

Theses and Dissertations

2008

Attitudes and perceptions of high school career and technical education in California's Central Valley

Michael Bard De Vore

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

Recommended Citation

De Vore, Michael Bard, "Attitudes and perceptions of high school career and technical education in California's Central Valley" (2008). *Theses and Dissertations*. 18.
<https://digitalcommons.pepperdine.edu/etd/18>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact bailey.berry@pepperdine.edu.

Running head: CENTRAL VALLEY HS CAREER & TECH

Pepperdine University

Graduate School of Education and Psychology

ATTITUDES AND PERCEPTIONS OF HIGH SCHOOL CAREER
AND TECHNICAL EDUCATION IN CALIFORNIA'S CENTRAL VALLEY

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Leadership, Administration & Policy

by

Bard Michael De Vore

December, 2008

Linda Purrington, Ed.D. - Dissertation Chairperson

This dissertation written by

Bard Michael De Vore

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

June 05, 2008

Dr. Linda Purrington, Ed.D., Chairperson

Dr. Thomas Crow, Ph.D.

Dr. Susan Parks, Ed.D.

Eric R. Hamilton, Ph.D.
Associate Dean

Margaret J. Weber, Ph.D.
Dean

© Copyright by Bard Michael De Vore (2008)

All Rights Reserved

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
DEDICATION	ix
ACKNOWLEDGEMENTS	x
VITA.....	xii
ABSTRACT.....	xiii
Chapter 1: Introduction to the Study	1
Forces Driving the Need for Change	2
California’s Economic Future: The Correlation Between Wage and Education.....	4
A Need to Improve: High School Graduation Rates and Preparedness for College	5
A Call for Reform of Career Preparation Programs	7
A Closer Look at California’s Central Valley.....	10
Statement of Problem.....	11
Purpose of the Study	11
Research Questions.....	13
Assumptions	14
Significance	14
Delimitations of the Study	15
Limitations of the Study.....	15
Definition of Terms	15

Organization of Study 16

Chapter 2: Review of Related Literature 17

 Introduction 17

 Federal Legislation and Vocational Education 20

 History of California Vocational Education Legislation 26

 National Assessment of Vocational Education 32

 Office of Vocational and Adult Education..... 34

 Vocational Education Research Trends 36

 Research Triangle Institute..... 36

 Vocational Education as Perceived by Different Segments of the Population
 and IVE 40

 California’s Central San Joaquin Valley..... 43

Chapter 3: Methodology 45

 Overview 45

 Study Design 45

 Study Population..... 48

 Human Subject Protection..... 50

 Instrumentation 51

 Survey Validity..... 54

 Survey Reliability 56

 Data Analysis 57

 Materials..... 59

 Procedures 59

Chapter 4: Findings	62
Research Question One: Findings	63
Factor Analytic Results.....	67
Research Question Two: Findings.....	68
Research Question Three: Findings.....	71
Chapter 5: Study Conclusions and Recommendations.....	77
Analysis of Findings for Research Question Two.....	77
Analysis of Findings for Research Question One	81
Analysis of Findings for Research Question Three.....	83
Conclusions and Implications	88
Suggestions for Future Research.....	91
Policy Recommendations.....	92
Practitioners’ Recommendations.....	93
Final Summary	94
REFERENCES.....	96
APPENDIX A: Education and Training Pay	105
APPENDIX B: AYP High School Objectives.....	106
APPENDIX C: IVE Scale.....	107
APPENDIX D: Program Characteristics Scale	113
APPENDIX E: Introduction Letter to Counselors.....	119
APPENDIX F: Letter of Permission Superintendents/Administrators	122
APPENDIX G: Introduction Letter to Superintendents/Administrators	123

