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Identifying high school practices that impact post-secondary employment outcomes for students with mild-to-moderate learning disabilities

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Identifying High School Practices That Impact Post-Secondary Employment Outcomes For Students With Mild-to-Moderate Learning Disabilities

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ABSTRACT

The purpose of this qualitative study was to identify high school practices that impact post secondary employment outcomes for students with mild to moderate learning disabilities by comparing outcomes of students that had finished school two and three years previously. The procedure used was a thirty question mail-in survey. Three hundred and seventy-one surveys were mailed out to former students in a school district in San Jose, California. The students had all received special education services for mild to moderate learning disabilities when they finished high school with either a diploma, certificate or they had dropped out. The data analysis consisted of sorting the forty-eight returned surveys into two groups, one group with more positive outcomes, and the second group with less positive outcomes. The two groups were compared on several themes including employment, education, knowledge of disability, high school vocational classes, paid employment in high school and several others. The differences suggested some possible directions for this district to take to increase the positive outcomes of their special education students such as teaching students about punctuality, how to explain to their bosses the necessary accommodations that they require, assistance in acquiring drivers licenses, and assistance in experiencing paid employment in high school. Unexpectedly, participation in general education vocational programs or special education programs was not associated with more positive outcomes. The opposite was reported. Future research could be focused on finding the reason or reasons that this effect was noted despite strong research findings to the contrary.

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CHAPTER I

Introduction

Students who receive special education services in high school will fare less well after high school in many areas when compared to students that do not receive special education services (Dowdy, 1996; Dowdy, Carter & Smith, 1990; Schmitt, Cartledge, Growick & Klein, 1987 as cited in Dowdy et al, 1996; Wagner & Blackorby, 1996). These areas include employment opportunities, incarceration rates, income levels and even mortality rates (Scholl & Mooney, 2004; Muller 2002; Blacklund, Sorlie & Johnson, 1999; Wagner & Blackorby, 1996; Phelps & Hanley-Maxwell, 1997). High school dropouts have more positive outcomes than students who complete high school with special education services (Wagner & Blackorby, 1996; Edgar, 1988 as cited in Phelps & Hanley-Maxwell, 1997). Receiving special education services seems to predict poor post-secondary outcomes for the student that receives the services. The question that arises from this information is whether or not the special education services provided in high schools today are effective and efficient in preparing these students to achieve more positive outcomes after high school.

There seems to be many philosophies and curriculums concerning vocational education for students with mild-to-moderate learning disabilities. Many high schools persist in preparing all students as if they will attend college (Rosenbaum, 2002). The majority of students with mild-to-moderate disabilities will go directly to work (Wagner & Blackorby, 1996).

In California most of the vocational programs in special education are directed towards the minority of special education students. The minority of special education

students is comprised of students who have moderate to severe learning disabilities. For these students with moderate to severe learning disabilities, the State of California has mandated vocational education and provided funding to emphasize this education. However, the majority of special education students fall into the category of having mild-to-moderate learning disabilities (Wagner & Blackorby, 1997). There is a dearth of vocational programs and supports for the students with mild-to-moderate learning disabilities. Two important points could be argued for these students with mild-to-moderate learning disabilities. Firstly, they have great potential as employees. Secondly, most of them will be employed for their working lives at non-subsidized, non-sheltered jobs. Non-subsidized, non-sheltered employment is also known as competitive employment. Identifying some high school practices that positively impact their employment outcomes could be the catalyst for developing changes within our present high school education programs.

Fifty years ago there were very few organized special education programs. In fact, "special education" had not been coined as a term yet. Students that were not successful in school were failed. Some students with truly obvious disabilities such as physical disabilities or mental retardation or visible learning disabilities were never allowed to go to school because there were no programs or teachers for them (Winzer, 1993; Dahl & Sanche, 1997)). This lack of a formal education gives rise to the question of how prepared these students would have been for employment in a competitive market.

Today things are vastly different. Or are they? A major difference is that State and Federal Law now requires that special education students are identified as early as

possible (0-21 years of age) and if necessary, that they receive interventions from a very early age. A child must be assessed by trained personnel to determine eligibility for special education services. There are thirteen eligibility categories: autism, deaf, deaf-blindness, emotional disability, hearing impaired, mental retardation, multiple disabilities, orthopedic impairment, other health impairment, and specific learning disability, language or speech disorder, traumatic brain injury and visual impairment. If a child is diagnosed with one or more of these suspected disabilities, evidence must be shown that the child's education is negatively impacted and that the child needs specialized instruction to benefit from his or her education.

Once a child is qualified to receive special education services, a team must be assembled to consider the child's Individual Education Plan or IEP. This team is usually composed of the child's parents or guardians, a special education teacher and/or case manager, a general education teacher, and an administrative representative. When necessary, a school psychologist, medical personnel, therapist or other various professionals will be in attendance. The job of this IEP team is to develop goals and plans for the child, monitor the child's progress at least annually and guide the education of the child. Decisions must be made about appropriate programs and services. Federal Law requires that each student must be placed in the least restrictive environment possible to achieve educational benefit. For example, a child with a mild-to-moderate disability may not require the same level of supervision and intervention that a child with moderate to severe disabilities needs. Ideally each child will be placed in the environment that offers the least restriction while enabling educational benefit as measured by goals reached, classes passed, and benchmarks gained. Federal Law

also requires that each student receiving special education services must also receive transition services in the form of interventions concerning employment, education, training and independent living to facilitate their departure from secondary school. If those interventions were truly effective and efficient, then all the students completing a public school education might assume that they will have positive outcomes regarding employment and education in the world after high school. Unfortunately that is not true.

Research shows that students that receive special education services in high school do less well in many areas of their life than do high school drop-outs (Dowdy, 1996; Dowdy, Carter & Smith, 1990; Schmitt, Cartledge, Growick & Klein, 1987 as cited in Dowdy et al, 1996; Wagner & Blackorby, 1996). If the success of special education programs were to be measured by the outcomes of students after high school, there might be a case to say that there has not been much progress in the last fifty years.

Purpose of the Study

As a former coordinator of independent living services, and a former sheltered workshop counselor, I have had the opportunity to observe several age groups of individuals with mild-to-moderate learning disabilities. I have worked with people from the age of thirteen to seventy who had the common factor of a mild-to-moderate learning disability The lack of special education services in past years was very obvious when working with people over fifty years old. These people could not manage the basic necessities of independent living or working without intensive intervention. When I would begin work with new clients that were younger than thirty years old, I could see that that they had significantly more knowledge than their older counterparts. The biggest difference in their lives appeared to be their differing exposure to organized

education. The older people had virtually no formal education, and the younger people had received thirteen or more years in the public school system. It became apparent that formal education, outside the home, was crucial to the development of many skills such as independent living skills, employment skills and social skills.

Currently I am a high school special education teacher with students that have a mild-to-moderate learning disability. In order to best serve the population I teach, I want to know what high school teaching practices most positively influence their outcomes in employment after high school.

The purpose of this qualitative research is to identify high school practices that impact post secondary employment outcomes for students with mild-to-moderate learning disabilities. By determining which factors (for example: vocational classes, work experience classes, education about their specific disability, possessing a drivers license, college classes, resume preparation, interview practices) positively influence the students' success after high school, steps can be taken to implement only the practices that help.

Research Questions

1. What are the major impacts of high school practices on post-secondary employment outcomes for students with mild-to-moderate learning disabilities?
2. Which are the major vocational educational services in general education or special education programs in Campbell Union High School District that are most strongly associated with more positive post-secondary outcomes for students with mild-to-moderate learning disabilities?

Definition of Terms

Vocational education: for the purposes of this study, vocational education is defined as curriculum designed to provide skills for employment

Special education: instruction that is specially designed for the unique educational needs of students with disabilities (Lewis & Doorlag, 2003, p.445)

Mild-to-moderate learning disability: for the purposes of this study, a mild-to-moderate learning disability id defined as a specific learning disability that does not include mental retardation (an IQ below 70)

Underemployment: for the purposes of this study, underemployment is defined as being employed part time but wanting full time employment, or doing a job that is not challenging or interesting, or a dead-end job with no career potential.

Transition: a process for planning for students' attainment of future post-secondary outcomes through the development of an appropriate course of study (Smith, Polloway, Patton & Dowdy, 2004, p.482)

IDEA 2004: The Individuals with Disabilities Education Act (IDEA) is a law guaranteeing services to children in the USA. IDEA is a set of rules that states the requirements for states and public agencies to provide early intervention, special education and related services to infants, toddlers, children and youth with disabilities. IDEA 2004 made significant changes to the law regarding transitions for secondary students.

