through high school vocational programs do obtain better jobs than students who go to work who did not participate in a high school vocational program. According to Rosenbaum (2002), employability skills need to be addressed at an earlier age than high school in order to keep opportunities open to them. Overall, students need better preparation for work while they are in high school. Vocational teachers can teach the social skills and work habits, and academic teachers could integrate teamwork, communication, and report writing into their curriculum. Career-related classes could motivate low-achieving students because they emphasize different skills, and their teachers have influence with potential employers for students. Policies are needed to support and encourage public schools to keep vocational programs. Employers want employees that are prepared for work. Vocational programs provide realistic options for students that offer the potential to move up in pay with increased experience and skill (Rosenbaum, 2002).

Sixteen years after the first *Skills Commission Report* in 1991, the 2006 report reflected similar dismal results. Young adults with low skills are not able to compete in a global economy, and education reform is recommended again by the Skills

Commission Report, (2006). With this in mind, the Perkins Act of 2006 (Perkins IV) is attempting to reform schools using career development, and using career development in turn to address the necessary global competitiveness of American students (Association for Career and Technical Education, 2006; Minnesota Department of Education, 2007). Titles I and IV of No Child Left Behind also address career development, stating that career guidance and planning are components that need to be addressed as part of overall school programming P.L. 107-110, 107th Congress in 2002.

According to the Association for Career and Technical Education (2007), when the No Child Left Behind Act of 2002 was signed, it allowed for career and technical education to be included in school reform efforts. Specifically, Kobylarz (2005) identified the connections between career development, and NCLB and found that five out of nine NCLB titles have connections to career development programming. NCLB's connection to career development and school reform opened the door for more opportunities for career and technical education to play a critical role in the future of school reform (Association for Career and Technical Education, 2007).

Federal legislation is once again stepping in to education in an attempt to raise standards, so students can be competitive in a global economy. Schools are lagging behind business/industry and researchers need to work on the dissemination of research regarding what employers want as an entry level employee, to ensure it is received by potential users, who are the teachers of the future employees (Hargreaves, 2003; Louis & Jones, 2001). Teachers can no longer teach using the examples they were taught as elementary and secondary students (Hargreaves, 2003).

In summary, career education has a long and varied history. Most of the literature on career education was generated during the 20th century, within a Western modernist paradigm. The connection of education and employment at the postsecondary level first received federal attention with the Morrill Act of 1862. Next, federal law addressed career education at the secondary level with the Smith-Hughes Act of 1917. Frank Parsons (1909) was the first person to create a model for connecting people to employment. Progressive education supported the connection of school and work. In addition, career development was established in secondary education by the late 1960s. The 1970s was considered the peak of career development in secondary education. By the 1990s, the career education concept resurfaced with the School-to-Work Opportunities Act of 1994. Presently, a continuation of the school-to-work movement is still supported with the reauthorization of the Perkins Act in 2006, which encourages integration of career development and academics as a component of school reform. Currently, under NCLB and Perkins, educators are expected to be accountable and keep up with the professional literature to incorporate scientifically-based, researched, best practice in the classroom. The next section will cover influences on school-based career development interventions during high school.

Influence of School-Based Career Development Interventions

Career intervention meta-analyses have shown that career development has a positive effect on student growth when incorporated into a school system (Baker & Taylor, 1998; Evans & Burck, 1992). A number of studies from the late 1970s and early 1980s examined career education and its positive influence on academic growth (Evans & Burck, 1992). Career development has also been shown to influence academic

achievement and student motivation (Legum & Hoare, 2004). After 1983, minimal research was done with secondary students, partially due to the long-term design of the programs (Hughes & Karp, 2004; McWhirter et al, 2000).

Students who dropout of high school find it more difficult to find employment because they lack the job skills needed in today's market. Students who are exposed to career development activities during middle school are better prepared to follow a program of study at the high school level, and engage in continued career development activities there. Creating an education/career path for after high school could start in middle school (Trusty, Niles, & Carney, 2005). According to Turner & Lapan (2005), by the age of nine, children are shaped by their socialization experiences, influenced by what they see as gender appropriate careers, and consequently, limit their range of acceptable occupations before they have had a chance to explore their potential interests. Thus, ideally, creating an education/career path should start at the elementary level. The middle and high school years are a critical intervention period for keeping students involved in school (Castellano, Stringfield, & Stone III, 2002). Middle school guidance programs improve academic outcomes and support links to future career paths during high school (Turner, 2007). Three benefits of middle school career development identified by research include:

- school engagement;
- increased self-esteem, motivation, and personal responsibility for learning; and
- more options and better focus for high school goals (Castellano et al, 2002; Legum & Hoare, 2004; Turner, 2007).

Research has shown that the number of high school graduates entering postsecondary education has increased, yet almost half do not complete a bachelor's or associate degree within six years. Middle school and high school educators and parents miss the practical components of post-high school planning by pushing college and discouraging other realistic options. School counselors have become vital information sources for career development and educational planning around students' future goals (Feller, 2003). Research states that teachers who work collaboratively with students and parents have a more open relationship with students and their advice is more accepted. According to Trusty, Niles, and Carney (2005), extracurricular activities, hobbies, and civic participation are important to long-term career development.

Hyslop-Margison and Armstrong (2004) state that in order for students to become critical thinkers, they need a foundation of knowledge with which to work, then they can balance this background knowledge with critical thinking processes. Many career education programs also incorporate critical thinking into the curriculum and take a global approach, analyzing how the global market influences American society (Aldeman, 2010; Friedman, 2003; Hargreaves, 2003; Hyslop-Margison & Armstrong, 2004).

In summary, in order for career development programming to be successful, the whole school community (teachers, counselors, parents, employers, and students) need to be involved. Careers have changed from a one-time choice of an occupation to a lifelong career decision-making process. Systematic change in K-12 education is needed to keep up with the new knowledge society, which has changed from a separate subject focus to an interdisciplinary focus that requires holistic development of the student that will

support the development of the future employee. The employee that is flexible, able to solve problems, and able to think outside of the box needs to be nurtured from childhood. Important life skills in the new economy include flexible thinking and openness to experience. “With the growing importance of soft skills . . . traditional career development activities that focus on assessing specific existing abilities or potential aptitude for particular job tasks are becoming less and less useful” (Greene, 2006, p. 35).

The Minnesota Model of College and Career Readiness

This section describes the components and future vision of Minnesota’s College and Career Readiness model for Minnesota students. Its vision was inspired by research that demonstrated that schools in Minnesota lacked a vision of what students really do after high school graduation (Minnesota Department of Education, 2007). Most students were not graduating from the postsecondary institution they enrolled in immediately after high school in 2004 (Minnesota Department of Education, 2007). Social research shows that there are two important changes happening (a) the economic globalization and (b) the demographic transformation (Minnesota Department of Education, 2007). The goal became to close the gap between Minnesota students and the highest performing nations of the world so that Minnesota students could be productive workers in this new context (Pekel, 2008). In Minnesota, federal and state components of career development are integrated into a model to help schools to implement academic rigor and career development.

Governor Pawlenty’s Initiative (April 2007): World-Class Students

Producing world-class students is the call from the Minnesota Governor’s Office. The Governor’s plan seeks to push Minnesota to lead the nation in educational

excellence, and to create a student who is successful in a competitive global environment. The plan has four goals which are (a) one year of postsecondary education for all students during high school, (b) high schools that offer advanced academics, (c) offer secondary rigorous programs that include Career and Technical Education fields that are competitive, and (d) partnerships with high schools and businesses to create meaningful work-based learning experiences (Minnesota Department of Education, 2007). To reach these four goals, the Governor implemented a five-step program:

- the three R's of high schools: rigor, relevance, and results;
- Effective teachers for all students that includes access to college programs;
- Academic rigor for all students with a graduation plan;
- Closing the achievement gap with rigorous and relevant courses; and
- Data-driven decision-making accountability for the P-12 education system.

Each step has several components or options for schools to implement which are connected to potential state funding. The changes the Governor encouraged in his world-class student initiatives are also supported by Perkins IV (Minnesota Department of Education, 2007).

Perkins IV

Minnesota currently applies to the federal government for funds through the Carl D. Perkins Act of 2006 (Perkins IV). The State then distributes funds to state-approved consortia of career and technical education programs. The most recent policy that frees up certain discretionary funds from the federal government is the Carl D. Perkins Act of 2006, signed into law by President Bush on August 12, 2006 and reauthorized until 2012 (Minnesota Department of Education, July 2007). In order to

utilize the new grant money, the state of Minnesota and Minnesota State Colleges and Universities developed a state plan.

According to the State of Minnesota (2007), Perkins IV stresses accountability more than previous versions of the law, and attempts to create a hub that connects high school reform, career pathways, and American competitiveness. In other words, the intent of the law is to develop closer partnerships with postsecondary institutions, secondary institutions, businesses, and community activities as well as to create a synthesis of options and possibilities for high school students (Minnesota Department of Education, July 2007).

To support student success, Perkins IV emphasizes programs of study for grades 11-14 set up by partnerships of high schools and postsecondary schools. Professional development is emphasized in Perkins IV, which recommends joint training with academic staff, career and technical education staff, superintendents, as well as career and guidance counselors. Perkins IV also stresses increased mathematics, science, and technology use in the classroom. Finally, accountability through data systems and indicators of performance are measured (Minnesota Department of Education, July 2007).

College and Career Readiness

Minnesota uses David Conley's definition of college and career readiness: "the level of preparation a student needs in order to enroll and succeed (without remediation) in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program" (2007, p. 3). Conley defines success as "completing entry-level courses at a level of understanding and

proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of course in the subject area” (2007, p. 3).

Research has identified the following components as important to college and career readiness:

- habits of mind which include analysis, interpretation, precision and accuracy, problem-solving, and reasoning;
- key context, such as writing, as this skill has been connected with college success;
- academic behaviors such as study skills, time management, study groups, and awareness of personal performance; and
- contextual skills and awareness, which include the interpersonal skills and social skills that support students’ successful interaction with students from different backgrounds and cultures.

Evaluation is demonstrated by continuous measurement of the four components that are sensitive to increasing sophistication and elaboration of capabilities versus just learning the elements (Conley, 2007).

Based on career education and development research, Minnesota created a pathway to college and career guide that includes four components:

1. Scaffold curriculum, which starts where the student is at, and then develop concepts and skills to move on to the next step.
2. Programs that include support for English Language Learners to help them better understand education and workforce opportunities.

3. Academic interventions are provided for first-generation college students, students from low socioeconomic backgrounds, and students who are academically behind.

4. Bridge programs that successfully help students transition from high school to college are provided.

Evaluation is provided through three components: Minnesota's Educational Planning and Assessment System (EPAS) which includes the 8th grade EXPLOER, 10th grade PLAN, and the ACT assessments; the ACCUPLACER, a computer-adaptive postsecondary placement exam that is used to determine course placement in postsecondary institutions; and the Minnesota Comprehensive Assessments, which are compared to the EPAS score to verify college readiness. In the future, the Minnesota Comprehensive Assessments will be rewritten to reflect college and work readiness.

The final component is making college and career readiness information available to three different audiences (a) system and community leaders, (b) students and families, and (c) educators. Some examples of additional information are also available through Minnesota's online resources such as ISEEK.org and the Minnesota Career Information System (<http://mncis.intocareers.org>), with many links for students, parents, and education professionals. The federal government also supports the online resource Perkins Collaborative Resource Network at the following website, <http://cte.ed.gov/nationalinitiatives/guidanceandcounseling.cfm> with information on each state for students, parents, and educators.

Overall, the State of Minnesota supports many career development activities in general education programming as one piece of its school reform efforts. The Perkins IV requires more integration of career development in academic courses and integrated

staff development between career/technical education and academic subjects, but no one is seeking the perceptions of the educators and superintendents of implementing career development within the academic curriculum.

Conclusion

This review of the literature focused on the history of career development which included federal and state policies that encourage career development for all students. Overall, career education has a positive impact on academic success in elementary and secondary schools (Hughes & Mechur Karp, 2004). Research has revealed its positive influences on students (Baker & Taylor, 1998; Evans & Burck, 1992; Turner, 2007). The literature identified attempted to demonstrate how career development is integral to the success of high school students as they transition from high school to work and/or postsecondary education. However, career development is not a priority for superintendents or educators, as noted by the dated research that is available on the subject (Feingold, 1974; Leonard & Pietrofesa, 1974; Marland, 1974). According to Baker and Taylor (1998), the field of career development is an “underrepresented area of applied or field evaluation research” (p. 383). Nevertheless, over 30 years of career education research is available to support students transitioning from secondary to postsecondary education, and has been available for the leaders involved with educational reform movements (Baker & Taylor, 1998). In recent years, there has been a renewed interest in preparing high school students for careers because of the dawning of the global information age and changes in the demographics of the state of Minnesota.

Recent research is available regarding student graduation rates, academics, global information, and demographic changes, but research on superintendent perceptions of career development in the high school setting is very limited. Hughes & Mechur Karp (2004) identifies reliance on self-reported student information for data as a weakness of career education research. All of the activities studied by Hughes & Karp were short-term in duration; this makes it difficult to identify their long-term benefits. Other meta-analyses and this literature review show the value of career development from the perspective of the student, but do not address the perceptions of the instructors or district leaders, including the superintendents (Baker & Taylor, 1998; Evans & Burck, 1992; Hughes & Mechur Karp, 2004).