APPENDIX H:	Letter of Permission Chancellor	126
APPENDIX I:	Letter of Introduction SCCCDC Chancellor.....	127
APPENDIX J:	Letter of Introduction to SCCCDC Respondents.....	130
APPENDIX K:	Letter of Permission Union Directors	133
APPENDIX L:	Letter of Introduction to Unions.....	134
APPENDIX M:	Letter of Introduction to Union Directors	137
APPENDIX N:	Letter of Informed Consent	140
APPENDIX O:	Tom Crow LOC	142
APPENDIX P:	John Hutson LOC	143
APPENDIX Q:	Holly Newlon LOC.....	144
APPENDIX R:	Sandra Banducci LOC.....	145
APPENDIX S:	Doug Martin LOC.....	146
APPENDIX T:	Armando Vasquez LOC.....	147
APPENDIX U:	Rhea Kirby LOC.....	148
APPENDIX V:	Cynthia Young LOC	149
APPENDIX W:	Tim Bowers LOC.....	150
APPENDIX X:	Valerie Vuicich LOC	151
APPENDIX Y:	Permission to Use IVE Scale.....	152
APPENDIX Z:	Human Subjects Protection Online Education Tutorial.....	153

LIST OF TABLES

	Page
Table 1. United States World Ranking.....	3
Table 2. Percentage Distribution of Public High Schools Offering Vocational Education	9
Table 3. Attitudinal Ratings about Vocational Education.....	64
Table 4. Psychometric Characteristics for Scales (N = 103).....	67
Table 5. One-Way ANOVA Tests for Selected Attitude Scores Based on Group (N = 103).....	69
Table 6. Ratings for Program Characteristics. Sorted by Highest Rated Characteristics (N = 75).....	72
Table 7. One-Way ANOVA Tests for Selected Need Ratings Based on Group (N = 103).....	73

DEDICATION

This dissertation is dedicated to my children and to their children in hopes of a better tomorrow.

ACKNOWLEDGEMENTS

First and foremost, I would like to give thanks to God for the blessing he has bestowed upon me and for the desire He has placed upon my heart to be of service to students. Second, I would like to thank my wife, Liesl and my children, Jaden and Amaya. Without you in my life, there would be less reason for pursuing this. Thank you allowing me to spend the time we should have spent together, on this journey. Most of all, thank you for believing in me and filling my life with love.

To my parents, I say not bad for a kid who wasn't expected to finish high school. It has been said that a parent's role is to help their children achieve above and beyond. Well mom and dad, I am standing on the shoulders of giants. Thank you for being who you are and allowing me to be me.

To my instructors and my classmates, I am so glad we found each other. I have learned a tremendous amount about the subject matter these past years and even more about myself. Thank you for allowing me to grow, fail and learn. The friendships I have made through our experiences together are forever. To the C2 brotherhood, I love you guys. Anywhere, anytime for anything, I'll be there.

To my committee; Linda Purrington, Susan Parks and Tom Crow; thank you for your patience and guidance. It is an honor to have you be a part of this with me, I respect you all deeply. You have made this process one that I truly believe will have an impact on the lives of young people for years to come. Your insights and collaboration have been most valuable and there is no way to express how important you have all been to me.

Grandma and Grandpa, I did it. I know you are looking down upon me. This is for the both of you. You have always inspired me to do great things. I am nowhere close to being done.

VITA

Bard M. De Vore

EDUCATION

2003-2008 <i>Ed.D.</i>	Pepperdine University • Educational Leadership Administration & Policy	Malibu, CA
1998-2001 <i>Master of Arts</i>	National University • Cross-Cultural Education	Fresno, CA
1995-1997 <i>Bachelor of Arts</i>	Fresno State University • English	Fresno, CA

ACCREDITATIONS

California Administrative Services Credential Tiers I & II

California Clear Single-Subject Teaching Credential

CLAD Certification

National Coaching Certification

PROFESSIONAL EXPERIENCE

1992 - 2002 <i>Teacher, Special Education Aide, Substitute Teacher</i>	Fresno County Office of Education	Fresno, CA
<ul style="list-style-type: none"> ▪ Teacher of the year nominee, 1999 & 2002 ▪ Specialized in at-risk youth education 		
2002 - Present <i>Guidance Learning Counselor, Athletic Director, English Teacher & Coach</i>	Fresno Unified School District	Fresno, CA
<ul style="list-style-type: none"> ▪ Experienced with Middle and High School Campuses ▪ Completed FUSD Aspiring Administrators Program 		

PROFESSIONAL MEMBERSHIPS

Phi Delta Kappan	ASCD	CTA
------------------	------	-----

ABSTRACT

The purpose of this study was to investigate and analyze the attitudes and perceptions of community college leadership, union officials and high school school-to-career counselors regarding high school vocational education in the California's Central San Joaquin Valley, and to identify characteristics deemed most necessary in the design of a high school vocational education program.