NCLB: No Child Left Behind (2001) is a federal law aimed at improving the performance of elementary and secondary schools by increasing the accountability of states, school districts and schools. NCLB focuses on standards-based education reform. NCLB

states that all students will be proficient in all subjects by 2017. No accommodations are made for students with learning disabilities.

CAHSEE: The California High School Exit Exam tests the reading, writing and mathematics skills of all secondary high school students in California. Students failing to pass the two part exam cannot graduate from California high schools with a diploma. Aimed at identifying students without grade level proficiency in the three core subjects named, students first take the exam in the 10th grade.(California Dept. of Education 2009, retrieved online)

CHAPTER II

Review of the Literature

The Commission finds students with disabilities are significantly unemployed and underemployed upon leaving school compared to their peers who do not have disabilities. Too many students with disabilities leave school without successfully earning any type of diploma, and they attend post-secondary programs at rates lower than their nondisabled peers. Adults with disabilities are much less likely to be employed than adults without disabilities. Unemployment rates for working-age adults with disabilities have hovered at the 70 percent level for at least the past 12 years, which the Commission finds to be wholly unacceptable. Even when employed, too many adults with disabilities who are employed earn markedly less income than their nondisabled peers. These statistics reflect failures in the present systems' structures. We find that the overriding barrier preventing a smooth transition from high school to adult living is the fundamental failure of federal policies and programs to facilitate smooth movement for students from secondary school to competitive employment and higher education.

President's Commission on Excellence in Special Education: *A New Era: Revitalizing Special Education for Children and Their Families, July 2002*

The purpose of this study was to identify some high school practices that are positively associated with post-secondary employment outcomes with mild-to-moderately learning-disabled students by examining specific practices in the Campbell Union High School District of San Jose, California. In endeavoring to understand how to best meet the need for more comprehensive school to work transitions, this review of the literature was undertaken.

The review is divided into two major sections: the problem and the impact of vocational education. Peer-reviewed journals were the research tools of choice for this endeavor. The criteria were quite simple; most (about 90%) of the journal articles were less than ten years old and the perused research had to disaggregate the data between mild-to-moderate populations, moderate to severe populations and the general

population. While journals concerning themselves with children and education were most predominant in the resources used, some medical and employment journals were also utilized. Web-based searches of databases provided most of the resources and careful scrutiny of the attached reference lists provided the remainder of the articles reviewed.

The Problem

Several research studies suggest that high school special education students with learning disabilities require more comprehensive school to work transition programs than general education students in order to reach the same levels of positive outcome in terms of employability and earnings (Dowdy, 1996; Dowdy, Carter & Smith, 1990; Schmitt, Cartledge, Growick & Klein, 1987 as cited in Dowdy et al., 1996; Wagner & Blackorby, 1996). Historically, special education students have fared less well than their general education counterparts in the areas of unemployment, underemployment, frequency of incarceration, income and earnings, advancement in employment and risk of mortality (Scholl & Mooney, 2004; Muller, 2002; Backlund, Sorlie & Johnson, 1999; Wagner & Blackorby, 1996; Phelps & Hanley-Maxwell, 1997; Thurlow, Sinclair & Johnson(2002), Sinclair & Thurlow, 2002). Special education students are more likely to be unemployed or underemployed than students in the mainstream. They are more likely to be in jail more often than their general education counterparts. They usually make less in wages and they do not advance up the career ladder as do students who did not get special education services. Most grimly, special education students die younger than students who did not receive special education services. Although some parents, educators and counselors believe that receipt of a high school diploma will

ameliorate the repetition of this history, that view is not supported by research (Dowdy, 1996; Phelps & Hanley-Maxwell, 1997). Special education students that receive a high school diploma do not even earn as much money as general education students that drop out of high school (Wagner & Blackorby, 1996; Edgar, 1988 as cited in Phelps & Hanley-Maxwell, 1997).

Special educators are noting that currently there is much emphasis on transition for special education students. Perhaps this emphasis is being driven by two independent factors, namely the combination of IDEA 2004 and NCLB juxtaposed with the California High School Exit Exam.

IDEA 2004

In 1990 the federal government passed legislation creating IDEA, the Individuals with Disabilities Education Act. In 1997 they amended it to require state and local education agencies to plan for the post-school transition needs of high school students with disabilities. The goal was to insure that all students with special needs were better prepared to make the transition from school to the workplace (Scholl & Mooney, 2004). Ideally, this goal was to be met by a vast network of interconnecting programs and services that vary from state to state, county to county and district to district. This network has not proved effective as observed by Phelps & Hanley-Maxwell (1997) when they reported that " the array of federal work-related education and training programs and special population targeting have created a fragmented, disjointed quagmire of programs and services for the populations most in need ...."(p.243). The President's Commission on Special Education (2002) found that the high rate of unemployment and underemployment is a "fundamental failure of federal policies and programs". In 2004,

IDEA was re-authorized and several important changes were made. These changes were in direct response to the abysmal rates of unemployment and underemployment documented in the President's Commission on Excellence in Special Education (2002). Students with IEPs (Individual Education Plans) must have secondary transition plans in place by the time of their sixteenth birthday. The definition of transition dramatically shifted from the "fragmented, disjointed quagmire" of a process described by Phelps and Hanley-Maxwell (1997) to a set of coordinated activities that are planned and delivered on a schedule determined by the students' individual needs, skills, strengths and desires. The transition plan has shifted in emphasis to results-oriented. Before a student experiences a change in status, there must be an evaluation of that student's performance. Every student requires a Summary of Performance (SOP) before their special educations services are terminated due to graduation with a diploma or becoming too old for services. For the first time, a statement of interagency responsibilities must be included in the IEP.

NCLB

No Child Left Behind (NCLB) has had its own effect on special education by demanding that a certain schedule of improvement in student's academic scores must be met. Unfortunately, NCLB has not made allowances for the special education population, so those students are also be held to the same standards of academic achievement as students without disabilities. One goal of NCLB is that 90% of all students will graduate from high school with a diploma (Dowdy, 1996). To summarize, IDEA mandates that educators plan and provide for the special education student's transition from high school to workplace while NCLB mandates that educators push all

their students to higher levels of academic achievement. The two would seem to be at cross purposes.

CAHSEE

December 2007 marked the first year that California high school students receiving special education services had to pass the California High School Exit Exam in order to graduate with a diploma. The California High School Exit Exam (CAHSEE) is focused on competency levels as determined by the state government in the academic areas of English language arts and mathematics. It is predicted that many special education students will not pass this exam as sophomores, juniors or seniors (CARS website, 2005). As a result, these students will not receive a high school diploma. Receiving a certificate of completion or another marker of attendance in high school has been regarded as less desirable than a high school diploma because these alternates are not as valuable to colleges, the military and employers (Benz & Kochhar, 1996). Traditionally the end result of high school has been a diploma. Perhaps without a high school diploma to look forward to, special education students will increase their already abysmal dropout rate (Rosenbaum, 2002). According to Wagner & Blackorby (1996), almost 40% of students with disabilities did not complete four years of high school as approximately 30% dropped out during high school while 8% had dropped out before ever reaching high school. Compare this to a dropout rate of 16% for regular education students (Edgar, 1988 as cited in Phelps & Hanley-Maxwell, 1997). In summary the CAHSEE may increase the dropout rate in the population of students with disabilities, because it may appear as an insurmountable barrier to graduation and a diploma.

When the legislation in the IDEA 2004 and the NCLB measures is combined with the expected effects of the CAHSEE, the focus on transition services for students with disabilities is intensified. Students receiving special education services may not earn diplomas because of the CAHSEE. IDEA 2004 says that all secondary special education students must have a results-oriented transition plan with measurable post-secondary goals, and receive scheduled transition services throughout their secondary education. Demands on educators and districts have increased in terms of providing better transition services to produce students that are better prepared for employment and post-secondary education after high school.

Vocational Education and the Student with Mild-to-moderate Learning Disabilities

Vocational education in special education is one of the recognized components of a successful school to work transition (Wagner & Blackorby, 1996; Rosenbaum, 2002; Scholl & Mooney, 2004; Phelps & Hanley-Maxwell, 1997; Dowdy, 1996; Roessler & Foshee, 1996). Vocational education is mandated in California for all individuals diagnosed with moderate to severe learning disabilities. These students are also all enrolled in the Workability program; a work-experience program that can provide paid employment in the community. Workability is an array of services including but not limited to job coaching, resume preparation, job interview practice, job search help, job placement and subsidized employment. The Vocational Rehabilitation Act (1992) states that individuals with severe disabilities are to be provided Workability services first and those people with specific learning disabilities are to be served if there are resources available. Often students with mild-to-moderate disabilities receive less help (Dowdy, 1996).