Superintendents are the leaders of school districts. Many demands are made on them to provide a quality education to the children and youth in their school districts. Federal laws, state laws, and local policies all need to be followed. Career development is addressed in several federal laws and state laws, yet recently, the concern has been that our schools are behind globally, and that reading, writing, math, and science will solve all our problems. Meanwhile, counselors, social economists, and education researchers have conducted extensive research to substantiate the value of career development, as described in this literature review. Therefore, seeking the perceptions of superintendents on the topic of career development in the secondary education system is the purpose of this research.

Chapter Three: Methodology

Qualitative research is known for interpreting real-life experiences with discussions that generally focus on paradigms and theory (Creswell, 2007; Marshall & Rossman, 1999). The research project presented here is intended to be a methodical inquiry into superintendents' perceptions of career development. This chapter describes the research design and methodology used to conduct this research, including the design, participants, data sources, validity and reliability of the data, data collection, and ethical considerations.

Purpose

Research, policy, and curriculum are available that describe what works on the topic of career development and youth, but little is known about how the leaders of public school districts interpret this information. Therefore, this research studied superintendents' interpretations of federal and state career education policy, and how these perceptions influence the local implementation of career education.

Research Methodology

In order to understand the perceptions of school leaders regarding career education, a qualitative research design was chosen based on Creswell's 1998 definition of qualitative research:

Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem.

The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting. (p. 15)

Within qualitative research there are five traditions of inquiry (a) biography, (b) phenomenology, (c) grounded theory, (d) ethnography, and (e) case study. The qualitative method used in this study is a case study, based on Creswell's (1998) description that case studies are studies of a particular program or phenomenon, bounded by time and place. In addition, the case study researcher needs to develop awareness of a wide range of information about the case, and examine the meaning of an experience associated with a phenomenon.

In these case studies, a three-interview structure developed by Seidman (1998) was used to collect information. Seidman (1998) describes interviewing as a meaning-making process because "stories are a way of knowing" (p.1), and a way of understanding culture. This interviewing method combines life history interviewing with focused, in-depth interviewing. Interviewers use open-ended questions to reconstruct the participants' experience on the topic of study (Seidman, 1998).

Research Design

This qualitative research was conducted using Seidman's (1998) model of interviewing with a series of three separate interviews for each participant. The first interview focused on the life history of the interviewee as it related to career development experience. In addition, the first interview ascertains the perspective of the participant regarding the research topic. The interviewer encouraged the participant to share as much possible about them as it related to the research topic. The second interview focused on the present experience of the interviewee as it related to state and federal policy regarding career education development. Therefore, the second interview focused on the participant's present experience as it relates to the topic of study. In this

interview, the interviewer looks to reconstruct the experience of the participant as it relates to the topic of study. The third interview focused on reflection and meaning-making of the experience based from their perceptions of career development over time. Consequently, the third interview asked the interviewee to reflect on the meaning of their experience.

The interviews and this research project as a whole will make other leaders in education aware of the perceptions of superintendents regarding career development of secondary students in public schools. The interview questions were linked to the research questions in order to determine the superintendents' perceptions. The superintendents' perceptions of career development were drawn out using the questions listed below. The interviews were each 60-90 minutes long. The cases were five superintendents of public school districts in Northeastern Minnesota. The case study was bounded by a period of eight months of data collection in five separate sites. Data collection included five interviewees interviewed three times each for a total of 15 interviews.

Interview questions:

Interview One: "Life History", which establishes the context of the participant's experience:

1. What does the term "career development" mean to you personally?
2. What was your perception of career development as you were growing up?
3. Have your perceptions changed over the years as you have worked in the K-12 school system(s)?

4. What does the term “career development” mean to you as a leader of a K-12 school district?
5. What is your perspective on how career development fits into the K-12 school environment?

Interview Two: “Current View”, which reconstructs details of the experience (within the context) within which the experience occurs:

1. From your perspective, how do students experience career development in your district?
2. What is your perception of activities that promote career development in your district?
3. How are these activities incorporated into the district curriculum?
4. What are your perceptions of school reform efforts, and the inclusion of career development activities in them?
5. What are your perceptions of the changes in Perkins IV at the federal and state levels?

Interview Three: “Reflective,” which the participants can reflect on the meaning of their experience:

1. How has your perception of career development changed over time?
2. Reflecting on your own career development experience how is it similar to or different from that of students today?
3. What does the term “career development” mean to you as an administrator or as an educator?

4. Is there anything else you would like to add about your perceptions of career development in K-12 school programs?

Once the interviews were completed, the researcher analyzed and synthesized the perceptions and themes that emerged from them (see Chapter 5).

Population and Sampling Procedures

The participants in this study were five licensed public school superintendents in Northeastern Minnesota. Three were male and two were female, and they ranged in age from 35-62 years old at the time of the interview. Superintendents were first identified using the Minnesota Department of Education website. Then, five sites were selected to represent small, medium, and large districts. The districts selected include two Carl Perkins consortia and cover three counties within Northeastern Minnesota.

Data Collection Procedures

The method of data collection was Seidman's (1998) approach to interviewing as qualitative research. Creswell (1998) mentions a number of methods to collect data such as documents, interviews, and direct observations.

Prior to the first interview, several steps were taken to recruit subjects who met the specific criteria for this study. Professional adults with advanced degrees were chosen for this study. An internet search was conducted to identify five licensed superintendents from the State of Minnesota Education website. In particular, a range of variables were taken into consideration for this study, including superintendent's gender, district size, and district urbanicity.

Once potential participants were identified as being the leader in a public school district in Northeast Minnesota, the school district websites were reviewed, and sites

were selected to represent small, medium, and large districts. In addition each superintendent had experience with the 2006 Perkins IV legislation, and the implementation of its new requirements at the federal and state level. Next, verbal consent was initiated through phone calls inquiring about their willingness to participate. After giving verbal consent, the superintendents signed written consent forms at the first interview that explained the interview process. They were informed that the study is a voluntary research project, that they can withdraw at any time without penalty, and that the risk associated with this research project is minimal, no greater than the risk associated with daily living. They were informed that the information gained in this study would potentially be useful to superintendents and local boards of education.

Validity and Reliability

The three-interview structure used in this study follows the qualitative research method of Seidman (1998). This interview structure “incorporates features that enhance the accomplishment of validity meaning that the information is trustworthy and credible by placing the participants’ comments in context” (p. 17). Seidman identifies several features that enhance validity for the in-depth interview process. First, participants’ comments are placed in context. Second, interviewing over time encourages consistency and provides checks and balances for idiosyncratic days. Finally, if the interview structure allows the participants to make sense of their experience and understand the meaning of their experience, then the interview approaches validity (Seidman, 1998).

Interviewing participants over a period of weeks took into account off days and allowed the interviewer to check for internal consistency of each interviewee’s remarks.

In addition, interviewing five superintendents from five different public school districts, two different Perkins Consortia, and three different counties allowed the researcher to connect their experiences, and use the interviews as a cross-reference to check the validity of their responses.

Conclusion

Five case studies were conducted using in-depth interviewing with superintendents in Northeastern Minnesota. In the interviews, Perkins IV and the state interpretation of its implementation were referenced. The open-ended in-depth interviewing process provided the opportunity for more information sharing as well as “examination of the meaning of experiences toward a phenomenon” (Creswell, 1998, p. 39). Each interview was taped and transcribed to improve the ability to compare the data and distinguish common themes and experiences among the participants. Finally, the interview process for this study provides the validity inherent to the in-depth interviewing process.

Chapter 4: Research

The data collected for this qualitative case study focuses on superintendents' perception of career development in public secondary schools, and how these perceptions influence the local implementation of federal and state career education policy. This research reveals many challenging and interesting findings. All five Northeast Minnesota superintendents spoke candidly about the experiences that shaped their perceptions of career development efforts in their school districts. Each perspective is unique; however, the perspectives also shared a common thread, which is the need to look at connecting students to career options and training for the choices they would make. Each superintendent provided in-depth responses in a series of three interviews, resulting in thick, rich, candid descriptions of their perceptions and experiences.

Descriptive Data

The purpose of this research is to describe superintendents' perceptions of career education, and how these perceptions influence the implementation of federal and state career education policy at the local level. Research questions focused on the superintendents' perceptions of career development in the public school system and perceptions of career development policy.

The research questions that this study seeks to answer are:

1. What are superintendents' interpretations of the current career development legislation at the federal level and at the state level?
2. What are superintendents' perceptions of the current career development curriculum in high schools?

3. What are superintendents' perceptions of the strengths and weaknesses of a high school career development program?
4. What are superintendents' perceptions of students' career knowledge prior to and after their engagement in a high school career development program?
5. Do superintendents perceive a benefit to integrating career development into academic curriculum?

Below, the data analysis is presented by research question. Each research question was derived from the statement of the problem and the purpose of the study. The participants in this study were five public school superintendents in Northeast Minnesota. Their districts include two Carl Perkins consortia and cover three counties within Northeast Minnesota.

Data Analysis

Data was analyzed from a series of three interviews with each superintendent. This research utilized a case study approach, an approach which provides insight about an issue. For this particular case study, the topic regarded perceptions of career development in secondary schools in the superintendent's school district. The first interview focused on the participant's life history to establish the context of their experience with career development. The second interview focused on the participant's current view of career development and reconstructed their experience with career development in their district and within the field of education as a whole. The third interview focused on the participants' reflection and construction of meaning regarding their experience with career development over time. All fifteen interview questions were analyzed to answer the research questions for this study.

Question 1: What are superintendents' interpretations of the current federal and state career development legislation?

Participant A stated that the 2006 reauthorization of Carl Perkins allowed for good change. This participant expects more change to happen, but fears that current economic conditions will bring about program cuts. They have seen Perkins IV on the federal list of potential programs to be eliminated. The participant is concerned as to the future of career development if funding is eliminated. Participant A believes a well-functioning Carl Perkins Consortium has been established in Northeastern Minnesota between the high schools and the college under the new reauthorization of the Perkins Act. This participant noted that the new consortium structure created by Perkins IV encourages quality institutional relationships, and strong relationships will be important in order for the consortia to develop during these tough economic times. In Participant A's view, it is important to continue developing stronger relationships with businesses that support career development in the high schools.

According to Participant A, Perkins III was prohibitive and narrowly defined. He/she saw potential when the Tech Prep legislation was integrated into the Perkins Act, allowing high school counselors and regular education teachers to incorporate more career development activities and units into the general school curriculum. Nevertheless, Participant A perceives frustration amongst colleagues that career development is still more or less a high school program. The participant would like to see more support for middle school programming, including funding to purchase equipment and curricula for middle schoolers. This superintendent also considers it important for secondary education to forge relationships with local businesses in

addition to postsecondary partnerships to keep programs going. In his/her opinion, more financial support will be needed from business and industry to provide the specific skill training business and industry is currently looking for in employees. Participant A's point of view includes strong apprehension that during tough economic times, the technical education that Carl Perkins supports will become less important than traditional academics, and could be removed from the federal budget in the future.

Participant B stated that the local consortium staff does a tremendous job of having a positive impact on students with the meager funding provided by Perkins IV to local school districts through the state consortia system. He/she also support the federal legislative policy initiative of connecting secondary education with postsecondary education, and encouraging collaboration between the two institutions as a best practice method. Yet, Participant B notes that financial support is a concern because of the required planning and developing of programs of study that the secondary schools are doing with the postsecondary schools. This superintendent believes that the programs of study will mean nothing unless there is a way to create sustainability of the programs that prepare students for the career fields, pathways, and clusters identified by the state of Minnesota. Participant B also believes that Perkins is encouraging secondary-school collaborations with local business and industry. This superintendent notes that merging groups of people together to focus on career development is a good thing, but funding needs to be provided to sustain these programs.

Participant C has different perspective on the current legislation from involvement at the state level with various committees and organizations that focus on career development. This superintendent's initial response to this interview question

was “hoops within hoops.” Participant C participated in the interpretation of this legislation at the state level. Major changes were brought to the surface that would, in this superintendent’s opinion, provide an incentive for high schools that did nothing initially to get together to begin communicating and reevaluate how the Perkins funds were to be spent from a consortium perspective. This superintendent’s opinion is that districts that were previously independent would now need to cooperate with other districts with whom they had not worked prior to the reauthorization of Perkins IV. They viewed this as an opportunity for high schools to partner, reduce duplication, and provide more opportunities for students. For example, one district would have phlebotomy, another district would have a machine tech course and electronics, and another would have law enforcement courses. Students from different high schools would be allowed to participate in any of these programs. In addition, all of the programs at each school would also be incorporated into programs of study with the consortium postsecondary institution as required by Perkins IV.

Participant D stated that staying up-to-date with the current career development legislative policy was not a personal priority because the consortium coordinator keeps the district up-to-date regarding this issue. They supported the concept of connecting secondary institutions to postsecondary institutions, but were waiting for more information about the changes before dedicating too much time and staff to the effort without sufficient funding. In addition, Participant D thought that an important connection was lost with rural high schools when the new structure came about and the leadership of the technical college was replaced with leadership from a community college. Participant D was concerned about pushing students on to college before they

are ready, and did not encourage students to take advantage of the college-level opportunities outside of the school district because of a belief that “kids should be allowed to stay kids as long as they can.” Participant D felt strongly that Perkins IV, which promotes high school students starting college with enough credits to be a junior, is presented as a financial incentive for parents to push their child into something that they are not ready for. In short, it is a disservice to the holistic growth of the student.

Participant E stated that since the Perkins IV coordinator in their district understands the requirements for secondary schools, this participant does not need to keep up with the changes. This participant makes sure the district listens to and complies with the Perkins IV consortium coordinator, who implements the requirements of the law.