This researcher investigated this problem using the following questions as guides:

1. What are the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, regarding high school vocational education in California's Central San Joaquin Valley?
2. How do the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, with and without prior work related experience, compare regarding high school vocational education in California's Central San Joaquin Valley?
3. What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a high school vocational education program in California's Central San Joaquin Valley?

The design of this study was descriptive in nature and survey in methodology.

Specifically, this study utilized 2 written questionnaires with rating scales. One questionnaire evaluates attitudes/perceptions regarding vocational education in the Central San Joaquin Valley of California. The other questionnaire evaluates the importance of vocational education program design characteristics. The first survey, the

IVE, contained 28 questions. The second survey contained 21 close-ended statements. Both surveys were rated on a 5 point Likert scale.

Study findings suggest that community college leaders, union officials and high school counselors collectively view vocational education in California's Central San Joaquin Valley in a positive light. Respondents in all 3 subgroups identified access to further education and training, employer involvement and curriculum alignment with local labor market to be the characteristics most needed in the design of a program to serve students of California's Central San Joaquin Valley.

Chapter 1: Introduction to the Study

During the first part of the 20th century, educational systems in the United States of America primarily educated students for the world of work and a career after high school. Only approximately 2% of all 23 year-olds obtained college degrees, most of whom came from preparatory schools (Herrnstein & Murray, 1995). Public schools provided curriculum that reflected the local job markets and economies of the surrounding communities. The second half of the 20th century brought about a new focus in public high schools. College preparation curriculum and an increased national intent to make admissions open to all regardless of sex, race or religion; resulted in increased enrollment in American colleges and universities. Vocational education, once a vital part of the public school system, became a secondary program. The curricular requirements of vocational education became less rigorous than academia based counterparts. Over the past 20 years, vocational education has once again become part of the public discussion on educational reform. Efforts to revive and/or transform vocational education, although well-intended, have produced limited results. America is in the midst of a global competition and a number of reports suggest we are losing ground in the career technical education of our youth (Ansary, 2006; Cicerone & Augustine, 2005). This situation, if unaddressed, could lead to catastrophic economic consequences for our nation. Key to addressing this problem nationally, in California, and even more specifically in the San Joaquin Valley within Central California is: an understanding of the forces that are driving the need for change, clarifying what's working and what's not working within current high school programs, identifying the key stakeholders to lead reform efforts, and developing a shared mission, vision, and action plan that will lead to desired outcomes.

Forces Driving the Need for Change

Global competition. Concern about high school to career preparation has been slowly brewing since the 1950s and subsequently gained great momentum in the past 3 decades with the growing understanding that our competitive edge in the world marketplace may be closely linked to the education/career preparation of our nation's youth and their ability to innovate. "Today, global competition influences just about everything from jobs to wages, social welfare, and education. All nations must yield to the imperatives of the world market" (Flynn, 1995, pp. 53-55). On December 4, 1992 at the Conference for Global Development Cooperation held at the Carter Center, in Atlanta, Georgia, President Jimmy Carter made reference to the state of the American economic future.

When I left the White House, our country was the greatest creditor nation on earth. We are now by far the greatest debtor nation on earth. The current U.S. foreign debt more than triples the foreign debt of all the developing nations in the world. (Carter, 2005, p. 8)

In her article, *Global Competition and Education: Another Sputnik?* Patrice Flynn examines similarities between the Sputnik episode of the 1950s and the global competition that the U.S. is currently facing. "The United States faces a crisis in global competition and if we do not do a better job of preparing our children for the new world order, we will lose our preeminent economic stature" (Flynn, 1995, pp. 53-55).