However, students with a diagnosis of mild-to-moderate disability, particularly those diagnosed with a specific learning disability, make up the majority of special education students at 57% according to Wagner & Blackorby (1996). With this important statistic in mind, a review of the relevant literature was undertaken to determine the effectiveness of various approaches to vocational education for students with learning disabilities. If a particular approach to vocational education can be shown as more effective than the others, a case can be made for its use in the high schools of California and specifically the high schools in the local districts.

With data collected on 8000 students over three non-consecutive years, Wagner's and Blackorby's 1996 article reporting the results from the National Longitudinal Transition Study of Special Education Students provided much evidence of the effectiveness of vocational education. This study could be regarded as a classical study of transition for the special education population. The data was disaggregated by disability and several areas were covered, including the effectiveness of vocational education on this population. Wagner and Blackorby (1996) identified that the majority of special education students intended to go directly to work after high school without attending post secondary education. They reported that in the schools with access to vocational education for students with disabilities, the dropout rates were lower than the national average. According to Wagner and Blackorby (1996), the completion of vocational education classes was positively correlated to higher wages, between $4,000 and $6,247 annually more than the students with disabilities that received no vocational education. This benefit was only experienced by the population diagnosed as having a mild disability, not those with severe disabilities or with sensory disabilities. Another

benefit noted was that students who completed vocational education classes experienced an increase in probability of forty percentage points that they would garner a job in competitive employment (Wagner & Blackorby, 1996).

A survey study of eighty learning disabled students and eighty non-learning disabled students was conducted in 1990 to determine their transition needs, differences and similarities (Dowdy, Carter & Smith). These researchers, after analyzing the data on the students with learning disabilities, concluded, "many young people desperately need a curriculum with greater emphasis on their transitional needs" (Dowdy, Carter & Smith, 1990, p.346).

In Oregon researchers Benz, Lindstrom and Yovanoff (2000) described a program called Youth Transition Program that is geared for mild-to-moderately disabled high school juniors and seniors in 75% of Oregon's high schools. This program serves several thousand students. The program provides vocational education in the form of paid work experience, job placement and support, transition planning and instruction in academic, vocational, independent living skills and social/personal areas through a triangle of workers. A transition specialist, a special education teacher and a representative from vocational rehabilitation comprise the team. Benz, Lindstrom and Yovanoff (2000) have reported that 67% of their participants received a regular high school diploma as compared to 43% of youth with disabilities nationally. They also reported that in the first two years post high school, 71% of the Youth Transition Program students are competitively employed as compared to 46% of youth with disabilities nationally. Predictors of these outcomes in individuals are the completion of four transition goals during the program and participation in at least two paid jobs while

in the program. These same researchers have also stated that even one year of career and technical education in their senior year can improve students' probability of getting competitive employment and potential advances in earnings and wages (Benz, Lindstrom & Yovanoff, 2000).

Rosenbaum (2002) in his review paper prepared for the Office of Vocational and Adult Education, U.S. Department of Education discussed the current needs and desires of employers as being "soft skills" (p.9) such as social skills and work habits. Rosenbaum (2002) conducted interviews with 51 employers and reported that the employers stressed the following traits as being more important than academic skills: attendance, dependability, perseverance, attention to quality and ability to work with others" (p.9-10). Vocational education teachers teach these work habits and social skills by setting up their classrooms to simulate a workplace. This enables students to get instruction in these skills which they could not get in many other ways. Rosenbaum (2002) concludes that poor vocational preparation for students can be harmful to their future careers as doors can be figuratively closed in high school. He laments that "the labor market is often a cruel teacher" (p. 9), and many unprepared students are forced to learn in that environment because of a lack of vocational education in our high schools today.

Summary

While the research seems to suggest that Oregon's Youth Transition Program has documented some positive outcomes that differ significantly from the national averages, there is no recognized consensus amongst researchers as to the best approach for vocational education. According to Phelps & Hanley-Maxwell (1997), work

experience and functional curricula appear to work but the specific practices and content are not clear. They urge further research in reviewing outcomes of youths with disabilities leaving high schools as well as reviews of the educational practices that seem to report high quality outcomes.

It seems to be easier to determine what does not work. According to Rosenbaum (2002), the "college for all approach is a form of denial" and serves to set our students farther back in terms of career advancement. Counselors and teachers that push this approach do a serious disservice to the students with disabilities according to Rosenbaum (2002). Benz, Lindstrom and Yovanoff (2000) report that students with disabilities find it hard to meet the academic requirements of high school along with the necessary transition requirements at the same time. By focusing on the academic requirements of the high school diploma, there is potential to shortchange the student's preparation for transition. In other words, precious instructional minutes may be given over to "teaching to the test" so the student can pass an exit exam instead of working on the skills that will provide better employment and more earning power for the student's career.

Vocational education should be given more emphasis in the high schools of California, especially for students with disabilities. Oregon seems to be on the forefront of success with their Youth Transition Program, and perhaps that program could be used as a template for a similar endeavor in California. Further research is necessary to determine which specific practices and curriculum are most effective, but overall there seem to be many effective approaches. The positive outcomes associated with vocational education should serve as encouragement and motivation to educators and

administrators to implement more comprehensive vocational education for individuals with learning disabilities in every high school in California.

CHAPTER III

Research Methods

The purpose of this study was to identify high school practices that positively impact the post secondary outcomes of students with mild-to-moderate learning disabilities. There is a dearth of programs for the mild-to-moderately disabled students and their vocational needs. These students have great potential and most of them will be employed for their working lives at non-subsidized, non-sheltered jobs. Identifying some high school practices that positively impact their post-secondary outcomes could be the catalyst for developing changes within our present high school special education programs.

This qualitative study was conducted with the use of a survey directed towards former students of a large high school district in San Jose, California. The survey asked these former special needs students about their experiences in high school, their exposure to vocational education, their disability and level of satisfaction with their education and their current employment/education status. The rationale for selecting a qualitative approach for this study was that the focus of the study was to examine student perceptions regarding high school vocational education, preparedness for employment and current outcomes. This collective case study was of former students who had a mild-to-moderate learning disability, received special education services and attended different high schools. The methodology consisted of a questionaire in survey form mailed to students and returned anonymously. The survey contained questions about current employment and education, past experiences in vocational education and work history as well as several questions addressing the demographics of the surveyed

student group. A description of the survey questionaire and participants involved follows. Data was transcribed into spreadsheets and analyzed for similarities and differences between participants with more and less positive outcomes.

Participants

Three hundred and seventy-one former high school students of a school district in San Jose, California were selected as participants. The Campbell Union High School District serves 7,700 students on five different high school campuses. The students were selected because they had several factors in common: all were past students of the Campbell Union High School District, all had received special eduation services for a mild-to-moderate learning disability from the named district prior to leaving school, and all left school in either 2006 or 2007. Some of these students completed high school with a diploma, some of these students completed high school with a certificate and some of these students dropped out. Students receiving services for emotional disturbance and students classified as mentally retarded were excluded. The Special Education Department of the Campbell Union High School District selected the students based on the research criteria and supplied the names and addresses of the three hundred and seventy-one participants.

Procedures

Upon receiving written authorization from the school district (see Appendix A) three hundred and seventy-one survey packages were mailed to participants. The survey package contained an introductory letter (see Appendix B), a copy of the thirty question survey (see Appendix C), a stamped envelope with pre-attached labels with the address of the research project, and the return address of the participant. Anonymity

was assured and participants were assured that they could enlist help from family or friends to read the questionaire.

The survey contained thirty questions: thirteen were yes or no questions, twelve were multiple choice questions, three were rating scale questions and one was a fill-in-the-blank question . The questions pertained to students' employment history, secondary and post-secondary education history, current status in both employment and education, and demographic information that included gender, ethnicity, support from other agencies, residence, attendance and timeliness. Students were asked to name their disability, and to select from a list which areas of academics that their disability affected.

Data Collection

Participants were promised a $5.00 gift certificate to Burger King fast food restaurant upon return of the completed survey. Participants were expected to complete the survey in their home and to then mail it back to the researcher. A confederate was designated to retrieve the completed surveys from the rented postal box. The confederate opened the returned surveys, gave the surveys to the researcher and then mailed each participant that returned a survey a $5.00 gift certificate for Burger King fast food restaurant. At this point the confederate destroyed the survey envelopes with the participants' addresses on them. Anonymity of the participants was preserved in this manner. Participants were invited to add written comments about the survey at the end of the survey if they wished.