In summary, most of the superintendents shared awareness that more expectations were now incorporated into one piece of legislation, Perkins IV, and were concerned about a lack of funding to implement the required changes. This lack of funding will negatively impact the sustainability of the Program of Study initiative. Most of the superintendents interviewed supported the idea of making connections with local businesses and colleges. Some were ready to move ahead full steam and make changes, but some were still hesitant to make too many changes without more information about expectations and sustainability of the Minnesota Program of Study.

Question 2: What are superintendents’ perceptions of the current career development curriculum in high schools?

Participant A believes that the students in their district’s high school receive more career development information than students in most small schools. One teacher

teaches career development units in 7th and 8th grade, as well as an entire career development course for 9th and 10th graders. In addition, this same teacher teaches a career development elective for 11th and 12th graders. The school is small and has few electives, so a good portion of students take this elective. According to this superintendent, this same teacher incorporates activities using the Minnesota Career Information System (MCIS) as well as organizes field trips, speakers, and college fair trips; this teacher also conducts the EXPLORE assessment, the 8th grade assessment for baseline academic abilities, the PLAN assessment (10th grade assessment of academic abilities and progress towards education and career goals), and the ASVAB (Armed Services Vocational Aptitude Battery). This superintendent believes that this teacher is an example for other teachers in the district to follow. In addition, this same teacher makes certain to build personal relationships with students and supports students in creating a career path to follow after high school. The superintendent thinks that developing personal relationships with students is the key to the success of the career development curriculum in this school district. One concern brought forth regarding this teacher and the district's career education efforts is that the superintendent is not sure of the message students are receiving. The participant wonders if career and technology education is supported or if students interpret the message conveyed as "all students go to college".

Participant B states that, in their district, both counselors and teachers introduce students to careers using MCIS, bring students to college and career fairs, provide job shadowing opportunities, discuss careers in classes, and collaborate with businesses, business leaders, and college officials to foster career awareness. The business program

supports career exploration by providing employment experiences. This superintendent's district supports Postsecondary Education Options (PSEO), and helps students with testing to get into their postsecondary program of choice as high school juniors or seniors. In cooperation with college officials, this school district is considering developing formalized agreements between the high school and college so students can earn a certificate, a two-year degree, or a four-year degree in a health occupation. Participant B also feels that more financial support is needed in the area of career development so that schools can continue to provide career and technical education programs. Participant B looks at students holistically to make sure that the district is developing and offering programs that give students opportunities to examine a broad spectrum of career options. Another piece of career education in this district is that all students participate in career development, including students who receive special education services. Students with special needs are included in career development activities, and are provided the opportunity to learn about career opportunities through employment and job shadowing experiences alongside all other students.

When planning career development curriculum, Participant C considers the current economic situation and tries to build relationships with local businesses and industries that are open to working with education. This superintendent's district has the traditional career courses with the common assessments and tools used at various grade levels that most area schools use. After taking into account the economic conditions and forging partnerships with local businesses, this superintendent then reviews the school curriculum and the electives that are offered. Participant C notes:

We have a variety of different kinds of electives that I think are a good fit for career development, and some that we specifically focused on to fit what is coming into the local economy and the future opportunities that will be available for youth in up and coming career opportunities.

This participant also looks for programs that “can pay for themselves” and expose students to a variety of career choices outside of education. For example, when the building trades were in high demand, the school sponsored a carpentry program that built a house and then contracted out to plumbers, electricians, and their respective unions. After selling the house, the school made about \$70,000-\$90,000 from this project. The unions also donated money to purchase new math books for students at this particular secondary school because they felt good math skills were important for all students.

This particular superintendent is active on local committees that focus on the local economy and employment. During committee meetings, Participant C regularly discusses and shares information on the topic of available career choices and the training required for youth to become employed in them. In addition, these connections with local businesses and industries help Participant C keep abreast of new developments and make informed decisions about programs that need to be offered in the future so students are exposed to skills that are relevant to the workforce. Participant C feels that this type of program planning supports the economy, student growth, and exposure to pertinent programming for students in the district. In addition, this school district partners with other area high schools to provide a broader spectrum of Perkins IV opportunities for students. Many of these programs also have articulated college

credits attached to the coursework, and in some cases, students have the opportunity to start college as a sophomore.

Participant D describes general education activities, both structured and directly focused on career development, and unstructured. This superintendent believes that some of the structured general education experiences are not necessarily explicitly intended for the purpose of career development, but there is a career component subconsciously attached to the curriculum. For example, structured experiences that are not intended specifically for the purpose of career development are english, math, and science classes. These courses may not specifically discuss careers, but the curriculum supports students' development of the ability to read, write, and analyze written material, which are academic skills also important for youth's future career development.

Participant E perceived career development as a new component of the academic curriculum. This participant noticed a difference between the elementary system and the high school system. In the elementary school where this participant had been principal, there was no career development at all. As a superintendent, Participant E became more aware of career development, but was not closely associated with what happens in career education and has discovered that a lot has been happening for many years. This district uses electronic career development software and traditional career development courses during high school. In addition, every branch of the military visits the school.

Participant E reflected, "I look at when I was in high school, as compared to what I see happening out there as far as career development now, and it's like night and

day.” This participant reminisced that when they attended high school, they had all these counselors, but they never sat with you to walk down a path that explored this career and that career.

In summary, the current career development curriculum in high school varies from district to district. A common perception is that regular education students and special education students obtain good traditional career development information that also incorporates community partnerships with business and area postsecondary training programs. Another common perception appeared to be the importance of connections with the local community and businesses, to provide a broad spectrum of opportunities that prepare students for future career opportunities. One concern did arise related to the implicit message that the students could be receiving in the classroom because all teachers have a four-year college background and the message is unintentionally conveyed that going to a four-year school is still the only legitimate path. Finally, the superintendents agreed that it is their responsibility to provide leadership to ensure that students are provided access to courses and opportunities within their district that promotes career awareness.

Question 3: What are superintendents’ perceptions of the strengths and weaknesses of a high school career development program?

Participant A discusses strengths and weaknesses within the context of activities currently offered by their school district, seeing strengths in career development programs that start in elementary school and continue through high school. This school district uses the EXPLORE in the 8th grade and the PLAN in 10th grade, as well as offers traditional career development classes in middle school and high school. In

addition, technical and business course instructors connect with community businesses by inviting local community trades people into the classroom. In this district, students are also exposed to real-life experiences through job shadowing and school field trips. An additional strength of this district's career development programming is the internships provided to special education students. A district weakness is that not enough subject-area teachers are providing career information in their courses related to the field they are teaching. Finally, as previously stated, this superintendent worries about the message students are receiving about career development, wondering if career and technical education is given as much airtime as the message that "all students go to college".

Participant B perceives strengths of career development in their district as the knowledge base in core academic subjects, job shadowing, career development classes, career speakers in classrooms, and on-the-job training. In addition, the special education program has many initiatives supporting career development in and outside of the classroom, such as classroom career research connected to job shadowing in areas of interest in the business world. Additionally, this district uses the Science, Technology, Engineering, and Mathematics (STEM) high school reform design to support math and science curricula for career and technical education. Perkins IV funding supports instructors through initiatives by local colleges, universities, and businesses that provide teachers only summer internships and projects to learn more about world of work.

According to Participant B, some weaknesses in this district include lack of state and federal funding to support career activities and curriculum. This superintendent feels that "career development has fallen by the wayside." This participant feels that the

district needs to concentrate on curriculum development that includes career development, but the curriculum development in other subject areas does not include career units. Participant B explains that the focus is on state standards, and career development is not a direct part of the state standards.

Participant C shared some strengths of the career development program in their district, including that some teachers expose students to career development activities from as early as kindergarten. This superintendent perceived that progress has been made in the field, but that more advances in the career development field needs to occur. For example, from this superintendent's perspective, more partnerships with industry need to be developed and nurtured to help the schools keep up with local economic conditions. As an educator, this superintendent was first exposed to career development through the special education process in the 1970s. This exposure to special education demonstrated to this superintendent the importance of career development in the public school system, and also the value of early exposure to career development as part of a strong career development program.

In Participant C's perception, weaknesses include other local superintendents choosing not to devote the time to developing business and industry relationships for their districts and use the collegiate resources available that have leadership knowledge and cohesive business and industry relationships already built. Participant C observes that taking time to build relationships and develop partnerships that support career development is critical to a successful high school career development program. However, many superintendents do not take the time to develop relationships with industry that can improve the quality of career development education. Participant C

continues, “it is so easy to offer college classes, 30 to a room, technical equipment you don’t have to update; *Romeo and Juliet* doesn’t get old after 100 years.”

Another concern, according to Participant C, is staff and community perceptions of career development. Participant C shares that often, educators with four-year degrees inadvertently support college as the only path to train for a career. Teachers may not say this in so many words, but the message students pick up on is that the only postsecondary option is a four-year college path; the technical career path and other alternatives are not supported. This participant experiences this contradiction in action with district teachers and administrators who have children in high school who are pursuing non-traditional career paths, yet these teachers promote the four-year traditional college path or they limit the electives their child can participate in because they feel that their child will never need to know that information.

Another perceived weakness of career development in Participant C’s district is that some community members who were trained for careers that require a two-year degree or less do not want their children to be better educated than they are. They use the rationale that a high school education was good enough for them, so it is good enough for their children. This participant feels the tension students experience between the “a four-year college career path is the only way” and “a high school education is enough” viewpoints.

Participant C also notes the influence of special education law in the Individualized Education Plan process that requires students and families to look at transition and career skills. Participant C thinks that all students could benefit from a similar process, but feels that schools do not do this well. In Participant C’s opinion,

school counseling programs need more definition. In Participant C's district, even with the 9th grade career development unit, the senior interview, and the interest inventory, students still do not know the real spectrum of career options available. In Participant C's opinion, K-12 education has not changed a lot in the last 100 years. This superintendent's experience with teachers who teach career units in high schools is that the teacher comes from a four-year education career path, and has little or no experience with alternate postsecondary career paths. Therefore, these teachers unintentionally present a limited spectrum of options for students, conveying that a four-year college degree is the only legitimate career path.

Participant D shares strengths including a full-time K-12 counselor to help provide guidance for students in social development and career development. This school district also incorporates career units within academic subjects. This participant has also noticed an increase in parent interest in their child's career development, particularly during junior and senior high school. An additional strength of this district's career development program is that the superintendent supports activities that encourage teachers to provide career guidance and career development classroom activities to students and develop personal connections with students as well. Other strengths include a 9th grade career unit in Social Studies where students start to learn to make purposeful choices about high school and beyond. This career unit includes field trips to inform the choices that the students are exploring. Participant D did note a weakness, in that the state will pay for two years of college if students start college as a junior in high school. The state promotes this option to parents as a money-saving measure.

Participant D perceives this option as detrimental to the holistic development of the child.

Participant E shares that their district's career development program includes activities such as career assessments for different grade levels, career units, career fairs, and students with Individual Learning Plans being provided work-study jobs.

Participant E's school district also supports the employment of a full-time K-12 school counselor. Participant E perceives weakness in the lack of state and federal funds provided for career development programs in their district.

In summary, superintendents' perceptions of strengths of their high school career development programs include leadership that supports career development activities in the school curriculum. Another strong component is that some programs start in elementary school and continue through high school. In addition, traditional career development activities include strong curriculum and connections to community businesses and industries, as well as strong connections with local two-year and four-year colleges. However, weaknesses include a lack of supportive funding from the state and federal governments. In addition, teacher training programs do not include career development as part of content area teacher preparation. Thus, teachers in general have no formal training in career development and therefore, unless career development is a personal interest of theirs, many do not include career development in their curriculum. Another weakness shared included that school leadership does not always take into account the perceptions of community and local businesses, and does not always build relationships with community and local businesses. Finally, many educators

unintentionally convey the message that a four-year college career is the only legitimate postsecondary path after high school.

Question 4: What are superintendents' perceptions of students' career knowledge prior to and after their engagement in a high school career development program?

Participant A revealed that many students in general do not give careers much thought, and if they do go to college, students enter training for a career that they are familiar with as they flounder during the first two years of college. Participant A explains that students in their district are actively involved in various activities that expose them to new ideas and opportunities, including

- use of the Minnesota Career Information System, an interactive computer program;
- 9th and 10th grade career units;
- field trips;
- speakers;
- college fairs; and
- career/academic assessments from ACT: the 8th EXPLORE assessment and 10th grade PLAN assessment.

Students in special education also participate in career development activities.

Participant A feels that school counselors are important to help with the career development curriculum and provide direction for students. Participant A states, "I think we provide more [career] information now than they did [in the past]."

Participant B reflected:

I think sometimes we concentrate on just the academic and building awareness and careers and things like that without really getting to the kids where they really are. Sometimes their vision ends at their front door or at the front door of the school, and we don't really understand how to build a vision that goes beyond their particular environment.

This participant shared that students who participate in the career and technical programs acquire more career knowledge and knowledge of how to plan for postsecondary training. In addition, school counselors are able to help students with the planning and support needed to successfully pursue a career plan. Furthermore, students in special education receive extra support from a case manager who helps them explore possible career options and pathways. This participant saw special education students as leaving high school with a better understanding of career opportunities than many other students, but also notes that other students who participate in the career development courses and activities during high school will have the information they need to prepare for the future.

Participant C perceives that on a national level, the Career Development field is trying to make changes, but from Participant C's perspective:

Teachers all go through four-year colleges, and then their friends tend to be people who have been through four-year colleges; they believe everybody goes to four-year colleges, and I think that just rubs off on all the kids that keep coming through the secondary school system.