In 1983, the National Commission on Excellence in Education published, *A Nation at Risk*. The report found that students in the United States were losing ground in every academic category as a result of a "rising tide of mediocrity" (Ansary, 2006). A recent examination of world rankings, published online by Nationmaster.com, revealed that not only was the U.S. falling behind in academics; in the areas of science, math, and literacy,

the achievement gap was already quite substantial. Table 1 outlines the United States' rank in the aforementioned subjects.

Table 8

United States World Ranking

Subject	United States World Ranking	Definition of Ranking
Reading literacy	#15	Mean value of performance scale for students 15 years of age (NationMaster, 2007)
Mathematics literacy	#18	Mean value of performance scale for students 15 years of age (NationMaster, 2007)
Scientific literacy	#14	Mean value of performance scale for students 15 years of age (NationMaster, 2007)
Time spent learning Science	#8	Intended instruction time spent studying science, as a percentage of total intended instruction time for students 12 to 14 years of age (NationMaster, 2007)
Time spent learning mathematics	#2	Intended instruction time spent practicing mathematics, as a percentage of total intended instruction time for students 12 to 14 years of age (NationMaster, 2007)

On May 27, 2005, the Committee on Prospering in the Global Economy of the 21st Century received a bipartisan letter from the Senate Committee on Energy and Natural Resources, directing them to assess America's competitiveness for the 21st

century. The senators hoped the study would assist congressional deliberations. The findings presented to the Committee on Science and the U.S. House of Representatives on October 20, 2005, *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, found that the United States currently faces a serious and growing challenge to maintain its future competitiveness and standard of living. The report further suggests the United States appears to be on a losing path. The standard of living in the United States in the future will depend on the quality of employment citizens hold. The report found that without jobs, citizens of the United States will not have the ability to support the economy they are accustomed to; the tax base may be eroded at the expense of programs such as healthcare and the nation's security. The result of such an occurrence may serve as a deterrent to the investment of jobs in America (Cicerone & Augustine, 2005).

California's Economic Future: The Correlation Between Wage and Education

California may be moving toward the brink of a large and lasting economic divide. Southern California has seen the growth of an economy dominated by lower-wage jobs and unskilled labor. Northern California and the Bay Area, meanwhile, continue to see an influx of higher-wage jobs and businesses seeking more highly skilled workers. (Project California, 2006)

There is a strong correlation between the wage an individual earns and the amount of education they possess. The U.S. Bureau of Labor Statistics (2006) published a report entitled, *Education Pays*; the report cited unemployment and earnings for full-time wage and salary workers age 25 and over, by educational attainment. Appendix A displays the findings. Not only do the earnings rise as the level of education does, but the unemployment rate drops as well with increased levels of educational attainment.

A Need to Improve: High School Graduation Rates and Preparedness for College

A recent U.S. Census Bureau survey completed in 2002, suggests that high school completion among young adults was approaching 90% (Barton, 2006, pp. 14-18).

California, as a state, reported a graduation rate of 84.9% for the 2004/05 school year (California Department of Education, 2005). While a 5.1% difference may not appear to be monumental, given the fact that California enrolled 499,505 students as freshmen in 2001-2002, 5% equates to roughly 24, 975 students, not to mention the 119,313 students that are unaccounted for or have not graduated as of yet. California's Grade 9 to graduation rate for the class of 2004-2005 was 71.1%, for the students who enrolled in 2001-2002 as the graduating class of 2004-2005. This total is far below the 84.9% yearly rate reported as part of federal compliance. This number translates to 144,856 students who did not graduate. Nationally, in 2003, 1.1 million 16- to 19-year-olds did not have a high school diploma and were not enrolled in school (Barton, 2006, pp. 14-18).

California, as a state, accounted for 140,980 of those students from the class of 2002-2003 by itself (California Department of Education, 2005).

The current state of education implies that college is a viable option for all students. Today, students have a firm belief in their ability to go to college. In *College for All*, James Rosenbaum concludes, "Many college-bound youth hold no-penalty beliefs that they can attain their plans even if they do poorly in high school, and these beliefs seem to reduce their efforts in high school" (Rosenbaum, 2003, pp. 252-260). On January 23, 2001, President Bush presented his plan for educational reform to Congress, The No Child Left Behind (NCLB) Act. NCLB outlined four major principles in an education reform plan: stronger accountability for results, expanded flexibility and local control,

expanded options for parents, and an emphasis on teaching methods that have been proven to work (U.S. Department of Education, 2003a).