Data Analysis

After completion of data collection, the surveys were coded and sorted into groups, and the participants' answers were tallied. Five groups of participants were developed and information was sorted into two groups.

Participants were identified as having more positive outcomes if met one of these criterias:

1.They were employed full time.

2.They were full time college students.

3. They were a combination of employed and enrolled in college.

Other participants were identified as having less positive outcomes if they met one of these two criterias:

1.They were unemployed and unenrolled in college.

2.They were working part time and unenrolled in college.

The responses of the first group (more positive outcomes) were compared to the responses of the second group (less positive outcomes) to see similarities and differences. The responses were grouped into themes including possession of a driver's license, vocational education in high school, and the ability to describe the accommodations necessary to an employer. For example, one of the areas or themes that was predicted to show a difference was whether or not the students with more positive outcomes had experienced more paid employment in high school than students with a less positive outcome. Each theme was analyzed in a similar fashion until the similarities and differences between more and less positive outcomes were either shown to exist or shown not to exist.

CHAPTER IV

Results and Discussion

The purpose of this research was to examine two main questions regarding the post-secondary outcomes of high school finishers with mild-to-moderate learning disabilities : a) what are the major impacts of high school practices on post-secondary employment outcomes for students with mild-to-moderate learning disabilities and b) what are the major vocational educational services in general education or special education programs in the Campbell Union High School District that are most strongly associated with more positive post-secondary outcomes for students with mild-to-moderate learning disabilities.

In this chapter, the demographics of the participants and the level of participant response, gender and ethnicity of respondents are first reported in Tables 1 through 4. Then a short description of how the participants were sorted into groups is followed by a look at the differences and similarities in the groups in different areas or themes. Lastly, the research questions are considered one by one.

Demographics of Participants

Students were identified by the Campbell Union High School District as meeting the basic criterion of the research study: all participants finished high school in either 2006 or 2007; all participants received special education services for mild-to-moderate learning disabilities in high school; and all participants attended schools within the Campbell Union High School District. A thirty question survey was developed and mailed to potential participants. Three hundred and seventy-one surveys were mailed but seventy-three were returned as undeliverable.

Table 1

Response of Participants

298 surveys delivered	100%
48 surveys returned	16.1%
250 surveys not returned	83.9%

Table 1 shows that of the two hundred and ninety-eight surveys that were delivered, forty-eight surveys were returned (16.1%). Two hundred and fifty (83.9%) surveys were not returned.

Table 2

Gender of Participants

29 Male Participants	60.4 %
19 Female Participants	39.6%
Total: 48 Particpants	100%

In Table 2, the gender of the participants is reported . Of the forty-eight surveys returned, nineteen were from female participants (39.6%) and twenty-nine (60.4%) were from male participants. This seems to reflect current statistics that males constitute two-thirds of the population of individuals with disabilities (National Association of Special Education Teachers, 2007).

Table 3

Ethnicity of Participants

38 White participants	79.2%
8 Hispanic participants	16.7%
1 African American participant	2%
1 American Indian participant	2%
48 Total Number of participants	100%

In Table 3, the participants' ethnicity is reported. Thirty-eight of the respondents were Caucasian (79.2%), eight were Hispanic (16.7%), one was African American (2%) and one was American Indian (2%).

Results

The first research question asked about the major impacts of high school practices on post-secondary employment outcomes for students with mild-to-moderate learning disabilities. This is important to consider because if a high school practice appears to have a neutral effect on post-secondary outcomes, then perhaps the practice needs to be altered or eliminated in favor of a practice that seems to be more associated in helping students reach more positive outcomes. If a practice appears to have a significant impact, perhaps that practice could be emphasized.

The second research question asked about the major vocational educational services in general education or special education programs in Campbell Union High School District that are most strongly associated with more positive post-secondary outcomes for students with mild-to-moderate learning disabilities. The first question

deals with the broader area of high school practices, the second question deals with the specific vocational education services offered in the Campbell Union High School District.

Groups

First of all, the forty-eight participants were sorted into two groups. By sorting the participants into two groups based on their survey answers, one group of students with more positive outcomes and the other group with less positive outcomes, it became clear that there were some practices or demographic characteristics that were associated more often with one group than the other. The positive outcome group, referred to as Group A hereafter, was comprised of participants that were attending college, or working fulltime, or working and attending college concurrently. The less positive outcome group, referred to as Group B hereafter, was made of participants that were unemployed and not enrolled in college, or working part time.

Incomplete surveys were not discarded but rather all the information given was included. Some participants did not reply to all the questions on the survey so in some instances, the percentages will not add up to one hundred, nor will the numbers equal the number of participants.

Table 4

Development of Groups

Group A More positive outcome participants- 30	62.5%
Group B Less positive outcome group -18	37.5%
Total participants - 48	100%

There were thirty participants (62.5%) that were sorted into the group with more positive outcomes. Eighteen participants (37.5%) were sorted into the group with less positive outcomes.

Comparing Outcomes of the Groups

After coding and tallying the survey results, and grouping the participants into two groups, the groups were compared to each other to find differences and similarities on certain themes. Information on these themes is reported in the following tables and text: participants' education status, employment status, how they found their jobs, punctuality, ability to work with other people, rate of firing, childlessness or having children, living with parents or not, job satisfaction, wages earned, and collection of welfare or food stamps.

Table 5

Employment Status and College Participation

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Employed	Yes - 22 (73.3%)	Yes- 10 (55.5%)
	No - 2 (6.7%)	No - 8 (44.4%)
Part time	Yes- 8 (26.7%)	Yes-10 (61.1%)
Full time	Yes- 7 (23.3%)	Yes- 0
College-Currently	Yes-25 (83.3%)	Yes-0
College-Historically	Yes- 29 (96.7%)	Yes- 12 (66.7%)

Table 5 outlines employment and enrollment information. In Group A, the more positive outcome group, twenty-two (73.3%) of the participants were currently employed. Fulltime workers in Group A numbered seven (23.3.%). Part-time workers in Group A numbered eight (26.7%). Not all participants indicated whether their work was fulltime or part-time. Twenty-five (83.3%) of the Group A participants were currently enrolled in college. Twenty-nine (96.7) participants in Group A had been enrolled in college at some time.

Group B, the less positive outcome group, showed marked differences in the percentages of employment and enrollment. Ten of the Group B participants were employed (55.5%). Of these participants, all were employed part time and none were

employed fulltime. As far as college enrollment, none of Group B participants were currently enrolled in college. However, twelve (66.7%) of them had been enrolled in college at some time.

Table 6

How Participants Found Their Jobs

	Group A More Positive Group 18 responses	Group B Less Positive Group 10 responses
Family or Friends	10 (55.6%)	4 (40%)
An employment agency	1 (5.6%)	1 (10%)
On their own	6 (33%)	5 (50%)
Through college	1 (5.6%)	0 (0%)

In Table 6, the manner in which participants found their employment is illustrated. Participants in Group A found employment most often through family and friends (55.6%) while Group B participants found employment on their own (50%) most often.

Table 7

Punctuality

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Always on time	19 (70.3%)	7 (46.6%)
Usually on time	5 (18.5%)	8 (53.3%)
Sometimes on time	2 (7.4%)	0
Never on time	1 (3.7%)	0

Table 7 shows the differences in rates of punctuality for the participants in the groups. Group A, the more positive outcome groups, reports that they are always on time 70.3% of the time while Group B participants reported that they are always on time 46.6% of the time. Group B also reported that they are usually on time 53.3% of the time as opposed to 18.5% of the Group A participants. There is a large difference in punctuality between the Groups.

Table 8

Ability to Work with Others

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Excellent	11 (64.7%)	6 (60%)
Good	5 (55.5%)	4 (40%)
Not very good	0	0
Terrible	0	0

Both groups report similar levels of getting along with their co-workers. Neither group reported that they did not get along well with co-workers.

Table 9

Rate of Firing

	Group A More positive outcomes	Group B Less positive outcomes
Have been fired	1 (6.7%)	2 (13.3%)
Have not been fired	14 (93.3%)	13 (86.7%)

Even though it appears that the rate of being fired was twice as high in Group B, it is dubious that the difference is significant because of the small sample reporting. Being fired does not appear to be a major cause of unemployment.

Table 10

Existence of Children

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Have children	2 (6.5%)	3 (16.7%)
No children	29 (93.5%)	15 (83.3%)

Table 10 provides the information that in Group A , 6.5% of the participants have children. In Group B, this rate is more than doubled as 16.7% of the participants have children.