According to Participant C, the implied perception is that the four-year college path is the only valid postsecondary path. Participant C saw students who participated in the

entire high school career development curriculum, but are still confused about what kind of postsecondary training to pursue after high school. This superintendent also noticed that students who work during high school often limit themselves in the variety of future choices they consider available to them and do not explore as many options as they could. This superintendent also has the view that as a leader of a school district, it is their duty to provide more technical career options for students in high school. In addition, students do not know what they want. Nevertheless, students take high school courses and the teachers inadvertently lead them to four-year college programs. Consequently, in Participant C's opinion, this limits students' options for other types of training that may interest the student and suit the student better. This concerns Participant C, because often, students are not exposed to as many career options as they could be in a high school setting. This superintendent feels that secondary schools in general have not made much progress with career development in terms of improving the opportunities for students through building better relationships with local business and industry. In addition, schools still do not make room for career development in the curriculum.

Participant D feels that career development shows up in all grades in their district, and that all activities in school expose students to ideas and possibilities for careers. In addition, many high school courses offer specific career-oriented activities, such as units, field trips, speakers, etc. In this superintendent's perception, even with direction from a career development curriculum, students are generally not sure of what they want to do after high school.

Participant E observed that many choices students make about career development are influenced by family and friends, even though this district utilizes many ways for students to explore careers, including the Minnesota Career Information System, career fairs, 9th grade career units, various recruiters, and career assessments. This superintendent also feels that special education students are provided with career development preparation and planning for postsecondary training. For example, special education students are set up with coursework that includes career related information and work-study activities. In this superintendent's district, the schools use career development curricula and the school counselor provides guidance for the students to create a plan for postsecondary training.

In summary, superintendents perceive that student career knowledge prior to and following their engagement in a career development program is informed by a variety of career development activities. However, in these superintendents' opinions, students do not give career planning much thought. In the perception of these superintendents in general, after a high school career development program, many students still do not grasp how to build a vision that goes beyond the school doors. According to this group of superintendents, when students are finished with a career development program, students often still find it easier to say they are going to college instead of that they do not know what they want to do. These study subjects perceive that students still do not know the real spectrum of options available to them, even with career education. In the perception of the superintendents, this is primarily due to teachers unintentionally conveying a limited spectrum of options to students. Finally, superintendents perceive

school districts as helping students with planning for postsecondary, but unfortunately, this planning is often limited to preparing to attend a four-year college.

Question 5: Do superintendents perceive a benefit to integrating career development into academic curriculum?

Participant A shared their perception of the importance of career development in the academic curriculum by comparing the limited resources that were available when this participant was in high school to the diverse and complex career development choices and resources that are available to students in this global economy. This Participant feels that more educators could do a better job of preparing students and exposing students to career resources in their fields of study. To that end, this participant supports classroom teachers integrating career development into each course. In the opinion of this superintendent, it is important to make students aware of choices in each academic area so that more doors are kept open for them in the future. Participant A shared that there are so many career options out there, that career decision-making has increased in complexity, and as a result, schools need to provide more career awareness education.

Participant B supports the idea of career development: “My perception is that career development demands more attention and planning than what I used to consider.” This superintendent thinks secondary schools need to help students with planning and skill preparation for the current job market, as well as possible future skills students will need for employment. “Therefore, teaching students to be comfortable with learning and change is critical to their future ability to be successful in the employment market,” observes participant B. In addition, participant B notes the importance of career

development in the secondary school because of the global society, the changing technology, the environment, and the emotional impact on students. Students need more awareness of all the opportunities that are available, and that could become available, so as not to be limited by what they and their families are aware of right now. Further, students need to become conscious that there is life beyond a career, and how to balance career, family, and self-care as well.

Participant C discovered that only 25% of the students in their district were graduating from four-year colleges after they said they were going to four-year colleges. This information influenced the superintendent to consider more technical programs for students and felt it was their duty to figure out what those programs should be.

Participant C perceives a benefit to integrating more technical programming into the school district. This superintendent carefully analyzed the courses offered in the district and integrated courses that would line up with trades in Northeast Minnesota, then focused on creating programming to provide students with skills that will prepare them for employment opportunities. Participant C believes that parents are generally locked into their own spheres of what careers are available. Parents do not have a good understanding of what career options could become available in the future, and what preparation will be needed to enter them.

The other thing this superintendent learned from working in the K-12 system is that more students need to be exposed to career education earlier. However, early childhood and elementary teachers do not include career awareness in their curriculum and this superintendent's observation is that they are resistant to doing so, and perceives

this as a reflection of what they were taught during their teacher training in the four-year college programs.

Participant C became especially aware of the importance of career development during a Title IX audit years ago. Education had recently gone from girls in Home Economics and boys in shop classes to girls could sign up for shop if they wanted and boys could take Home Economics if they chose, but this generally did not happen. Participant C suggested that that needed to change, but the superintendent at the time very vigorously expressed his perception that there was no reason that girls needed to take shop classes.

An additional awareness came to light with the realization the most parents in the community were not four-year college graduates. Many were high school graduates, and others did not even finish high school. Occasionally, this superintendent would come across a parent (fathers usually), who did not want his child to do better than he did, because he considered it a judgment of him that he had not done better. “It was the strangest thing to come up against because usually your parents want their kids to do better; the parents never went to college, so they want their child to go to college,” notes Participant C. In addition, the population of this district includes many older voters on fixed incomes, and when it comes to funding schools, the thought is “a high school education was good enough for me; it is good enough for them.” Yet, the world has changed a lot. This school district is in a unique position because it offers the traditional four-year college track, and a variety of electives that offer skills that are transferable to other types of training programs, such as apprenticeships and 6 to 24-month college training programs. In order to offer these electives, partnerships have been set up with

local businesses to support students' development of skills that will qualify them for entry-level employment positions.

Participant D also perceives a need for schools to support career development. This school district achieves this by maintaining a full-time K-12 counselor to guide children in social development and career development. Often, something triggers a year or two after high school and students can recall the information learned in high school to help guide their decisions. Yet, Participant D still comes across indecision among students, and has an idea "that there are still a relatively large percent of kids who get to be seniors and don't have a clue." This participant has also seen more parent interest in their child's career development education during high school, "so my own personal perceptions being the superintendent of this school is that our main purpose in terms of education is to prepare them for life after high school."

Participant E discusses the difficulty in offering career development programming and various other programs due to loss of funding; therefore, programs are no longer available that would help keep students in school. High school is a steppingstone to postsecondary schooling, but many students are not going on to any type of training after high school. Participant E sees students falling between the cracks and not getting the help they need to learn new skills. This school district has made it a priority to have a full-time high school counselor that works with students on career development activities.

In summary, all participants agreed that incorporating career development into the curriculum is important, but all perceive how it is currently incorporated differently. Participants in this study consider secondary education as preparation for after high

school, and see schools' role as making students aware of resources to open doors to the future. All agree that students are still limited by what they see in family, school, and the community. Participants in this study also agree that parents are also not aware of what options are available, and note that schools need to provide more information for parents. Most consider career development as very complex which requires planned/methodical exploration and direction, including sharing information regarding how to change paths and adapt to change in general.

Chapter Five: Results and Recommendations

The purpose of this study has been to explore superintendents' perceptions of federal and state career education policy, and how these perceptions influence local implementation of career education. This study provided an opportunity to capture the perceptions of five superintendents in Northeast Minnesota regarding career education policy at the secondary level. The superintendents participated in a series of three interviews designed to take them through their own personal experiences with career development and the Tech Prep, School-To-Work, and Perkins III and Perkins IV federal policies that were in place during their tenures as superintendents. This chapter presents a synopsis of the findings of the study, and offers conclusions which may inform recommendations for further research.

Findings of the Study

The findings of this study include, but are not limited to the following ideas:

1. Each participant in this study expressed the need for sustainability of career development activities, and was concerned about the lack of state and federal funding for these activities, as well as the potential loss of all funding.
2. Most of the participants saw a need for more funding for career development at the middle school level.
3. Some participants were concerned with the many prescribed steps that are required to access the limited Perkins IV funding that is currently available.
4. Some participants felt that since there is a coordinator that ensures that each district complies with the Perkins IV requirements, it was not as necessary for superintendents to keep up on the legislation.

5. Most participants were concerned about the implied career development message that students receive from teachers with four-year degrees: that a four-year college degree is the only legitimate training program.
6. A weakness in career development, in the perception of some participants, is that not enough classroom teachers are exposing students to possible careers.
7. Even though students are exposed to a wide variety of career development opportunities and choices, participants still felt that many students leave high school unsure about what they want to do next.
8. All of the participants in this study supported the new Perkins IV restructuring, which calls for connecting secondary schools in close proximity to each other to share programs and students so that more programs can be offered instead of schools providing duplicate programs. This will result in the ability to provide more opportunities for students and to develop stronger collaborative relationships with postsecondary institutions.
9. Most participants appreciated the financial support that resulted from Perkins IV supporting counselors to collaborate with teachers in the classroom to provide career development activities.
10. All participants shared similar ideas about career development activities happening at the high school level, the middle school level, and some at the elementary school level. For example, participants all talked about using the PLAN test for 10th grade, the Explore test for 8th grade, and attending various career fairs and college fairs for students.

11. All participants noted the importance of both special education students and regular education students receiving career development education.
12. All participants agreed that students receive plenty of career development education, but noted that more attention needs to go into the planning and executing of individual career development plans.
13. All participants believe that career development is important and needs more focus and effort on the part of school districts. Preparations to enter into a global job market and prepare for jobs that have not been created yet were concerns of the superintendents who participated in this study.

Summary of Findings

Through the interview process, the study revealed findings that only superintendents could express. The qualitative tool of the face-to-face interview was critical in revealing this information. For example, the superintendents in this study perceive that classroom teachers could do more to bring career choices and training into their individual subject area classrooms. In addition, all participants noted the importance of sustained career development programming in this global economy to open doors for students and connect them to training programs. However, these superintendents were concerned about the career-related messages that students were receiving at the secondary school level; they questioned whether career and technical training programs were getting as much “airtime” as four-year training programs.

Further findings touched on Perkins IV, career activities, and special education. The superintendents also noted the positive impact of the restructuring requirements of Perkins IV, especially the additional collaboration requirements. Each district shared

similar high school and middle school career development activities, and all participants emphasized the importance of these activities to guide students in planning their futures. Additionally, all superintendents stressed the importance of special education students receiving quality career development education alongside regular education students. Finally, superintendents noted that a wealth of information is available for students to access through the school system while planning their futures in this global economy.

The majority of concerns expressed by the superintendents related to the importance of federal and state funding to keep career development a priority in secondary education. Superintendents also perceived career development activities incorporated into the traditional academic curriculum as providing valuable opportunities for students to explore options and choices to select from while planning their postsecondary futures. Further, this study revealed that sustainability of funding for career development was the top priority of all superintendents that participated.

Recommendations

Revelations from this study generated recommendations for further study of the field of career development and the perceptions of superintendents. These recommendations include, but are not limited to:

1. It is recommended that teachers incorporate more career development curriculum into the traditional academic curriculum to better prepare students for a global economy and the job market of the future.
2. It is recommended that the federal government provide more funding to sustain career development in secondary education.

3. It is recommended that school districts secure more funds through grants and local business/industry partnerships to help sustain career development in preparation for the unknown job market of the future.

Recommendations for future research

This important research in school leadership and the perceptions of career development must continue in order to ensure a continued strong academic base to increase students' access to training that creates opportunities for them to ultimately get jobs that have not been created yet. The following are recommendations to assist high schools in their efforts to create strong sustainable career development programs.

Although it is difficult to reach all students, career development and planning has grown increasingly important and complex. Superintendents are feeling the expectations of the community to prepare students for the jobs of the future, to ensure that students are leaving high school with some sort of entry-level employment skills that will develop as they follow a postsecondary training program.

More research is needed to understand the perceptions of parents, students, and educators regarding the topic of career development and how it is related to career readiness. Superintendents' from this study revealed that career development is important. But many parents do not know what is available for parents to become more knowledgeable and informed about the possible options for their children. Regardless of where the student is developmentally many parents do not know how to encourage and support involvement with extra curricular activities, community activities and hobbies that could build interest in possible future career options. By exposing students to career

development activities early they are more likely to be made aware of what the potential possibilities are that could open up in the future.

Implications

Different perceptions were expressed in this research, with some superintendents perceiving that school counselors are the career development provider who leads students into career thinking, while others perceive teachers to be more instrumental in introducing students to various careers. Most noted that classroom teachers will need to take on a greater role in career development, in order for students to prepare for *career readiness* which the education research now emphasizes. The idea of career development is still narrow in focus, and more work still needs to be done to broaden the idea to include the traditional academic subjects as part of a high school career development program. The findings of this study imply that schools need more funding to supplement existing career development activities in the secondary education curriculum. Yet, the future can be so unpredictable that perhaps the perception of career education and career development needs revision as implied by the new term “career readiness” in order to encompass more career options for a future with endless career possibilities.

The global society that we now participate in has revitalized the need to connect high schools to a wide variety of post-high school training options. The last century has brought dramatic changes in the perception and expectations of many people in the field of education. Historically the assumption has been that when students graduated from high school they had the necessary skills to successfully enter the workforce or continue on to college. In recent history the United States has shifted from an industrialized

nation into a global economy and education is seeing the influence of this through the changes at the federal level through the policies and the amendments that are passed. In addition, the United States strives to focus on educating all students regardless of the concerns or needs that are present. Developmentally a student may need more than a secondary education exposure to career readiness. This is also reflected in the recommendation by the superintendents to bring career awareness to the elementary and middle school grades. The idea is that students need to be prepared for careers with the same effort that goes into learning reading, mathematics, and science. The concept is not to prepare a student for a specific career, but to focus on teaching universal and transferable skills that are required in many careers. When students are ready to enter the workforce or continue their education, they also will then have some knowledge in order to find and engage in activities that will help them achieve a goal. These same skills will also help them change goals or careers later in life. For example, a goal could be a different position at their place of employment or volunteering for an organizational activity.