In California, more than 1200 elementary, middle and high schools have been labeled as, in need of improvement (U.S. Department of Education, 2003a). According to statistics reported to the U.S. Department of Education, approximately 24,470 U.S. public schools, or almost 27% of the nations total, did not meet the NCLB requirements in 2004-2005 (Basken, 2006). The California Master Plan for Higher Education outlines the target populations for admitting students into the state's university systems. The University of California (UC) plans to target and admit the top 10 to 12% of the graduating class, while the California State University system (CSU) is aimed at the top 33% of the graduating class. The Community College system in California on average enrolls of approximately 14% of the graduating class each year (California Post Secondary Education Commission, 2006). Given these numbers, although not exact, we see that roughly 47% of the graduating class continues on with education.

While the number of students enrolling in college after high school has increased dramatically in California, the number of students actually completing a degree has risen only slightly. In a study cited by California's Department of Education, National Center for Educational Statistics, the following was found:

77% of the class of 1992 enrolled in a postsecondary institution within 8.5 years of high school versus 59% and 55% of the classes of 1982 and 1972, respectively. Among those earning more than 10 postsecondary credits, 50% of the class of 1992 completed a bachelor's degree within 8.5 years of high school versus 43% and 46% of the class of 1982 and 1972, respectively. (Livingston & Wirt, 2005)

College administrators are now seeing the results as more and more students enter unprepared for the rigors of college academics. A recent article in Time magazine noted

that approximately 600,000 incoming freshmen who entered college in the fall of 2002, 29% enrolled in at least one remedial reading, writing or math class. The cost of such classes cost taxpayers nearly \$1 billion a year (Cloud, 2002). Moreover, The Center for Education reported that 40% of students at 4 year-colleges and 63 % of community college students take at least one remedial course (Livingston & Wirt, 2005).

Rosenbaum (2003) discusses the ill effects of college for thinking in, *College for All*, “Though well-intentioned, college-for-all norms may inadvertently encourage no-penalty beliefs, low effort, and unrealistic plans; hurt student achievement and later attainments; and set students on a course for later disappointment. Policy reforms are suggested” (pp. 252-260).

A Call for Reform of Career Preparation Programs

The current state of career preparation and workforce development programs are insufficient in number and design to meet the needs and growing demands of today’s worker. California has an enormously productive economy, which for a nation would be among the top 10, maybe top 5, largest in the world. Without competent and well-prepared workers the future of California’s economy may be in jeopardy.

On September 27, 2005, California Governor Arnold Schwarzenegger signed into effect Senate Bill 70. The bill—which supported State Superintendent of Public Instruction, Jack O’Connell—took funds intended for Proposition 98 and redirected it into elementary, middle and high school programs that promote vocational education through computer training, shop classes and other trade based areas of study. Support for the governor’s actions came in a statement from O’Connell’s spokeswoman, Hilary McLean, “This is one of those things both sides of the aisle probably agree on, and Jack’s

view is that we need to invest in voc-ed in ways that help students prepare for the careers of tomorrow rather than the careers of today” (Delsohn, 2005, p. C2).

According to the California Department of Education Fact Book 2004 Handbook of Education Information:

An important part of the work of the California Department of Education (CDE) is to strengthen the relationship between a strong K–adult system and California’s economic future. That future depends on the state’s ability to develop a competitive workforce for the knowledge-based, global economy of the twenty-first century. CDE’s perspective has broadened from the traditional vocational (now career-technical) education curriculum to a multifaceted concept incorporating career preparation and workforce development. Elements include integrating academic and career-technical education curricula, adding or modifying workforce development programs, and expanding partnerships linking education to workforce preparation and economic development.

Career-technical education continues to be a priority, but the focus is expanding from the traditional job entry preparation within subject areas—agriculture, health careers, business, home economics, careers and technology, industrial and technology education—to an “industry cluster” approach. For example, industrial and technology education is now identified within California’s high employing industry sectors as building trades and construction, energy and utilities, transportation, manufacturing and product development, and engineering and design.