Table 11

Living with Parents or Not

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Live with parents	25 (83.3%)	14 (82.4%)
Do not live with parents	5 (16.7%)	3 (17.6%)

In Table 11, it is obvious that there is very little difference in outcome whether or not the participant lives with their parents.

Table 12

Job Satisfaction

Do you like your job?	Group A More Positive Outcomes	Group B Less Positive Outcomes
A lot	9 (60%)	3 (30%)
A little bit	6 (40%)	6 (60%)
Don't like it much	0	1 (1%)
Hate it	0	0

In Table 12, the differences in job satisfaction are illustrated. 60% of Group A likes their jobs a lot and 40% likes their jobs a little bit. In Group B, participants like their jobs a lot only 30% of the time while they like their jobs a little bit 60% of the time. Group B had one participant that didn't like his or her job much. There seems to be more job satisfaction with the participants in Group A.

Table 13

Wages Paid by Hour

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Less than $8.50/hr	4 (23.5%)	3 (27.3%)
More than $8.50/hr	3 (17.6%)	3 (27.3%)
More than $10.00/hr	8 (47.1%)	5 (45.5%)
More than $15.00/hr	2 (11.8%)	0

In Table 13, it appears as of the majority of both groups earns wages in the range of $10.00 to $15.00 per hour. Only Group A had individuals receiving more than $15.00 an hour.

Table 14

Collecting Welfare or Food Stamps

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Collect welfare or food stamps	2 (6.9%)	1(5.6%)
Do not collect welfare or food stamps	27 (93.1%)	17 (94.4%)

In Table 14, it appears that there is very little difference in the groups as far as the collection of welfare or food stamps.

Summary of Differences Beween Groups

There were many obvious differences between Group A and Group B with the most pronounced being in these themes: employment rates, college enrollment, finding employment, punctuality, children or childlessness, job satisfaction, and possession of a driver's license.

The differences beween Group A and Group B were very slight in these themes: history of college enrollment, ability to work with others, rate of firing, living with parents or not, wages earned per hour and collecting welfare or food stamps.

Overall, Group A participants were more likely to be employed and enrolled in college. However since these were differences that determined the group selection, this is not new information. New information included that the participants in Group A were more likely to be punctual and to have greater job satisfaction. Participants in Group A were also more likely to be childless at this point of their lives and to rely on family and friends to find employment.

Research Question I : What are the major impacts of high school practices on post-secondary employment outcomes for students with mild-to-moderate learning disabilities?

In order to determine if there are certain high school practices that influence employment outcomes for this population, it was necessary to look at some of the secondary practices commonly associated with this population. For example, sometimes high school students are taught about their disabilities, sometimes they are not. Sometimes students are able to name their disability, the areas in which they are affected, and the necessary accommodations they require for success. Participants were asked to report on whether they had taken career classes. Questions were asked about general education vocational classes such as photography, child development, cooking, computer classes and agriculture; and about vocational programs such as Central County Occupation Program (CCOC) and Reserve Office Training Corp (ROTC). Participants were asked whether or not they had completed a career

assessment or personal survey about employment in high school. Participants were asked about participation in Work Ability (special education) or Work Experience (general education) classes and if they had experienced paid employment during high school. Participants reported on whether they felt that they had been taught enough in high school in the areas affected by their disabilities. Participants provided answers to the question of whether or not they had an up-to-date resume or not. All of these themes may reflect current practices in secondary schools.

Findings

Table 15

Knowledge of Own Disability

Do you know the name of your disability?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Denied disability	4 (14.3%)	5 (26.3%)
Did not know disability	12 (42.9%)	6 (31.6%)
Named disability	12 (42.9%)	8 (42.1)

Slightly more participants in Group B denied that they had a disability than did participants in Group A. For clarification purposes, it should be restated here that all participants received special education services for mild-to-moderate learning disabilities in high school in the Campbell Union High School District. In order to receive such services, students must be diagnosed with a learning disability. Slightly more participants in Group A (42.9%) claimed they did not know the name of their disability as compared to participants in Group B (31.6%).

Table 16

Disabilities Named

Disability	Number of Participants
Attention Deficit Disorder	6
Attention Deficit Hyperactivity Disorder	4
Dyslexia	3
Auditory Processing Deficit	2
Visual Perceptual	1
Anxiety	1
Depression	1
Short Term Memory loss	1
Long Term Auditory Memory Loss	1
Bipolar	1
Aspergers	1
Cerebral Palsy	1
Dysgraphia	1
Slow Processing	1

Students were asked to write in the name of their disability if they knew it. Twenty-one participants wrote their disability or disabilities on the survey. Four of the twenty-one reported multiple disabilities. Disabilities were not divided by groups.

Table 17

Disability Affects Participant in These Areas

	Group A More Positive Outcomes	Group B Less Positive Outcomes
reading	19 (63.3%)	9 (50%)
writing	16 (53.3%)	8 (44.4%)
math	9 (30%)	8 (44.4%)
organization	6 (20%)	9 (50%)
communication	4 (13.3%)	4 (22.2%)
other	5 (16.7%)	2 (11.1%)

In Table 17, Group A is shown as experiencing the most effect in the area of reading, followed by writing, then math, organization and other. Communication is the area least affected for participants in Group A.

It is different for Group B. They experience the greatest effects in the areas of reading (50%) and organization (50%). They rated themselves as equally effected in writing and math at 44% of the group. Group B (22.2%) also rated themselves as experiencing a greater effect in communication than did Group A (13.3%).

Both groups list reading as an area strongly effected by their disability however Group B ranks the other are as more highly than Group A especially organization and communication.

Table 18

Explaining Necessary Accommodations

Can you explain to your boss how to work with your learning disability?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes	16 (67%)	5 (36%)
No	8 (33%)	9 (64%)

Table 18 shows that Group A (67%) reports being able to explain the necessary accommocations to their bosses more frequently than Group B (36%). The majority of the Group A participants can explain their accommodations while the majority of Group B can not.

Table 19

Paid Employment in High School

Did you have a paying job in high school?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes	19 (65.5%)	8 (40%)
No	10 (34.5%)	12 (60%)

In Table 19, there is an obvious difference in the groups' employment during high school. The participants in Group A (65.5%) had paid employment much more often than the participants in Group B (40%).

Table 20

Participation in Workability or Work Experience in High School

Did you participate in Workability or Work Experience in high school?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes	8 (22.2%)	7 (50%)
No	28 (77.8%)	7 (50%)

In Table 20, participation in Workability or Work Experience programs is considered. Group A participants were not very involved with these programs (22.2%) whereas 50% of Group B participated in these programs.

Table 21

High School Learning

Did your high school teach you enough in these areas?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Reading	18 (60%)	12 (66.7%)
Writing	29 (96.7%)	11 (61.1%)
Math	12 (40%)	11 (61.1%)
Being on Time	14 (46.7%)	9 (50%)
Organization	27 (90%)	6 (33.3%)

In Table 21, Group A, more than half of the participants reported that they had been taught enough in reading, writing and organization but especially in writing and organization. Less than half of the participants in Group A reported that they had been taught enough about being on time and in math.

Group B reported different levels of teaching in high school. More than half of them felt they had learned enough in reading, writing and math and perhaps in being on time. Less than half of Group B felt they learned enough about organization.

Table 22

General Education Vocational Classes in High School

Did you take vocational classes in high school?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Central County Occupational Program (CCOC)	9 (30%)	3 (37.5%)
Cooking, photography, child development, computer classes, agriculture	16 (53.3%)	16 (88.9%)
Reserve Officers' Training Corp (ROTC)	0	5 (27.8%)

In Table 22 the most utilized vocational classes seems to be these classes offered on the high school campuses: cooking, photography, child development,

computer classes or agriculture. 88.9 % of Group B members participated in these classes while 53.3% of Group A members participated in them. None of the Group A members participated in Reserve Officers' Training Corp but 27.8% of Group B did. Participation in Central County Occupational Program was almost equal with the two groups.

Table 23

Careers Assessments or Surveys

Did you take any career assessments or personal surveys in high school to see what kinds of jobs suited you?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes	8 (27%)	7 (39%)

In Table 23, both groups reported less than half of their members took a career assessment or personal survey to determine career possibilities while in high school.

Table 24

Careers or Career Awareness Components (Special Education)

	Group A More Positive Outcomes	Group B Less Positive Outcomes
Career class	6 (20%)	3 (16.7%)
Job Shadowing	9 (30%)	3 (16.7%)
Resume Preparation	0	5 (28%)
Career Exploration	0	1(5.6%)
Interviewing Skills	0	3 (16.7%)
Community Service	0	3 (16.7%)

In Table 24, there is some evidence that Group B experienced more components of the career classes such as resume preparation, interviewing skills and community service. However Group A reported more enrollment in a Careers class and more job shadowing than did Group B particpants.