Career and college readiness is more than exploring specific careers. It encompasses a broader picture with skills that include but are not limited to critical thinking, collaborative problem solving, cultural awareness, and good people skills. All students need exposure and awareness of these skills through education and in a variety of settings such as a classroom, extra curricular activities, community activities, and hobbies for use in future employment settings.

The ability to communicate with a variety of methods is now expected in the work place and should also be reflected in the high school classroom. Developmentally

students mature differently but that does not excuse the secondary education system from teaching cooperative learning, problem solving, researching, and critical thinking. Then link these skills to the economy and occupations that are currently available worldwide. Teachers cannot be expected to be aware of all the career options available in the future, but they can be more cognizant of teaching more transferable skills. Teachers should be expected to incorporate the tools that are available school wide. An example for Minnesota would be using the Minnesota Career Information System as a classroom tool and coordinate with other teachers across the curriculum to integrate it differently in the various subject areas. Many Minnesota districts have this tool available, but will introduce it once, to most, not all students, and expect the students to continue using the tool on their own.

Schooling is something that many people perceive that since they have experienced it they know about it. Many parents have experienced public education in the United States at some level and based on that experience use that to guide their children through the system. Over the past 30 years, technological advances have changed the employment opportunities from a manual labor market to a knowledge market. Although parents have experience in education most are unaware of what many employers are expecting from employees. Many parents are unaware of the potential opportunities and barriers that their children will encounter as they enter the workforce.

Funding was seen as concern by all, but as demonstrated by one superintendent in this study funding, could be overcome by developing partnerships with the local business and industry; by developing partnerships with the school and involving the partners in the academic curriculum of the students. The support from business and

industry can change from verbal to financial. Examples shown in this study were teacher salaries; new textbooks, paid work study experiences for the students. In addition, other benefits for students are future employment connections for students, more exposure to the expectations of employers, and potential training options for students to consider in the future.

Participant perceptions about career development are important in summarizing this research. Participant C notes, “[we] still have teachers who don’t know a lot about career development.” Participant A states, “we need to do a whole lot better job preparing kids, and there are a lot of things we can do.” Participant B shares, “today, I think with the rapid change that students are facing with things like technology information and job change and with the global economy, global communications we have to prepare kids for careers in a much planned methodical way.” Participant C says it well:

Everybody’s got to do something; we’re all too small to have it all ourselves.

There are going to be more and more jobs out there that are not going to fit into our box. I talk to people all the time about our baby boomer generation being replaced by these small ones where these kids are going to need to multi-task to help support us, and we’re going to be super critical of how they work because they don’t fit our perceptions.

Schools need to continue integrating career education into the curriculum in order for students to be career-ready when they leave the education system, whether they leave after high school or after postsecondary training. For students to become participants in their communities as adults they need the skills to contribute as

productive citizens. The data from this study implies that more effort needs to be focused on integrating career education into K-12 education in order to support students as they make specific career decisions when entering adulthood. In conclusion, it is evident based on the findings of this study that more funding needs to be provided for career education, more staff development is needed, and universities may also need to look at expanding teacher training programs to include career development within subject areas, rather than just assume it is the responsibility of the guidance counselor.

In closing, this study shows that career development is much broader than many recognize. It includes academic preparation, as well as exposure to the possibilities of employment paths that are in the unknown future. Two of the participants shared the following words of wisdom:

It fits well into English, Math, Reading, Writing and ... that as teachers, (no matter what you teach) if you're a social studies teacher or a science teacher, you need to include information about career opportunities [in your specific fields]" (Participant A).

Participant C eloquently summarizes key concepts regarding looking to the future:

My key questions are always:

1. What is the next wave?
2. What's the next thing?

It's watching energy patterns and seeing who wanted to come in [meaning who wanted to partner with secondary education and develop a business relationship to expand the career options and awareness of students] (Participant C).

As a leader [the superintendent], who watches what is happening in the community, identifying emerging businesses and changes in established local business sectors and the surrounding area may assist schools in connecting students with exposure to future employment and training possibilities. Hopefully, beyond the school environment, other community businesses and employers will want to become involved and support the initiatives of the high school. Business and industry involvement is vital to the future success of career development.

References

- Achieve (2010). *Achieving the possible: What Americans think about the college-and-career ready agenda*. Washington, DC. Retrieved from www.achieve.org
- ACT (2010). *The condition of college & career readiness 2010*. Iowa City, Iowa. Retrieved from www.act.org
- ACT (2011). *Affirming the goal: Is college and career readiness an internationally competitive standard?* Iowa City, Iowa. Retrieved from www.act.org
- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. Retrieved from http://mnp20.org/pdf/res2_toolbox.pdf
- Aldeman, C. (2010). *College- and career-ready: Using outcomes data to hold high schools accountable for student success*. Education Sector Report. Washington, DC. Retrieved from www.educationsector.org
- American Diploma Project Network (2011). *Closing the expectations gap 2011: Sixth Annual 50-state progress report on the alignment of high school policies with the demands of college and careers*. Retrieved from www.achieve.org
- American School Counselor Association. (2003). *The ASCA national model: A framework for school counseling programs*. Alexandria, VA: Author.
- Anderson, G., Herr, K., & Nihlen, A. S. (1994). *Studying your own school: An educator's guide to qualitative practitioner research*. Thousand Oaks, CA: Corwin.
- Aubrey, R. F. (1977). Historical development of guidance and counseling and implications for the future. *E-Journal of The Personnel and Guidance Journal*, 55(6), 288–295. Retrieved from <http://search.ebscohost.com>
- Baker, S. B., & Taylor, J. G. (1998). Effects of career education interventions: A meta-analysis. *E-Journal of The Career Development Quarterly*, 46(4), 376–385. Retrieved from <http://search.ebscohost.com>
- Barton, P. E. (1994). *Odyssey of the transition from school to work: 1960-1990*. In A. J. Pautler (Ed.), *High school to employment transition: Contemporary issues* (pp. 3–12). Ann Arbor, MI: Prakken.
- Bennett, R. V. (1972). *Cardinal Principles Report: An educational classic*. Retrieved from ERIC database. (ED073079)

- Bloch, D. P. (1996). Career development and workforce preparation: Educational policy versus school practice. *E-Journal of The Career Development Quarterly*, 45(1), 20–40. Retrieved from <http://search.ebscohost.com>
- Blustein, D. L., Phillips, S. D., Jobin-Davis, K., Finkelberg, S. L., & Roarke, A. E. (1997). A theory-building investigation of the school-to-work transition. *The Counseling Psychologist*, 25(3), 364–402. doi:10.1177/0011000097583002
- Bohan, C. (2003). Early vanguards of progressive education: The Committee of Ten, the Committee of Seven, and social education. *E-Journal of Journal of Curriculum and Supervision*, 19(1), 73–94. Retrieved from <http://search.ebscohost.com>
- Bobbitt, F. (1920). Objectives of secondary education. *E-Journal of The School Review*, 24(10), 738–749. Retrieved from <http://www.jstor.org>
- Borow, H. (1964). *Man in a world at work*. Boston, MA: Houghton Mifflin.
- Brewer, J. M. (1942). *History of vocational guidance*. New York, NY: Harper & Brothers.
- Brott, P. E. (2005). A constructivist look at life roles. *E-Journal of The Career Development Quarterly*, 54(2), 138–148. Retrieved from <http://search.ebscohost.com>
- Brown, D. A. (2002). *Career choice and development* (4th ed.). San Francisco, CA: Jossey-Bass.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organizational analysis*. Burlington, VT: Ashgate.
- Camp, W. G., & Hillison, J. H. (1984). Prosser's sixteen theorems: Time for reconsideration. *E-Journal of Journal of Vocational and Technical Education*, 13(1), 13–21. Retrieved from <http://scholar.lib.vt.edu/ejournals/JVTE/>
- Capuzzi, D., & Gross, D. (1991). *Introduction to counseling: Perspectives for the 1990s*. Boston, MA: Allyn and Bacon.
- Carl D. Perkins Career and Technical Education Improvement Act of 2006, § 20 U.S.C. 2301 et seq. (2006).
- Carnevale, A., & Desrochers, D. (2003). Preparing students for the knowledge economy: What school counselors need to know. *E-Journal of Professional School Counseling*, 6(4), 228–236. Retrieved from <http://search.ebscohost.com>

- Carnevale, A. P., Smith, N., & Strohl, J. (2010). Help wanted projections of jobs and education requirements through 2018. Washington, DC: Georgetown University, Center on Education and the workforce. Retrieved from <http://cew.georgetown.edu>
- Castellano, M., Stringfield, S., & Stone, J. (2002). *Helping disadvantaged youth succeed in school: Second-year findings from a longitudinal study of CTE-based whole-school reforms*. St. Paul, MN: University of Minnesota, National Research Center on Career and Technical Education. Retrieved from <http://www.nccte.org>
- Center for Postsecondary Success, Minnesota Department of Education. (2009, September). *Blueprints: Redesigning high schools for the 21st century*. Minneapolis, MN: Author. Retrieved from <http://education.state.mn.us/mdeprod/groups/HighSchool/documents/Publication/015165.pdf>
- Clark, D. (1992). *Improving workforce preparation: Lessons from the career education movement*. National Association for Industry-Education Cooperation Newsletter, 28(4), 3. ERIC database. (ED349437)
- Cohen, M., & Besharov, D. J. (2002). *The role of career and technical education: Implications for the federal government*. Washington, DC: U.S. Department of Education. Retrieved from <http://www.ed.gov/about/offices/list/ovae/pi/hs/besharov.doc>
- Conley, D. T. (2007). *Toward a more comprehensive conception of college readiness*. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://mnp20.org/pdf/res1_conley.pdf
- Copa, G. H., & Wolff, S. J. (2002). *New designs for career and technical education at the secondary and postsecondary levels: Design guide for policy and practice*. St. Paul, MN: University of Minnesota, National Research Center on Career and Technical Education. Retrieved from http://www.nccte.org/publications/infosynthesis/r&dreport/Guide_for_Policy-Copa.pdf
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- DeBell, C. (2001). Ninety years in the world of work in America. *The Career Development Quarterly*, 50(1), 77–88. Retrieved from <http://search.ebscohost.com>

- Denzin, N., & Lincoln, Y. (Eds.).(2005). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. New York, NY: The Free Press.
- Dewey, J. (1938). *Experience and education*. New York, NY: Touchstone.
- Doolittle, P., E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *E-Journal of Journal of Vocational and Technical Education*, 16(1), 30–49. Retrieved from <http://scholar.lib.vt.edu/ejournals/JVTE/>
- Doty, C. R., & Weissman, R. (1984). Vocational education theory. *Journal of Vocational and Technical Education*, 1(1), 5–12.
- Drier, H. N., & Gysbers, N. C. (1993). *Guidance and counseling programs for the year 2000 and beyond: Strengthening work-related education & training*. Retrieved from ERIC database. (ED355374)
- Dumont, F., & Carson, A. D. (1995). Precursors of vocational psychology in ancient civilizations. *E-Journal of Journal of Counseling & Development*, 73(4), 371–378. Retrieved from <http://search.ebscohost.com>
- Evans, J., & Burck, H. (1992). The effects of career education interventions on academic achievement: A meta-analysis. *E-Journal of The Journal of Counseling & Development*, 71(1), 63–68. Retrieved from <http://search.ebscohost.com>
- Feingold, S. N. (1974). Perspectives on career guidance: A superintendent's view. *E-Journal of Peabody Journal of Education*, 52(1), 5–13. Retrieved from <http://search.ebscohost.com>
- Feller, R. (2003). Aligning school counseling, the changing workplace, and career development assumptions. *E-Journal of Professional School Counseling*, 6(4), 262–271. Retrieved from <http://search.ebscohost.com>
- Fosnot, C. T. (Ed.). (1996). *Constructivism: Theory, perspectives, and practice*. New York: Columbia University, Teachers College Press.
- Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century*. New York, NY: Farrar, Straus, and Giroux.
- Gagne, R. M. (1977, April). *Discovering educational goals*. Retrieved from ERIC database. (ED138567)

- Gaynor, A. K. (1998). *Analyzing problems in schools and school systems: A theoretical approach*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gillie, S., & Gillie Isenhour, M. (2003). *The educational, social and economic value of informed and considered career decisions: American's Career Resource Network Association: Research-based policy guidance*. Retrieved from <http://acrnetwork.org>
- Gordon, H. (1998). Vocational education teacher perceptions of their use of assessment methods. *E-Journal of Journal of Vocational and Technical Education*, 15(1). Retrieved from <http://scholar.lib.vt.edu/ejournals/JVTE/>
- Greene, M. J. (2006). Helping build lives: Career and life development of gifted and talented students. *E-Journal of Professional School Counseling*, 10(1), 34–42. Retrieved from <http://search.ebscohost.com>
- Guichard, J., & Lenz, J. (2005). Career theory from an international perspective. *E-Journal of The Career Development Quarterly*, 54(1), 17–28. Retrieved from <http://search.ebscohost.com>
- Gysbers, N. C. (1995). *Youth career planning—Career development knows no boundaries*. Retrieved from ERIC database.(ED 416369)
- Gysbers, N. C. (1997). Involving counseling psychology in the school-to-work movement: An ideal whose time has come. *The Counseling Psychologist*, 25(3), 413–427. doi:10.1177/0011000097253004
- Gysbers, N. C. (2002). *Comprehensive school guidance programs in the future: Staying the course*. Retrieved from ERIC database. (ED464278)
- Gysbers, N., & Jensen, L. (1999). *Strengthening guidance leadership for the 21st century*. National Consortium of State Career Guidance Supervisors. Retrieved from <http://www.guidanceleadership.fsu.edu/pdf/white-paper.pdf>
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Columbia University, Teachers College Press.
- Harkins, A. (2002). *The future of career and technical education in a continuous innovation society*. St Paul, MN: University of Minnesota, National Research Center for Career and Technical Education, Retrieved from <http://www.nccte.org>