This approach provides integrated, sequential programs of instruction designed to build on the academic preparation of students as well as on their experiences, interests, skills, and prior knowledge of practices and procedures. Partnerships between business and industry sector clusters and various educational levels are emphasized as well as learning strategies that connect across the disciplines. CDE also works with professional and student organizations in offering technical assistance and professional development (U.S. Department of Education, 2003b, para. 1)

A survey conducted regarding Vocational Programs in Secondary Schools, found that “almost 90% of U.S. public high schools in 1998-99 were comprehensive schools. The remaining 11% of schools were evenly split between area or regional vocational schools (which typically serve students on a part-time basis) and full-time vocational high schools” (Hudson & Shafer, 1999). Table 2 shows a percentage distribution of public

high schools by type, by locale, and by the percent offering at least one vocational education program for any of the 28 selected occupations in 1998–1999.

Table 9

Percentage Distribution of Public High Schools Offering Vocational Education

Locale	Area or Regional Vocational School	Vocational High School	Comprehensive High School	% of Schools Offering at Least One Program
Overall / all areas	6.2	4.6	89.2	66.5
Urban areas	5.5	10.3	84.2	72.9
Suburban areas	5.9	4.4	89.7	63.9

Note. From “Survey on Vocational Programs in Secondary Schools” by U.S. Department of Education, National Center for Education Statistics Fast Response Survey System, 1999, from <http://nces.ed.gov/surveys/>. Adapted with permission.

According to the California Department of Education’s Public School Directory, as of September of 2006, there are 1236 high schools in the state that are active. Of these schools only 76 (6.017%) are of vocational design. These schools have been designated Regional Occupation Centers/Regional Occupation Program ROC/ROP. The remaining 1187 schools are comprehensive in design (California Department of Education, 2006c).

There exists a need in California to strengthen the relationship between K-12 and adult vocational education programs to help insure California’s economic future. The conceptualization and restructuring of career education and preparation programs with workforce development programs, although complete in theory and intent, have yet to be successfully and fully implemented in practice. It is imperative that this take place in

order to support California's economic welfare, growth and security for future generations.

A Closer Look at California's Central Valley

Situated between Los Angeles and San Francisco, California's Central San Joaquin Valley covers north from the Sacramento Delta to the Tehachapi Mountains in the South. The area is divided into eight counties and has a population of roughly 3,744,000 according to 2005 census reports. The area is rich in cultural diversity and has been test market for major brand corporations such as Pepsi and McDonalds because of its isolation from major city influence and the area's diverse cultural makeup (CERES, 2000).

A recent 2005 U.S. census report indicates the labor workforce of the San Joaquin Valley to be approximately 1,641,000. Of these individuals, approximately 725,000 (or roughly 44 % of the workforce) are purported to hold jobs that are rooted in trade-based jobs such as service, construction, maintenance, repair and production (CERES, 2000). In California's Central Valley the Department of Education reports a total of 158 high schools with an active standing. Of the 158 schools in the area there are only 12 ROC/ROP schools, which account for a total of 7.5% of the total. The remaining 146 schools are comprehensive public high schools (California Department of Education, 2006a). This is a notable disparity between the jobs available and the high school vocational/career-tech preparation available to students in the area.

In order to address this disparity and ensure that Central San Joaquin Valley high school career technical education programs are state-of-the-art, it is necessary to identify expert/stakeholders responsible for leading reform efforts and to identify their attitudes

and perceptions regarding high school vocational/career-technical education and preferred design elements. Surfacing attitudes, perceptions, and preferences is a first step towards the development of a shared mission and vision and ultimately, a shared plan for translating vision into reality.

Statement of Problem

There is a need for reform in the Central San Joaquin Valley to strengthen the high school vocational education programs available to students. With the limited access of vocational education in some Central San Joaquin Valley counties and the absence of such programs in the remaining counties, students are leaving high school unprepared for the rigors of college and unprepared for the world of work. Expert/stakeholders are key to leading and supporting reform efforts. Identifying these expert/stakeholders in the Central San Joaquin Valley and learning about their attitudes, perceptions, and program design preferences are steps yet to be taken in the reform of career technical education in this area.