Table 25

Resumes

Do you have a resume?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes, one I did in high school.	3 (10%)	5 (27.8)
One that is up-to-date	20 (67%)	9 (50%)
No	5 (16.7%)	5 (27.8%)

In Table 25, it is clear that the majority of Group A participants have an up-to-date resume while 50% of Group B have an up-to-date resume. Group B also had more participants with their high school resumes and without a resume at all.

Table 26

Possession of a Driver's License

Do you have a driver's license?	Group A More Positive Outcomes	Group B Less Positive Outcomes
Yes	25 (83%)	7 (41%)
No	5 (17%)	10 (59%)

In Table 26, it is shown that more than double the percentage of participants in Group A have a driver's license as do the participants in Group B. Many schools

continue to offer driver's education courses but the Campbell Union High School District has not offered these courses for several years.

Table 27

Diploma, Certificate or Dropout

When you left high high school did you get?	Group A More Positive Participants	Group B Less Positive Particpants
Diploma	29 (97%)	14 (78%)
Certificate	1 (3%)	1 (5.6%)
Dropout		3 (16%)

Almost every participant in Group A (97%) received a high school diploma while a strong majority in Group B (78%) received a high school diploma. There were no drop-outs in Group A. One student reported receiving a certificate which is difficult to explain as Campbell Union High School District issued its first Certificate of Educational Acheivement in the 2008-2009 school year and these participants finished high school in either 2006 or 2007.

Discussion

The question of identifying secondary practices that impact post-secondary employment speaks to the mandate set out in the *President's Commission on Excellence in Special Education* (2002). Clearly the members of the Commission found the statistics of unemployment for adults with disabilities to be unsatisfactory, and they laid the blame for the situation solidly at the door of the secondary institutions that fail to

provide a a seamless transition from secondary school to education or employment. In order to improve the transitions, secondary schools need to identify the practices that are more strongly associated with more positive outcomes for students with disabilities.

In this research study, eight of eleven investigated themes were identified as being more strongly associated with more positive outcomes. Three of the investigated themes seemed to have little influence on more positive or less positive outcomes.

Perhaps the strongest association was found when the participants were asked if they could explain to their bosses about the accommodations they needed to do their jobs. Sixty-seven percent of Group A could indeed explain their accommodations as opposed to only 36% of Group B participants. Interestingly enough, the ability to name their disability was not an indicator of less or more positive outcomes. It seems that participants do not necessarily need to know the name of their disability but they do need to know the accommodations that help them.

The participants' learning disabilities affected them in different subject areas at school. Group A experienced the most difficulty in reading and then writing. Group B experienced the most difficulty equally in reading and organization with math and writing as close runners-up. The biggest difference between groups was in organization as Group B named that as their number one area of difficulty while it was the fourth area of difficulty for Group A. The participants were also asked if they felt they had been taught enough in high school in their areas of difficulty. Group A strongly felt that they had been taught enough in both writing and organization. Group B did not feel as strongly about any of the areas but they did report that they were definitely not taught enough

about organization. Perhaps it could be speculated that organization is a very limiting factor for those participants in Group B.

The more positive outcome group, Group A, reported that a majority of them had experienced paid employment during high school. Group B's participants reported that a minority of them experienced paid employment in high school. Perhaps having had paid employment in high school could be suggested as another predictor of more positive outcomes after secondary school.

An interesting area of inquiry centered around the connection between Work Ability or Work Experience programs, vocational classes and more successful outcomes. Research shows that vocational education is one of the recognized components of a successful school to work transition (Wagner & Blackorby, 1996; Rosenbaum, 2002; Scholl & Mooney, 2004; Phelps and Hanley-Maxwell, 1997; Dowdy 1996; Roessler & Foshee, 1996). This did not seem to hold true for this group of participants.

The majority of Group A participants did not participate in these programs while Group B's participants were evenly divided in participating or not participating. According to the research, the results should have been opposite. The majority of participants in both groups took vocational classes on their high school campuses but only Group B students enrolled in Reserve Office Training Corp. There was no strong difference in enrollment rates between Group A and Group B so it appears that there is not a strong association between outcomes and vocational education in this study. One explanation might be the manner in which vocational education is delivered in this

geographic area. Most of the vocational education has been developed for general education students not special education students.

Both groups reported that a minority of them had taken career assessments or surveys, usually a component of a vocational class. Both groups reported that a small minority of their members took vocational classes like careers and career awareness in the special education environment. That information leads to the question of how available the special education vocational classes are to the students with learning disabilities.

Resumes are often a component of vocational classes or career classes. A majority of the Group A participants reported having a current resume while only half of Group B participants had a current resume. It is interesting that the group that is more employed has more up-to-date resumes where it might seem that those that are unemployed or underemployed would be more likely to have an up-to-date resume.

More than double the number of Group A participants had driver's licenses as compared to Group B. Somehow it seems that possessing a high school diploma is strongly associated with more positive outcomes. It seems unfortunate especially for special education students that Campbell Union High School District has discontinued the driver's education curriculum in their high schools.

Finally, participants were asked if they received a diploma, a certificate or dropped out of high school when they finished high school. Both groups reported a majority of them had received a diploma which supports the research that has found that a diploma does not improve the outcomes of a special educaton students (Dowdy,

1996; Phelps & Hanley-Maxwell, 1997).Only Group B had participants that had dropped out of high school without completing a diploma or certificate.

This research points strongly to the need to teach all special education students which accommodations will help them most in a way that they could relate to someone else. Another application could be the identification of students most lacking in organization skills and then the development of a curriculum targeted specifically to these students. While paid employment in high school is a strong predictor of a more positive post-secondary outcome, participation in the very programs that support employment (Workability and Work Experience) is not associated with a positive outcome. Apparently students should work for wages in high school but necessarily with the support of these programs. Participation in vocational classes also was not associated with positive outcomes and that is an area of concern because it is so strongly touted as part of a good transition program. Perhaps this school district might want to discover why vocational education is not benefitting mild-to-moderately learning disabled students.

This study suggests that resume preparation should be taught so that students can update their resumes after they complete high school; and that students with organization problems should be identified and receive extra teaching in that area; and that students should know their accommodations; and that students should have paid employment during high school. This study also suggests strongly that special education students should be assisted in acquiring a driver's license.

Future research might be directed towards the finding that vocational education, Workability and Work Experience do not seem to be providing the benefits in this specific school district that might be expected.

Research Question II: Which are the major vocational educational services in general education or special education programs in Campbell Union High School District that are most strongly associated with more positive post-secondary outcomes for students with mild-to-moderate learning disabilities?

The vocational programs in Campbell Union High School District that originate in general education include Work Experience class, Reserve Officer Training Corp, Central California Occupational Program (CCOC) and several classes including child development, cooking, computer classes, agriculture and photography. The vocational programs that originate in special education are Workability, Career and Career Awareness classes.

Findings

The findings for this second research question were gleaned from the findings of the first research question. The first research question was a broader question inquiring as to which high school practices impacted post-secondary outcomes for the participants. This second question asked which specific vocational service was most associated with more positive outcomes. Specific data and tables were considered for this question.

Table 22 contains information on the General Education vocational classes in high schools in the Campbell Union High School District. The most often taken vocational classes seem to be these classes that are offered on the high school

campuses: cooking, photography, child development, computer classes or agriculture. 88.9 % of Group B members participated in these classes while 53.3% of Group A members participated in them. None of the Group A members participated in Reserve Officers' Training Corp (ROTC) but 27.8% of Group B did. Participation in Central County Occupational Program (CCOC) was almost equal with the two groups. The group associated with the least positive outcomes took more of these classes than the group of participants with more positive outcomes.

Table 23 shows the rate at which the two groups experienced Careers or Career Awareness Components , the vocational classes usually offered only by the special education departments in this school district. In Table 23 there is some evidence that Group B experienced more components of the career classes such as resume preparation, interviewing skills and community service. However Group A reported more enrollment in a Careers class and more job shadowing than did Group B participants.

In Table 24 which measured whether or not the participants had a current resume, it is clear that the majority of Group A participants (67%) had an up-to-date resume while 50% of Group B have an up-to-date resume. Group B also had more participants still using their high school resumes or without a resume at all.

Table 25 shows how many of the participants in each group possessed a driver's license. The table shows that more than double the percentage of participants in Group A had a driver's license as did the participants in Group B. Many schools continue to offer driver's education courses but the Campbell Union High School District has not offered these courses for several years.