- Harkins, A., & Kubik, G. (2000). The future of distributed competence: Constructing a post-education paradigm. *On The Horizon*, 8(6), 11–14. doi: [10.1108/10748120010803618](https://doi.org/10.1108/10748120010803618)
- Harris-Bowlsbey, J. (1996). Synthesis and antithesis: Perspectives from Herr, Bloch, and Watts. *E-Journal of The Career Development Quarterly*, 45(1), 54–57. Retrieved from <http://search.ebscohost.com>
- Harris-Bowlsbey, J. (2003). A rich past and a future vision. *E-Journal of The Career Development Quarterly*, 52(1), 18–25. Retrieved from <http://search.ebscohost.com>
- Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2005). Child vocational development: A review and reconsideration. *The Journal of Vocational Behavior*, 66(3), 385–419. doi:10.1016/j.jvb.2004.05.006
- Herr, E. L. (1996). Perspectives on ecological context, social policy, and career guidance. *E-Journal of The Career Development Quarterly*, 45(1), 5–19. Retrieved from <http://search.ebscohost.com>
- Herr, E. L. (2001). Career development and its practice: A historical perspective. *E-Journal of The Career Development Quarterly*, 49(3), 196–211. Retrieved from <http://search.ebscohost.com>
- Herr, E. L. (2003). The future of career counseling as an instrument of public policy. *E-Journal of The Career Development Quarterly*, 52(1), 8–17. Retrieved from <http://search.ebscohost.com>
- Herr, E. L. (Ed.). (1974). *Vocational guidance and human development*. Washington, DC: University Press of America, Inc.
- Herr, E. L., & Shahnasarian, M. (2001). Selected milestones in the evolution of career development practices in the twentieth century. *E-Journal of the Career Development Quarterly*, 49(3), 225–232. Retrieved from <http://search.ebscohost.com>
- Hershenson, D. B. (2006). Frank Parsons's enablers: Pauline Agassiz Shaw, Meyer Bloomfield, and Ralph Albertson. *E-Journal of The Career Development Quarterly*, 55(1), 77–84. Retrieved from <http://search.ebscohost.com>
- Hess, F. M. (1999). *Spinning wheels: The politics of urban school reform*. Washington, DC: Brookings Institution Press.

- Hoffmann, L., Jackson, A., & Smith, S. (2005). Career barriers among Native American students living on reservations. *The Journal of Career Development, 32*(1), 31–45. doi:10.1177/0894845305277038
- Holland, J. L., & Whitney, D. R. (1969). Career development. *E-Journal of Review of Educational Research, 39*(2), 227–237. Retrieved from <http://www.jstor.org/stable/1169453>
- Howe, K. R., & Berv, J. (2000). Constructing constructivism, epistemological and pedagogical. In D. C. Phillips (Ed.), *Constructivism in education* (pp. 19–40). Chicago: National Society for the Study of Education.
- Hoyt, K. B. (1987). Perceptions of career education supporters concerning the current nature and status of the career education movement. *The Journal of Career Development, 13*(3), 5–15. doi: 10.1007/BF01351854
- Hoyt, K. B. (1993). *Career education and transition from schooling to employment*. Retrieved from ERIC database. (ED371242)
- Hoyt, K. B. (1994). A proposal for making transition from schooling to employment an important component of education reform. In A. J. J. Pautler (Ed.), *High school to employment transition: Contemporary issues* (pp. 189–200). Ann Arbor: Prakken.
- Hoyt, K. B. (1997, December). *Transition to postsecondary career-oriented education institutions: First preliminary findings: Counseling for High Skills Project*. Retrieved from ERIC database. (ED416372)
- Hoyt, K. B. (2000). *What's in a name?* Retrieved from ERIC database. (ED441967)
- Hoyt, K. B. (2001). A reaction to Mark Pope's (2000) "A brief history of career counseling in the United States". *E-Journal of The Career Development Quarterly, 49*(4), 374–379. Retrieved from <http://search.ebscohost.com>
- Hoyt, K. B. (2001). Career education and education reform: Time for a rebirth. *E-Journal of Phi Delta Kappan, 83*(4), 327–331. Retrieved from <http://search.ebscohost.com>
- Hoyt, K. B. (2005). *Career education: History and future*. Tulsa, OK: National Career Development Association.
- Hoyt, K. B., & Shylo, K. R. (1987). *Career education in transition: Trends and implications for the future*. Information Series No. 323. Columbus, OH: National Center for Research in Vocational Education

- Hoyt, K. B., & Wickwire, P. N. (2001). Knowledge-information-service era changes in work and education and the changing role of the school counselor in career education. *E-Journal of The Career Development Quarterly*, 49(3), 238–249. Retrieved from <http://search.ebscohost.com>
- Hughes, K. L., & Mechur Karp, M. (2004). *School-based career development: A synthesis of the literature*. America's Career Resource Network. Retrieved from <http://acrnetwork.org/viewdoc.aspx?ID=600059>
- Hyslop-Margison, E. J., & Armstrong, J. (2004). Critical thinking in career education: The democratic importance of foundational rationality. *E-Journal of The Journal of Career and Technical Education*, 21(1), 39–49. Retrieved from <http://scholar.lib.vt.edu/ejournals/JCTE/>
- Individuals with Disabilities Education Act of 2004, Pub. L. No. 108-446.
- Joyal, A. E., & Carr, W. G. (1944). Work experience programs in American high schools. *E-Journal of Annals of the American Academy of Political and Social Science*, 236, 110–116. Retrieved from <http://www.jstor.org/stable/1025200>
- Kantor, H. (1986). Work, education, and vocational reform: The ideological origins of vocational education, 1890-1920. *E-Journal of American Journal of Education*, 94(4), 401–426.
- Kenny, M. E., Blustein, D. L., Haase, R. F., Jackson, J., & Perry, J. (2006). Setting the stage: Career development and the student engagement process. *The Journal of Counseling Psychology*, 53(2), 272–279. doi: 10.10370022.0167.53.2.272
- Kienzler, D., & Smith, F. (2003). What our students have taught us about critical thinking. *E-Journal of The Journal of Family and Consumer Sciences Education*, 21(2), 43–50. Retrieved from <http://www.natefacs.org/JFCSE/v21no2/v21n2.htm>
- Kim, J. E. (1982). Federal policy for impact studies of R&D projects in vocational education. *E-Journal of Educational Evaluation and Policy Analysis*, 4(4), 421–437. Retrieved from <http://epa.sagepub.com/>
- Kobylarz, L. (2005). *No Child Left Behind and the national career development guidelines—Making connections*. America's Career Resource Network. Retrieved from <http://www.acrnetwork.org/ncdg/documents/AppendixA.doc>
- Lee, G. (1963). The morrill act and education. *E-Journal of British Journal of Educational Studies*, 12(1), 19-40. Retrieved from <http://www.jstor.org>

- Legum, H. L., & Hoare, C. H. (2004). Impact of a career intervention on at-risk middle school students' career maturity levels, academic achievement, and self-esteem. *Professional School Counseling*, 8(2), 148–155. Retrieved from <http://search.ebscohost.com>
- Lent, R. (1996). Career counseling, science, and policy: Revitalizing our paradigms and roles. *E-Journal of The Career Development Quarterly*, 45(1), 58–64. Retrieved from <http://search.ebscohost.com>
- Leonard, G. E., & Pietrofesa, J. J. (1974). Perspectives on career guidance: An educator's view. *E-Journal of Peabody Journal of Education*, 52(1), 26–32. Retrieved from <http://www.jstor.org/stable/1492038>
- Leung, A. S., Coneley, C. W., & Scheel, M. J. (1994). The career and educational aspirations of gifted high school students: A retrospective study. *E-Journal of The Journal of Counseling & Development*, 72(3), 298–303. Retrieved from <http://search.ebscohost.com>
- Lewis, M. V., & Kosine, N. R. (2008). What will be the impact of Programs of Study?: A preliminary assessment based on similar previous initiatives, state plans for implementation, and career development theory. Louisville, KY: National Research Center for Career and Technical Education, University of Louisville. Retrieved from http://136.165.122.102/UserFiles/File/pubs/POS_Study_Morgan.pdf
- Lichty, M., & Johnson, J. (2006). A follow-up study: The examination of teaching beliefs and its influence on curriculum orientation decisions. *E-Journal of The Journal of Family and Consumer Sciences Education*, 24(2), 36–50. Retrieved from <http://www.natefacs.org/JFCSE/v24no2/v24no2.htm>
- Louis, K., & Jones, L. (2001). *Dissemination with impact: What research suggests for practice in career and technical education*. St. Paul, MN: University of Minnesota, National Research Center for Career and Technical Education. Retrieved from <http://www.nccte.org>
- Luzzo, D. A., & MacGregor, M. W. (2001). Practice and research in career counseling and development 2000. *E-Journal of The Career Development Quarterly*, 50(2), 98–139. Retrieved from <http://search.ebscohost.com>
- Maddy-Bernstein, C. (2000). *Career development issues affecting secondary school*. St. Paul, MN: University of Minnesota, National Research Center for Career and Technical Education. Retrieved from <http://www.nccte.org/publications/infosynthesis/highlightzone/highlight01/highlight01-careerdevelopment.pdf>

- Marland, S. P. (1974). *Career education: A proposal for reform*. New York, NY: McGraw-Hill.
- Marshall, C., & Rossman, G. (1999). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Matthews, D. (2010). A stronger nation through high education: How and why Americans must achieve a “big goal” for college attainment. A Special Report from Lumina Foundation for Education. Retrieved from www.luminafoundation.org
- Matthews, M. (2000). Appraising constructivism in science and mathematics education. In D. C. Phillips (Ed.), *Constructivism in education* (pp. 161–192). Chicago: National Society for the Study of Education.
- McCannon, M., & Stitt-Gohdes, W. (1995). Effective teaching: Perceptions of secondary business education teachers. *E-Journal of Journal of Vocational and Technical Education*, 11(2), 34–43. Retrieved from <http://scholar.lib.vt.edu/ejournals/JVTE>
- McWhirter, E. H. (1997). Perceived barriers to education and career: Ethnic and gender differences. *E-Journal of The Journal of Vocational Behavior*, 50, 124–140. Retrieved from <http://www.sciencedirect.com>
- McWhirter, E. H., Rasheed, S., & Crothers, M. (2000). The effects of high school career education on social-cognitive variables. *The Journal of Counseling Psychology*, 47(3), 330–341. doi: 10.103110022-0617.47.3.330
- Menninger, W. C. (1964). The meaning of work in western society. In H. Borow (Ed.), *Man in a world at work* (pp. xiii–xvii). Boston, MA: Houghton Mifflin.
- Miller, C. H. (1964). Vocational guidance in the perspective of cultural change. In H. Borow (Ed.), *Man in a world at work* (pp. 3–23). Boston, MA: Houghton Mifflin.
- Mimbs, C. L. (2005). Teaching from the critical thinking, problem-based curricular approach: Strategies, challenges, and recommendation. *E-Journal of Journal of Family and Consumer Sciences Education*, 23(2), 7–18. Retrieved from <http://www.natefacs.org/JFCSE/v23no2/v23n2.htm>
- Minnesota Department of Education. (2006). *School report card*. Roseville, MN: Author. Retrieved from <http://app.education.state.mn.us/ReportCard>

- Minnesota Department of Education. (2007, April). *Taking Minnesota students from nation-leading to world-competing: Setting a course for success in the 21st century*. Roseville, MN: Author.
- Minnesota Department of Education (2010). Minnesota administrative rule 3505.1000 Subp. 5, MDE, 2010)
- Minnesota Department of Education. (2007, June). *The bridge to higher learning: A new vision for Minnesota's high schools in the global information age*. Roseville, MN: Author. Retrieved from <http://mnp20.org/resources/index.html>
- Minnesota Department of Education. (2008). *Minnesota's promise: World-class schools, world-class state* (Final report). Roseville, MN: Author. Retrieved from <http://mnp20.org/resources/index.html>
- Miramontes, O., Cheng, L.R., & Trueba, H. T. (1984). Teacher perceptions of observed outcomes: An ethnographic study of classroom interactions. *E-Journal of Learning Disabilities Quarterly*, 7(4), 349–357. Retrieved from <http://www.jstor.org/stable/1510235>
- National Center on Education and the Economy. (2006). *Tough choices or tough times: The report of the New Commission on the Skills of the American Workforce*. Washington, DC: National Center on Education and the Economy: The New Commission on the Skills of the American Workforce. Retrieved from <http://www.skillscommission.org>
- No Child Left Behind Act of 2001, Pub. L. No.107-110, 20 U.S.C. §6301, 115 Stat. (2002).
- National Dissemination Center for Children with Disabilities, (2010). Retrieved from <http://nichcy.org>
- Oliver, L. W., & Spokane, A. R. (1988). Career-intervention outcome: What contributes to client gain? *E-Journal of The Journal of Counseling Psychology*, 35(4), 447–462. Retrieved from <http://psycnet.apa.org>
- Owen, W. (1921, July). Report of the Commission on the Reorganization of Secondary Education. Paper presented at the address and proceedings of the fifty-ninth annual meeting of National Education Association, Des Moines, IA. Retrieved from ERIC database. (ED153896)
- Parsons, F. (1909). *Choosing a vocation*. Broken Arrow, OK: National Career Development Association.