Purpose of the Study

The purpose of this study is to investigate and analyze the attitudes and perceptions of community college leadership, union officials and high school school-to-career counselors regarding high school vocational education in the California's Central San Joaquin Valley. The study also presented the respondents with the characteristics of vocational education programs that support social reform, identified by the U.S. Department of Education, and asked them to identify those characteristics they deemed most necessary in the design of a high school vocational education program in California's Central San Joaquin Valley. This study looked specifically at the high school

setting and not at adult education as a result of the work being done by the community college system with students after leaving high school as well as the abundance of post-high school training and professional schools available to adults. In order to support the efforts of the community colleges it is the belief of this researcher that a program designed specifically for high school students would be a logical step in creating a program that benefits both student and institution but more importantly education as a whole.

The way that vocational education is perceived by the community is a very critical factor in the establishment and success of a high school vocational education program. If the stakeholders do not view vocational education in a positive light, there is a chance that they will not support or take part in it, financially or otherwise. A strong partnership with the trade unions and the community college system is of extreme importance to the success of this specific vocational education design. High school school-to-career counselors are an important link in the chain because they offer students options, vocational education being one.

If a belief exists that high school based vocational education is not important, then the program design is of no matter. The pool of respondents selected for this study represent individuals with direct experience in the fields closely associated with this study. High School school-to-career counselors deal with life choices with students and the ability they have to see career-tech as an option is instrumental to the success of a program designed to meet the needs of the students they guide and serve. The community college experts are now implementing similar career technical education programs for adults at the community college level.

A strong partnership with this particular set of individuals is essential for both parties. The community colleges essentially will continue where high schools leave off. Having programs that mesh and flow from one to the next will be essential for those students who choose to pursue higher education in their selected field of study. The trade unions are a vital voice. They will be the consumers of the end product. Students having gone through a high school program that provides career technical education preparation will have access to positions in the form of apprenticeships and entry level jobs. By allowing unions to have a voice in the study we bring them on board and are able to access their needs and in turn collect data which will allow in a stronger program and partnership to meet the needs of students.

Research Questions

Research questions guiding this study were:

1. What are the attitudes/perceptions of community college leadership, union officials and high school school-to-career counselors, regarding high school vocational education in California's Central San Joaquin Valley?
2. How do the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, compare regarding high school vocational education in California's Central San Joaquin Valley?
3. What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a high school vocational education program in California's Central San Joaquin Valley?

Assumptions

In order to obtain data relative to the statement of the problem and study research questions, the following assumptions were developed:

1. Program characteristics identified by respondents will be instrumental in the planning and design of a high school vocational education program designed for the Central San Joaquin Valley.
2. Respondents answered questionnaires honestly.

Significance

In designing and implementing a high school vocational education program to meet the needs of the students in the Central San Joaquin Valley, it is of extreme importance and value to identify the prevailing attitudes and perceptions of “experts” in the field of career-tech/vocational education. By identifying and examining the data collected, reformers will have a better understanding and awareness of the resistance and hurdles they may encounter when attempting to introduce and implement a new program.

In an attempt to reform high school career-tech/vocational education in the Central San Joaquin Valley it is important to consider the design and attributes of the proposed program. Through the use of attributes previously identified by the U.S. Department of Education “experts” in the field of career-tech/vocational education, will be able to rank attributes they deem to be most beneficial to the Central San Joaquin Valley. The pool of attributes presented to the respondents have been proven to work, moreover they have been proven to be those attributes that support social reform. Identifying the most desired attributes will allow reformers an opportunity to tailor a program that meets the specific needs of the students in the Central San Joaquin Valley.

Delimitations of the Study

Conditions that could be controlled included the following:

1. The respondents surveyed were located in Central San Joaquin Valley.
2. This study did not include counselors from private and parochial schools.
3. Only high school school-to-career counselors were surveyed since they represent the counselors most likely to refer and enroll students into vocational education programs.
4. Study is limited to high school only and does not address adult education.