Discussion

Research shows that vocational education is one of the recognized components of a successful school to work transition (Wagner & Blackorby, 1996; Rosenbaum, 2002; Scholl & Mooney, 2004; Phelps and Hanley-Maxwell, 1997; Dowdy 1996; Roessler & Foshee, 1996). This did not seem to hold true for this group of participants.

The majority of Group A participants did not participate in these two vocational education programs while Group B's participants were evenly divided in participating or not participating. According to the research, the results should have been opposite.

The majority of participants in both groups took vocational classes on their high school campuses. There was no strong difference in enrollment rates between Group A and Group B so it appears that there is not a strong association between outcomes and vocational education in this study. One explanation might be the manner in which vocational education is delivered in this geographic area. Most of the vocational education has been developed for general education students, not special education students.

Both groups reported that a minority of them had taken career assessments or surveys, usually a component of a vocational class. Both groups reported that a small minority of their members took vocational classes like careers and career awareness in the special education environment. That information leads to the question of how available the special education vocational classes were to the students with learning disabilities.

Resumes are often a component of vocational classes or career classes. A majority of the Group A participants reported having a current resume while only half of Group B participants had a current resume. It is interesting that the group that is more employed has more up-to-date resumes where it might seem that those that are unemployed or underemployed would be more likely to have an up-to-date resume.

More than double the number of Group A participants had driver's licenses as compared to Group B. Somehow it seems that possessing a high school diploma is strongly associated with more positive outcomes. It seems unfortunate especially for special education students that Campbell Union High School District has discontinued the driver's education curriculum in their high schools.

An association between vocational education and positive outcomes was not found in this study. Vocational programs, whether in special education or general education, were not associated with more positive outcomes. This was a totally unexpected result given the research that posits that vocational education and positive outcomes are strongly related (Wagner & Blackorby, 1996; Rosenbaum, 2002; Scholl & Mooney, 2004; Phelps and Hanley-Maxwell, 1997; Dowdy 1996; Roessler & Foshee, 1996).

One possible explanation is that the definition of a mild-to-moderate learning disability is quite broad and there is a large difference in the abilities of the highest achieving and lowest acheiving students. Prior to the 2008-2009 school year, students receiving special education services in Campbell Union High School District for a mild-to-moderate learning disability were seperated into two programs: Special Day Class (SDC) for students with lower achievement levels and Resource Specialist Program

(RSP) for students with higher achievement levels. Perhaps further research would find that the students that were in Special Day Class programs in high school made up the majority of Group B, the group with less positive outcomes,

There are many possible implications for this finding. It seems that vocational education is not beneficial to students with mild-to-moderate learning disabilities in Campbell Union High School District. The Workability program that works well in other districts should be adjusted so that it provides benefits to the students in Campbell Union High School District. More emphasis on facilitating paid employment in high school would seem to be the way for Workability to increase its effectiveness in this area. Another implication is that special education vocational education was not accessed by the majority of the participants, all who were receiving special education services. It seems that if the general education vocational education classes are not producing results, the special education departments should be providing options for their students. The special education departments may need to teach resume preparation in the special education environment . The special education staff may also need to teach students how to explain their disabilities to teachers, bosses and professors as well as their necessary accommodations. Perhaps students receiving special education services need to have access to a driver's education program as part of their transition program as it is strongly associated with more positive outcomes.

There is a definite need for future research to determine what can be done to bring this district's vocational education to the same level of effectiveness as the research suggests is the norm.

Conclusion

Determining the high school practices that impact post-secondary outcomes for students receiving special education services for mild-to-moderate learning disabilities was the first research question considered. Some practices were identified in this study as being more strongly associated with more positive outcomes. To summarize, these practices including assisting a student to:

a) be able to explain their disability and their accommodations

b) gain a driver's license

c) have a current resume

d) understand punctuality

e) have paid employment in high school

The second research question asked which vocational programs were most effective with the target population in Campbell Union High School District. The unexpected finding was that vocational programs were not strongly associated with more positive outcomes in Campbell Union High School Districts. Suggestions from this study include adding more places in the Workability program. Perhaps adding more special education vocational programs to teach resume preparation, the importance of punctuality, knowledge of their own disabilities and accommodations and driver's education are the clearest answers to the second research question.

CHAPTER V

Summary

The purpose of this qualitative research was to identify high school practices that impact post secondary employment outcomes for students with mild-to-moderate learning disabilities. By determining which factors positively influence the students' success after high school (for example: vocational classes, work experience classes, education about their specific disability, possessing a drivers license, college classes, resume preparation, interview practices), steps can be taken to implement only the practices that help.

Three hundred and seventy-one former high school students of a school district in San Jose, California were selected as participants. The students were selected because they had three factors in common: all were past students of the Campbell Union High School District, all received special eduation services for a mild-to-moderate learning disability from the named district prior to leaving school, and all left school in either 2006 or 2007. Some of these students completed high school with a diploma, some of these students completed high school with a certificate and some of these students dropped out. Students receiving services for emotional disturbance and students classified as mentally retarded were excluded. The Special Education Department of the Campbell Union High School District selected the students based on the research criteria and supplied the names and addresses of the three hundred and seventy-one participants.

The survey contained thirty questions: thirteen were yes or no questions, twelve were multiple choice questions, three were rating scale questions and one was a fill-in-

the-blank question . The questions pertained to students' employment history, secondary and post-secondary education history, current status in both employment and education, and demographic information that included gender, ethnicity, support from other agencies, residence, attendance and timeliness. Students were asked to name their disability, and to select from a list which areas of academics that their disability affected. Participants were expected to complete the survey in their home and to then mail it back to the researcher. Participants were invited to add written comments about the survey at the end of the survey if they wished.

After completion of data collection, the surveys were coded and sorted into groups, and the participants' answers were tallied. Participants were sorted into two groups. One group was identified as having more positive outcomes if they met one of these three criterias: employed full time, full time college students or a combination of employed and enrolled in college. This was Group A. The second group was identified as having less positive outcomes if they met one of these two criterias: unemployed and unenrolled in college, working part time and unenrolled in college. This was Group B.

The responses of Group A were compared to the responses of Group B to see similarities and differences. The responses were grouped into themes including possession of a driver's license, vocational education in high school, and the ability to describe the accommodations necessary to an employer. For example, one of the areas or themes that was predicted to show a difference was whether or not the students with more positive outcomes had experienced more paid employment in high school than students with a less positive outcome. Each theme was analyzed in a similar fashion

until the similarities and differences between more and less positive outcomes were either shown to exist or shown not to exist.

This research points strongly to the need to teach all special education students which accommodations will help them most and how to relate that information to someone else. Another application of this research might be identify the students most lacking in organization skills so that a curriculum targeted specifically to these students can be implemented. While paid employment in high school is a strong predictor of a more positive post-secondary outcome, participation in the very programs that support employment (Workability and Work Experience) was not associated with a positive outcome. Apparently students should work for wages in high school but not necessarily with the current support levels of these programs. Participation in vocational classes also was not associated with more positive outcomes, and that is an area of concern because it is so strongly touted as part of a good transition program. Perhaps this school district might want to discover why vocational education is not benefitting mild-to-moderately learning disabled students.

The educational philosophy of many districts may be to prepare all students for college, and to emphasize NCLB results and CAHSEE results by enrolling special education students in remedial academic classes. These two practices may actually be detrimental to many students with mild-to-moderate learning disabiltiies as the allotted instructional time is eaten up by these remedial and academic classes and little time is left for elective classes such as special education career classes and Workability programs. There may be much truth to the concept that not all students can complete the CAHSEE, meet the academic achievement standards of NCLB and also complete a

transition plan. When considering which course of action will be most helpful in the target students' post-secondary lives, the research seems to point to completing the transition plan as most important. Under IDEA 2004, the school districts are held more accountable for the seamless transition of the target students from the secondary environment to the post-secondary environment. Most school districts have much work to do to meet the minimum requirements of IDEA 2004.

This particular study points strongly to several possible actions that school districts could implement. First, all special education students with mild-to-moderate learning disabilities need to know which accommodations will help them most and how to explain them to a boss, teacher or professor. Secondly, school districts might want to initiate or continue driver's education programs for special education students. Thirdly, students most lacking in organization skills should be identified and receive interventions targeted specifically to improving organization skills. Fourthly, all students in the target population should experience paid employment in high school, and this should be facilitated as part of their transition plan. Fifthly, these students must learn the value of punctuality and that should begin with teachers' strong adherence to school's attendance policies. Lastly, all students need to know how to create a basic resume and how to update it after they leave high school.