- Pautler, A. J. (Ed.). (1994). *High school to employment transition: Contemporary issues*. Ann Arbor, MI: Prakken.
- Pekel, K. (2007). *The bridge to higher learning: A new vision for Minnesota's high schools in the global information age: A report from the Future of High Schools Task Force of the Minnesota Association of Secondary School Principals in partnership with the University of Minnesota's Consortium for Postsecondary Academic Success*. Retrieved from http://mnp20.org/pdf/res4_bridge.pdf
- Pekel, K. (2008). *Minnesota's promise: World-class schools, world-class state*. Retrieved from <http://mnp20.org/resources/index.html>
- Pennington, D. (2011). Remembering a special American career development idol. *Career Developments*, 27(3), 4-8.
- Peterson, G., Sampson, J., & Reardon, R. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.
- Phillips, D. C. (Ed.). (2000). *Constructivism in education: Opinions and second opinions on controversial issues*. Chicago, IL: University of Chicago Press.
- Pope, M. (2000). A brief history of career counseling in the United States. *E-Journal of The Career Development Quarterly*, 48(3), 194–211. Retrieved from <http://search.ebscohost.com>
- Prichard, D. H. (1974). Career guidance from a federal vantage point. *E-Journal of Peabody Journal of Education*, 52(1), 18–25. Retrieved from <http://www.jstor.org/stable/1492037>
- Prosser, C. A. (1912). Vocational education: Legislation of 1910-1911. *E-Journal of The American Political Science Review*, 6(4), 586–595. Retrieved from <http://www.jstor.org/stable/1944656>
- Reardon, R. C. (2005). Career education: Inseparable and equal. In K. B. Hoyt, *Career education: History and future* (pp. vii–viii). Tulsa, OK: National Career Development Association.
- Reardon, R., Bullock, E., & Meyer, K. (2007). A Holland perspective on the U.S. workforce from 1960 to 2000. *E-Journal of The Career Development Quarterly*, 55(3), 262–274. Retrieved from <http://search.ebscohost.com>
- Ricketts, S. (1982). *The impact of vocational research and development: A literature review*. Retrieved from ERIC database. (ED223816)

- Roeber, E. (1957). Vocational guidance. *E-Journal of Review of Educational Research*, 27(2), 210–218. Retrieved from <http://www.jstor.org/stable/1169254>
- Rojewski, J. W. (1999). The role of chance in the career development of individuals with learning disabilities. *Learning Disabilities Quarterly*, 22(4), 267–278.
- Rosenbaum, J. E. (1996). Policy uses of research on the high school-to-work transition. [Special Issue]. *E-Journal of Sociology of Education*, 69, 102–122. Retrieved from <http://www.jstor.org/stable/3108458>
- Rosenbaum, J. E. (2002). *Beyond empty promises: Policies to improve transitions into college and jobs*. Retrieved from ERIC database. (ED465094)
- Rosenbaum, J. E., Stephan, J. L., Rosenbaum, J. E. (2010). Beyond one-size-fits-all college dreams. *E-Journal of The American Educator*, 34(4), 2-13. Retrieved from <https://www.aft.org>
- Ruhland, S., Jurgens, C., & Ballard, D. (2003). Tech Prep's role in education reform: Perceptions from state Tech Prep directors. *E-Journal of The Journal of Career and Technical Education*, 20(1), 69–85. Retrieved from <http://scholar.lib.vt.edu/ejournals/JCTE/>
- Sampson, J., Reardon, R., Peterson, G., & Lenz, J. (2004). *Career counseling & services: A cognitive information processing approach*. Belmont: Thomson Brooks/Cole.
- Sauermann, H. (2005). Vocational choice: A decision making perspective. *E-Journal of Journal of Vocational Behavior*, 66, 273–303. doi: 10.1016/j.jvb.2004.10.001
- Savickas, M. L. (2003). Introduction to the special issue. *E-Journal of The Career Development Quarterly*, 52(1), 4–7. Retrieved from <http://search.ebscohost.com>
- Savickas, M.L. (2009). Special section: The 100th anniversary of vocational guidance. *The Career Development Quarterly*, 57(3), 194-198.
- Savickas, M. L., & Walsh, W. B. (Eds.). (1996). *Handbook of career counseling theory and practice*. Palo Alto, CA: Davies-Black Publishing.
- Schmoker, M. (1999). *Results: The key to continuous school improvement* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Scribner, J. P., Truell, A. D., Hager, D. R., & Srichai, S. (2001). An exploratory study of career and technical education teacher empowerment: Implications for school leaders. *E-Journal of The Journal of Career and Technical Education*, 18(1), 46–57. Retrieved from <http://scholar.lib.vt.edu/ejournals/JCTE/>

- Sewall, G. T. (2001). Standards for a democratic republic: The Committee of Ten revisited. *E-Journal of Journal of Education*, 176(3), 17–27. Retrieved from <http://search.ebscohost.com>
- Sexton, T. L. & Griffin, B. L.(Eds.).(1997). *Constructivist thinking in counseling practice, research, and training*. New York, NY: Columbia University, Teachers College Press.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Columbia University, Teachers College Press.
- Smith, N. B. (1999). *A tribute to the visionaries, prime movers and pioneers of vocational education, 1892-1917*. *E-Journal of Journal of Vocational and Technical Education*, 16(1). Retrieved from <http://scholar.lib.vt.edu/ejournals/JVTE/>
- Snedden, D. (1910). *The problem of vocational education* [Monograph]. Retrieved from <http://books.google.com/>
- Snedden, D. (1910). Vocational direction. *E-Journal of American Academy of Political and Social Science*, 35[supplement], 86–90. Retrieved from <http://www.jstor.org/stable/1011397>
- Snedden, D. (1916). New problems in secondary education. *E-Journal of The School Review*, 24(3), 177–186. Retrieved from <http://www.jstor.org/stable/1077999>
- Snedden, D. (1977). Fundamental distinctions between liberal and vocational education. *E-Journal of Curriculum Inquiry* 7(1), 41–52. Retrieved from <http://www.jstor.org/stable/1179398> , Reprinted from: National Education Association, *Journal of Proceedings and Addresses of the Fifty-second, Annual Meeting*, Department of Superintendence (Ann Arbor, Mich.: National Education Association, 1914), pp. 150-61.
- Staub, F. C., & Stern, E. (2002). The nature of teachers' pedagogical content beliefs matters for students' achievement gains: Quasi-experimental evidence from elementary mathematics. *Journal of Educational Psychology*, 94(2), 344–355.doi: 10.1037//0022-0663.94.2.344
- Stone, III, J. R. (2005). The neglected majority – revisited. *E-Journal of The Journal of Career and Technical Education*, 21(2), 67–81. Retrieved from <http://scholar.lib.vt.edu/ejournals/JCTE/>

- Stone, III, J. R., & Aliaga, O. A. (2005). Career & technical education and school-to-work at the end of the 20th century: Participation and outcomes. *Career and Technical Education Research*, 30(2), 125–144.
- Stumpf, S., & Lockhart, M. (1987). Career exploration: Work-role salience, work preferences, beliefs, and behavior. *E-Journal of The Journal of Vocational Behavior*, 30, 258–269. Retrieved from <http://www.sciencedirect.com>
- Super, D. E. (1969). Vocational development theory: Persons, positions, and processes. *E-Journal of The Counseling Psychologist*, 1, 2–9. Retrieved from <http://search.ebscohost.com>
- Symonds, W. C., Schwartz, R. B., & Ferguson, F. (2011). Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century. Report issued by the Pathways to Prosperity Project, Harvard Graduates School of Education. Retrieved from <http://www.gse.harvard.edu>
- Tennyson, W. W. (1968). Career development. *E-Journal of Review of Educational Research*, 38(4), 346–366. Retrieved from <http://www.jstor.org/stable/1169613>
- The Northland Works*. (2007). Retrieved from <http://www.thenorthlandworks.org>
- The Postsecondary and Work Force Readiness Working Group. (2009). *The road map to college and career readiness for Minnesota students*. Final report and recommendations presented to The Minnesota P-16 Partnership. Retrieved from <http://www.massp.org/downloads/readiness.pdf>
- The Secretary's Commission on Achieving Necessary Skills. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: U.S. Department of Labor, Author. Retrieved from <http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf>
- Trusty, J., Niles, S., & Carney, J. (2005). Education-career planning and middle school counselors. *E-Journal of Professional School Counseling*, 9(2), 136–143. Retrieved from <http://search.ebscohost.com>
- Turner, S. & Lapan, R. (2003). Native American adolescent career development. *E-Journal of Journal of Career Development*, 30(2), 159–172. Retrieved from <http://search.ebscohost.com>
- Turner, S. (2007). Introduction to special issue: Transitional issue for K-16 students. *Professional School Counseling*, 10(3), 224–225. Retrieved from <http://search.ebscohost.com>

- Turner, S. (2007). Preparing inner-city adolescents to transition into high school. *Professional School Counseling, 10*(3), 245–252. Retrieved from <http://search.ebscohost.com>
- Turner, S., & Lapan, R. (2005). Evaluation of an intervention to increase non-traditional career interests and career-related self-efficacy among middle-school adolescents. *Journal of Vocational Behavior, 66*(3), 516–531. doi: 10.1016/j.jvb.2004.02.005
- Turner, S., Trotter, M. J., Lapan, R. T., Czajka, K. A., Yang, P., & Brissett (2006). Vocational skills and outcomes among Native American adolescents: A test of the integrative contextual model of career development. *E-Journal of The Career Development Quarterly, 54*(3), 216–226. Retrieved from <http://search.ebscohost.com>
- Turner, S., Conkel, J., Reich, A., Trotter, M., & Siewart, J. (2006). Social skills efficacy and proactivity among Native American adolescents. *E-Journal of Professional School Counseling, 10*(2), 189–202. Retrieved from <http://search.ebscohost.com>
- U.S. Department of Education. (2011). Overview: The federal role in education. Retrieved from <http://www2.ed.gov/about/overview/fed/role.html>
- Wadsworth, J., Milsom, A., & Cocco, K. (2004). Career development for adolescents and young adults with mental retardation. *E-Journal of Professional School Counseling, 8*(2), 141–147. Retrieved from <http://search.ebscohost.com>
- Wallis, C., & Steptoe, S. (2006, December 10). How to bring our schools out of the 20th century. *Time*, 1–7.
- Ward, J. D., & Lee, C. L. (2002). A review of problems-based learning. *E-Journal of Journal of Family and Consumer Sciences Education, 20*(1). Retrieved from <http://www.natefacs.org/JFCSE/jfcse.htm>
- Watson, K. (1994). Technical and vocational education in developing countries: Western paradigms and comparative methodology. *E-Journal of Comparative Education, 30*(2), 85–97. Retrieved from <http://www.jstor.org/stable/3099058>
- Wettersten, K. B., Guilmino, A., Herrick, C. G., Hunter, P. J., Kim, G. Y., Jagow, D., ... McCormick, J. (2005). Predicting educational and vocational attitudes among rural high school students. *Journal of Counseling Psychology, 52*(4), 658–663. doi:10.1037/0022-0167.52.4.658
- Whiston, S., & Sexton, T. (1998). A review of school counseling outcome research: Implications for practice. *E-Journal of Journal of Counseling & Development, 76*(4), 412–426. Retrieved from <http://search.ebscohost.com>

- Whiston, S., Sexton, T., & Lasoff, D. (1998). Career-intervention outcome: A replication and extension of Oliver and Spokan (1988). *E-Journal of Journal of Counseling Psychology*, 45(2), 150–165. Retrieved from <http://search.ebscohost.com>
- Wired for 2020: A Campaign from the Mentoring Partnership of Minnesota. (2010). *Map your future*. Retrieved from <http://www.wiredfor2020.com/map-your-future>
- Woolman, M. (1916, May). The Smith-Hughes Bill H.R. 457 (New Number H.R. 11250) S. 703. *E-Journal of Journal of Home Economics*, 8(5), 241–246. Retrieved from http://hearth.library.cornell.edu/cgi/t/text/pageviewer-idx?c=hearth;cc=hearth;sid=f547b177013c948c7e307e52fa91aff4;rgn=full%20text;idno=4732504_8_005;view=image;seq=0025
- Worthington, R. L., & Juntunen, C. L. (1997). The vocational development of non-college-bound youth: Counseling psychology and the school-to-work movement. *The Counseling Psychologist*, 25(3), 323–363. doi:10.1177/0011000097253001
- Wraga, W. (1999, October). *Who wrote the Cardinal Principles Report?: The Commission of the Reorganization of Secondary Education revisited*. Paper presented at the annual meeting of the History of Education Society, Decatur, GA. Retrieved from ERIC database. (ED454603)
- Wraga, W. (2001). A progressive legacy squandered: The “Cardinal Principles” Report reconsidered. *E-Journal of History of Education Society*, 41(4), 494–519. Retrieved from <http://www.jstor.org/stable/3218246>