Future research might be directed towards the finding that vocational education, Workability and Work Experience do not seem to be providing the benefits in this specific school district that might be expected. There is a definite need for future research to determine what can be done to bring this district's vocational education to the same level of effectiveness as the research suggests is the norm.

In summary, this action research project provided me with a rich opportunity to study the very population that I work with, students with mild-to-moderate learning disabilities, and in the very area that I am most interested in, post-secondary outcomes. I learned that unless the future is vastly different from the present, most of my students will not finish a college degree but will go to work in a highly competitive job market without enough skills to advance or to earn salaries much above minimum wage. However, I also learned from this study that there are actions to take to help prevent that future from occurring. Despite the limitations of this action research project, the findings provided me with insights regarding interventions and education that I and my colleagues can provide to our special education students to increase their future success. This action research project charged me with optimism and excitement about the impact of high school practices. Optimism and excitement are two excellent partners to have in this rewarding field of special education.

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APPENDICES

APPENDIX A

LETTER OF PERMISSION FROM CUHSD

Campbell Union High School District

January 28, 2009

Committee for the Protection of Human Subjects,
California State University at Monterey Bay.

Dear Members of the Committee:

This letter is to confirm that Cynthia (Cindy) Deetz has been authorized by Campbell Union High School District of San Jose, California to access the names and addresses of a specific group of past students from this district. Ms. Deetz has assured Campbell Union High School District that these former students will remain anonymous. She has also assured Campbell Union High School District that this data will be used only to conduct research for her Action Thesis. Campbell Union High School District will abide by and comply with Committee for the Protection of Human Subjects procedures.

Sincerely,

Patti Gregory

Assistant Superintendent, Curriculum and Instruction

APPENDIX B

LETTER TO PARTICIPANTS

CALIFORNIA STATE UNIVERSITY
Monterey Bay
COLLEGE OF PROFESSIONAL STUDIES

100 CAMPUS CENTER, BUILDING 3
SEASIDE, CA 93955-8001
831-582-3853
FAX 831-582-4568
CPS@CSUMB.EDU
WWW.CSUMB.EDU

70

Insert survey here

February 16, 2009

Research Project
Box 276, 343 Soquel Avenue
Santa Cruz, CA 95062

Dear Former Student in the Campbell Union High School District,

My name is Cindy Deetz and I am a high school special education teacher. I am working on completing my Master's degree at California State University Monterey Bay. To finish my degree, I am doing some research. This research is aimed at finding out what schools can do to help students succeed after high school. I need your help to do this.

Your name came up as a possible participant in my research because, when you finished high school, you were receiving special education services in the Campbell Union High School District. You might have been attending Prospect High School, Branham High School, Westmont High School, Leigh High School, or Del Mar High School.

To help me out with this project, I would like you to complete the enclosed survey. When you mail it back to me in the stamped addressed envelope, I will mail you a $5.00 gift certificate from Burger King to show my appreciation. I would be so thankful if you would do this for me.

The survey is anonymous. No one will know what your answers are. I won't even know who said what because I have a helper that opens the envelopes and mails the gift certificate to you. He won't tell me who gets a certificate. That is how I can guarantee your privacy.

So please fill out your survey today and mail it back to me! I need your help to figure out what classes and programs in high school really help the students. By completing and mailing the survey form, you are implying consent for me to use your answers in my collection of answers.

Sincerely,

Cindy Deetz

Cindy Deetz

APPENDIX C

SURVEY

DO NOT PUT YOUR NAME ON THIS PAPER

Please complete these questions. It is fine to have someone else read these questions to you if you have trouble reading. This is an anonymous survey: no one will know your answers. Thank you for participating!

1. Are you employed?	Yes ☐ No ☐	
If you answered NO to this question, please skip to Question #9.		
2. Are you working 40 hours or more a week?	Yes ☐ No ☐	
3. Are you working less than 40 hours a week?	Yes ☐ No ☐	
4. What kind of job do you have?	1. A job in a union (plumber, electrician, Safeway worker, etc)	☐
	2. A job without a union (fast food, restaurant, babysitter, etc.)	☐
	3. A job with specialized training (nurse, child care worker, plumber, etc.)	☐
	4. A job that required you to go to college	☐
5. Think about your wages. Are you making:	1. Less than $8.50 an hour	☐
	2. More than $8.50 an hour	☐
	3. More than $10.00 an hour	☐
	4. More than $15.00 an hour	☐
6. If you are working now, how did you find your job? Check all that apply.	1. Through family or friends	☐
	2. An employment agency (Dept of Rehab.)	☐
	3. On your own (newspapers, radio ads, flyers, etc.)	☐
	4. Through college or an	☐

	apprenticeship	
7. If you are working now, how do you get along with your fellow workers?	1. Excellent	☐
	2. Good	☐
	3. Not very good	☐
	4. Terrible	☐
8. Do you like your job right now?	1. Yes, I like it a lot	☐
	2. Yes, I like it a little bit.	☐
	3. No, I don't like it much.	☐
	4. No, I hate it.	☐
9. Have you ever been fired from a job?	Yes ☐ No ☐	
10. If you were fired, why?	1. Late too many times or not showing up	☐
	2. Did not get along with the other workers	☐
	3. Laid off	☐
	4. Boss got mad at you	☐
	5. Could not do the job	☐
	6. Other	☐
11. Are you:	1. Male	☐
	2. Female	☐
12. Do you have children?	Yes ☐ No ☐	
13. Do you live with your parents?	Yes ☐ No ☐	
14. Do you collect welfare or food stamps?	Yes ☐ No ☐	
15. What is your ethnicity?	1. Native American	☐
	2. Hawaiian	☐

	3. Chinese	☐
	4. Guamanian	☐
	5. Japanese	☐
	6. Samoan	☐
	7. Korean	☐
	8. Tahitian	☐
	9. Vietnamese	☐
	10. Other Pacific Islander	☐
	11. Asian Indian	☐
	12. Filipino	☐
	13. Laotian	☐
	14. Hispanic	☐
	15. Cambodian	☐
	16. African-American	☐
	17. Other Asian	☐
	18. White	☐
16. If you have a learning disability, do you know the name of it?	1. I don't have a disability. Skip to question #13	☐
	2. I don't know the name of my disability.	☐
	3. My disability is _____. Write the name on the line.	☐
17. In what area or areas, does your disability affect you?	1. reading	☐
Check all that apply.	2. writing	☐
	3. math	☐
	4. organization	☐
	5. communication	☐
	6. other	☐
19. Did you have a paying job during high school? 20.	Yes ☐ No ☐	
19. Do you think that your high school education taught you the skills that you need for your job? Check all that apply. Did high school teach you enough in :	1. Reading	☐
	2. Writing	☐
	3. Math	☐

	4. Being on time	☐
	5. Organization	☐
20. Did you participate in a work experience class or Workability while you were in high school?	Yes ☐ No ☐	
21. Did you take vocational classes while you were in high school? Check all that apply:	1. CCOC	☐
	2. Classes like cooking, photography, child development, computer classes, agriculture, etc.	☐
	3. ROTC	☐
	4. None	☐
21. Did you take any career assessments or personal surveys in high school to see what kind of jobs suited you and your interests and skills?	Yes ☐ No ☐	
22. Did you take a Careers class or a Career Awareness class while in high school?	1. Career class	☐
Check all that apply:	2. Job Shadowing	☐
	3. Resume Preparation	☐
	4. Career Exploration	☐
	5. Interviewing Skills	☐
	6. Community Service	☐
24. How often are you on time for work or college?	1. Always on time	☐
	2. Usually on time	☐
	3. Sometimes on time	☐
	4. Never on time	☐
25. Do you have a resume?	1. One I did in high school	☐
	2. One that is up-to-date	☐

	3. No	☐
26. Do you know how to explain to your boss how to work with your learning disability? Some ways include: giving you a written list of jobs or using color coded materials or asking for verbal directions instead of written or having someone show you how to something for the first time or special seating? Can you explain to your boss what you need?	Yes ☐ No ☐	
27. When you left high school did you:	1. Receive a diploma	☐
	2. Receive a certificate	☐
	3. Drop out	☐
28. Have you ever taken any college classes?	Yes ☐ No ☐	
29. Are you enrolled in college now?	Yes ☐ No ☐	
30. Do you have a driver's license?	Yes ☐ No ☐	

You are now done this survey. If there are any comments you wish to make about this survey, please use the back of this page or your own pages to write on.

Please put this survey into the stamped envelope included and mail it today!

Thank you for participating in this survey. Look for your $5.00 Burger King gift certificate in the mail soon.