Appendix A
TIMELINE OF FEDERAL LEGISLATION AND RELATED EVENTS
INFLUENCING CAREER EDUCATION

- 1862 Morrill Act – Morrill Land-Grant College Act of 1862 focuses on expanding the role of colleges to bring liberal education and industrial education to support area businesses to anyone who wanted to attend college and move up the social ladder.
- 1881 Lysander Salmon Richards publishes *Vocophy: The New Profession: A system enabling a person to name the calling or vocation one is best suited to follow*.
- 1888 George Merrill provides vocational guidance services with teacher support at Cogswell High School in San Francisco.
- 1892 National Education Association creates the Commission on the Reorganization of Secondary Education; this committee created Bulletin No. 35 in 1918 for the Department of Interior, Bureau of Education called the Cardinal Principals of Secondary Education. Within the recommendations, vocational education was recommended as a focus of secondary education for American students.
- 1898-1907 Jesse B. Davis is considered the first school counselor because he created the first organized guidance program in a public high school of Detroit Central High School, and later in Grand Rapids, Michigan, to counsel high school students in career development.
- 1904-1906 Eli Witwer Weaver coordinates a Peer Counseling Program in New York City that assisted students to connect courses in high school that would

- help prepare students for entry into an occupation upon graduation. His obituary (1922) also identifies him as “Father of Vocational Guidance System in the Public Schools.”
- 1907 Frank Parker Goodwin, a history teacher in the Cincinnati public schools, initiated an organized guidance program.
- 1908 Official conception of modern vocational guidance is identified because of similar events happening Scotland, Germany, and United States.
- 1908 Boston social reformer Frank Parsons coins the term “*Vocational Guidance*,” marking the beginning of what we now think of as modern vocational guidance. Parsons argued for scientific approaches to vocational guidance instead of mentoring approaches.
- 1909 Frank Parsons posthumously publishes *Choosing a Vocation*, a book which describes a three-step model of career development that starts the vocational guidance movement, which later evolves into the field of counseling. Other pioneers of career development include economists, lawyers, educators, ministers, psychologists, and social workers.
- 1914 Congress authorized President Woodrow Wilson to appoint a committee to study vocational education. On April 2, 1914, The Commission on National Aid to Vocational Education was organized with Senator Hoke Smith as the chairman.
- 1916 Mary Schenck Woolman, a member of the Committee on Smith-Hughes Bill of National Society for the Promotion of Industrial and Education, and Member of Legislative Committee of American Home Economics

- Association wrote an article to support Smith-Hughes bill. She emphasized the need for skilled workers, and how the United States was one of the few large nations at the time that do not provide continued training for workers to bring them up from a low wage earning of self-support.
- 1917 The Smith-Hughes Act focused on connecting secondary education students to train them for employment in agriculture, home economics, trades, and industry. This act provided funding for the first secondary career education program. David Snedden and Charles Prosser provide the thinking and leadership of vocational education during the early 1900's including the leadership for Smith-Hughes Act. John Dewey and progressive education has influence as an opponent of vocational education.
- 1921 Report of the Commission on the Reorganization of Secondary Education created the foundational curriculum in schools today including vocational education.
- 1936 The George-Deen Act supports vocational education for high school students by allocating funds for teachers to teach what were later called vocational education courses in the high schools.
- 1946 The George-Barden Act provides guidance, teaching, training, and research money. This was the first legislation that supported research and development for vocational education by small scale studies by graduate programs.

- 1940-1950s School guidance was established as part of pupil personnel services through legislation.
- 1956 Anne Roe's work on categorizing occupations into eight categories served as a foundation for Holland's work of the late 1950s.
- 1960's Emphasis on professional counseling and connection between employment counselors and school counselors. High unemployment, resurgence of transitions from school-to-work.
- 1960 President Kennedy appoints a group to study vocational education as a possible effort to reduce the unemployment rate.
- 1961 The Area Redevelopment Act included education as a way to reduce poverty.
- 1962 The Manpower Development and Training Act (MDTA) provides structure for youth employment programs and training for workers unemployed by automation. In addition, this act also addressed special problem groups such as drop-outs and unskilled workers.
- 1963 The landmark Vocational Education Act begins a paradigm shift from employer-needs to the skills people need to become successful productive citizens. The VEA incorporates the recommendation of Vocation Recommendation Panel of 1962 that school counselors should understand the complexities of the world of work.
- 1964 The National Defense Education Act (Title V-A of 1958) is amended to include college counseling programs in elementary schools, high schools, and two-year colleges.

- 1964 The Economic Programs Opportunity Act was aligned with similar objectives of MDTA, but the focus was more specific to young and old from impoverished backgrounds.
- 1965 Public Law 89-10, the Elementary and Secondary Education Act (ESEA), the most comprehensive legislation at the time, had five titles to address various needs: Title I: Disadvantaged Youth, and Title III: Supplementary Educational Centers focused on support services including guidance and counseling.
- 1966 Amendments to the Economic Opportunity Act created the New Careers Program which focused on pre-professional employment and career ladders.
- 1967 Another panel of consultants assigned the task to study Vocational Education Act passed in 1963 and its impact to date, but not operational until 1965.
- 1967 President Johnson stressed that the Manpower policy needed to focus bridging the gap between education and work.
- 1968 The Vocational Education Act Amendments provide support for comprehensive career development, and counselor preparation programs focus on the need to help others decide if they should enroll in a vocational program.
- 1968 Earning and Learning Act draft ended up being included in the final version of the Vocational Education Act of 1968.

- 1969 ESEA is amended to include support for guidance and counseling in high schools.
- 1969 Edwin Herr helps to popularize the term *career education* by proposing that all formal education should focus on a career development theme at the National Vocational Education Conference.
- 1970 Education of the Handicap Act Public Law 91-230 started procedural safeguards for special education, and subsequent amendments that included career education as a transition element.
- 1971 At the National Association of Secondary School Principals Annual Conference, the idea of “Career Education” is launched by Sidney Marland, Jr. the U. S. Commissioner of Education introduced the term “career education” and his vision of school reform. Marland later becomes known as the “father of career education.”
- 1973 For the first time, the ESEA Amendments use the term “career development.”
- 1974 The ESEA establishes a statutory base for career education and the official beginning of the Office of Career Education in Office of Education. Funds were for effectiveness, not implementation.
- 1975 P.L. 94-142 Individuals with Disabilities Education Act (IDEA).
- 1974-1982 Dr. Kenneth B. Hoyt becomes the driving force behind efforts of career education as Director of the Office of Career Education.
- 1978 The Career Education Incentive Act was passed, but funding was refused.

- 1978 Ken Hoyt publishes a three-page monograph to define career education, and provided a broad reform of education as a school-based effort to have education better prepare youth for careers.
- 1981 The Career Education Incentive Act is repealed without explanation.
- 1980-1990 Career development is integrated into school guidance as part of a “comprehensive guidance program.”
- 1984 The initial passing of the Carl D. Perkins Vocational and Applied Technical Education Act marks the beginning of Tech Prep which connects education and business. It is intended to solve the problem of transitioning from school to the workforce so as to increase the quality of technical education of the U.S. workforce to grow the economy.
- 1984 Special Education includes more job training and less academics in curriculum.
- 1986 Public Law 99-457 started accountability for special education.
- 1986 Tech Prep is introduced by Dale Parnell to the public. This Act focuses on transitioning for the “neglected majority” that Dale Parnell wrote about in 1986. It includes seven Tech Prep essentials (a) articulation agreements, (b) appropriate curriculum design, (c) in-service teacher training, (d) counselor training, (e) equal access for special populations, and (f) preparatory services.
- 1989 National Career Development Guidelines were developed and published to help with lessons for use in elementary and secondary schools.

- 1990 Carl Perkins II is combined with Title III E of the Tech Prep Act in an attempt to integrate academics and CTE, including articulation between secondary and post-secondary education.
- 1990 Public Law 101-176 Individuals with Disabilities Education Act (IDEA) puts accountability in place for special education students.
- 1991 SCANS (Secretary's Commission on Achieving Necessary Skills) National recognition of the employment skills needed for entry level work that was recommended to implement in high schools.
- 1994 The School-to-Work Opportunities Act is passed; marking the first time vocational education is identified as universal need for all students.
- 1998 Perkins III focuses on linking high schools with two- and four-year college programs, and strengthening the link between business and higher education. It also includes four accountability indicators (a) student attainment, (b) credentialing, (c) placement and retention, and (d) nontraditional training/employment.
- 2001 ESEA is reauthorized as the No Child Left Behind Act.
- 2004 Public Law 108-446 IDEA was amended to IDEIA, and measurable results were expected from students receiving special education.
- 2006 Perkins IV reauthorization merges the Tech Prep and Perkins funds at state discretion (Minnesota is merging funds).
- 2009 College and Career Readiness for all students becomes the current terminology used in high school career development program/activities.

Appendix B
SAMPLE OF MINNESOTA COLLEGE AND CAREER READINESS
RESOURCES

- Blueprints: Redesigning High Schools for the 21st Century* newsletter, Minnesota Department of Education. Available at http://education.state.mn.us/MDE/Academic_Excellence/High_School_Initiatives/Blueprints_Newsletter/index.html
- Conley, D. T. (2007). *Toward a more comprehensive conception of college readiness*. Eugene, OR: Educational Policy Improvement Center. Retrieved from http://mnp20.org/pdf/res1_conley.pdf
- Pekel, K. (2007). *The bridge to higher learning: A new vision for Minnesota's high schools in the global information age: A report from the Future of High Schools partnership with the University of Minnesota's Consortium for Postsecondary Academic Success*. Retrieved from http://mnp20.org/pdf/res4_bridge.pdf
- Pekel, K. (2008). *Minnesota's promise: World-class schools, world-class state*. Retrieved from <http://mnp20.org/resources/index.html>
- Wired for 2020: A Campaign from the Mentoring Partnership of Minnesota. (2010). *Map your future*. Retrieved from <http://www.wiredfor2020.com/map-your-future>

Minnesota Online Resources

www.iseek.org

<http://mncis.intocareers.org>

Appendix C CONSENT FORM

Superintendents' Perceptions of Career Development

You are invited to be in a research study of perceptions of superintendents regarding career development in the public school system. You were selected as a possible participant because of your position as a public school superintendent. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Vicki Oberstar, a doctoral candidate at the University of Minnesota, Department of Education Policy and Administration.

Background Information

The purpose of this study is to understand perceptions of superintendents, and how these perceptions influence the implementation of federal and state career education policy.

Procedures

The topic will be superintendents' perceptions of career development in the public school system. If you agree to be in this study, we would ask you to participate in three interviews over six weeks. These interviews will be digitally recorded and will last approximately 1 hour and 30 minutes each.

Risks and Benefits of Being in the Study

This study carries less than minimal risk. The questions that will be asked are only about career development and your perceptions regarding this topic. The benefits to participation are to gain a better understanding of your perceptions of career education and how it is implemented in your school district. This may provide useful information to you as a superintendent and local school boards across the state of Minnesota.

Confidentiality

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. Only the principal investigator will have access to the digital recordings and they will be kept password protected for five years, then erased.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher conducting this study is Vicki Oberstar, a doctoral candidate at the University of Minnesota. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact me at Fond du Lac Ojibwe School, 218-878-7564, or vickioberstar@fdlrez.com, or my advisor Frank Guldbandsen at 218-726-8172, or fguldbra@d.umn.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612)625-1650.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____ Date: _____

Signature of Investigator: _____ Date: _____

Appendix D

INTERVIEW PROTOCOLS

Interview #1: Life History

Thank you for making the time for this first of three interviews. A total of three interviews will occur once every two weeks for six weeks. The length of each interview will be 1 hour and 30 minutes. The first interview is to establish the context of your experience within the framework of career development. We all have unique experiences. I am not expecting any specific types of answers. I am seeking the story of what your experiences were like for you with as much detail as possible.

Interview questions:

Interview One: “Life History.” This question establishes the context of the participant’s experience:

1. What does the term “career development” mean to you personally?
2. What was your perception of career development as you were growing up?
3. Have your perceptions changed over the years as you have worked in the K-12 school system(s)?
4. What does the term “career development” mean to you as a leader of a K-12 school district?
5. What is your perspective of how career development fits into the K-12 school environment?

Our first interview session is coming to a close. Is there anything else you would like to add about your experiences that we have not talked about?

Thank you for sharing your story with me. During the second interview we will focus on your present experiences. Do you have any questions?

Interview #2: Present Experience

Thank you for taking the time for this interview. In the second interview I hope to understand the story of your present experience with career development. We all have unique experiences and I am not expecting any specific types of answers. I am seeking the story of what your experiences were like for you with as much detail as possible.

Interview Two: “Current View.” This interview reconstructs details of the experience within the context of which the experience occurs

1. From your perspective, how do students experience career development in your district?
2. What is your perception of activities that promote career development in your district?
3. How are these activities incorporated into the district curriculum?
4. What are your perceptions of school reform efforts and the inclusion of career development activities in them?
5. What are your perceptions of the changes in Perkins IV at the federal and state levels?

Our session is almost done. Is there anything else you would like to add?

Interview #3: Reflection on Meaning

Thank you for taking the time for this interview. We all have unique experiences and I am not expecting any specific types of answers. I am seeking the story of what your experiences were like for you with as much detail as possible. Your detailed descriptions will be most helpful as we come to understand your experience.

Interview Three: “Reflective.” Participants can reflect on the meaning of their experience.

1. How has your perception of career development changed over time?
2. Reflecting on your career development experience, how is it similar to or different from students today?
3. What does the term “career development” mean to you as an administrator or an educator?
4. Is there anything else you would like to add about your perceptions of career development in K-12 school programs?

Our sessions are almost done. Is there anything else you would like to add?

Thank you for your contributions to this study.