Limitations of the Study

This study was limited due to the following conditions:

1. Responses were based on an individual's past experiences with vocational education.
2. Respondent pool relied heavily on attendance at board meetings, committee meetings and willingness to participate.

Definition of Terms

- Attitude: An attitude is a tendency or predisposition to evaluate an object or the symbol of that object in a certain way. Evaluation includes cognitive as well as affective elements.
- Career-technical/Vocational education is defined in the Perkins Act as follows:
 organized educational programs offering sequences of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Programs include competency-based applied learning, which contributes to an individual's academic knowledge, higher-order reasoning, problem solving skills, and the occupational-specific skills necessary for economic independence as a productive and contributing member of society. (U.S. Department of Education, 2002, para. 1)

- Experts: For the purpose of this study, experts refers to individuals identified in the fields of Local AFL-CIO trade unions, community college leadership and high school school-to-career counselors.
- Program characteristics: Refers to the list identified by the United States Department of Education. The list identified the program characteristics associated with successful vocational education programs. The Department of Educations findings also stated that these characteristics were shown to support social reform.

Organization of Study

This study is organized into five chapters. Chapter 1 is the introductory chapter and includes the context of the problem, the purpose of the study, the research questions, hypothesis, definitions of key terms, limitations of the study, and the significance of the study. Chapter 2 contains a literature review. Chapter 3 describes the methodology applied. Chapter 4 reports the results of the study. Chapter 5 presents a discussion of the findings, makes conclusions, and presents recommendations for future research.

Chapter 2: Review of Related Literature

Introduction

The literature review examines the relevant literature to provide a clear definition of vocational education, a brief historical background of vocational education in the United States, a summary of Federal and California State vocational education legislation, a look at the National Assessment of Vocation Education (NAVE) and Office of Vocational and Adult Education (OVAE), and concludes with vocational education research and trends and the status of vocational education/career technical education in the Central San Joaquin Valley.

Definition of vocational education. Vocational education has been defined in the Perkins Act as follows:

organized educational programs offering sequences of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Programs include competency-based applied learning which contributes to an individual's academic knowledge, higher-order reasoning, problem solving skills, and the occupational-specific skills necessary for economic independence as a productive and contributing member of society (U.S. Department of Education, 2002, para. 1).

Historically there has been controversy regarding the scope of vocational education. Some theorists narrowed the focus somewhat by referring to vocational education as preparing for a trade or craft by specific practical training, while other theorists gave vocational education a broader view that made it inclusive in all education.

History of vocational education. The program of vocational education in the United States, as it is known today, originated in the early part of the 20th century. The casual factors of the vocational movement in education occurred; however, during the

19th century, and the historical roots can be traced to ancient times with significant European connections (Gordon, 1999).

In 1862, Congress displayed its support of vocational education in public schools by passing the Morrill Tariff Act. The Morrill Act encouraged the teaching of agriculture and mechanical skills through the establishment of land grant colleges. Calvin Woodward, a professor at University of Washington in St. Louis found that many of his students in the engineering program were inept at the use of simple tools. He pushed for a balanced curriculum that was based in both theoretical and practical knowledge. His ultimate goal was to provide instruction in academics as well as trade based subjects and home economics. Unfortunately, the system Woodward longed for came about as separate from the already established academic institutions (Gasbarre, 2006).

On January 22, 1895 the National Association of Manufacturers (NAM) was organized at a convention held in Cincinnati, Ohio. NAM organized in a response to a period of economic depression and was motivated by the prospects of finding trained and skilled workers in an effort to subdue the growing power of the labor movement. NAM's Committee on Industrial Education issued a report in 1905 citing high dropout rates and the failure of the apprenticeship system as justification for the creation of a separate system of trade schools. The first report advocated that the schools be funded through corporate or private endowments rather than through public funds. Seven years later, however, the committee modified its position. Recommendations made in their 1912 report included:

- Creation of German-style continuation schools,
- Review of Related Literature of courses centered on the need of local industry,

- Administration of the schools by coalition of business and labor to ensure that industrial education not be corrupted by educators the way training had been,
- Use of federal funds to improve industrial education as the Morrill and Hatch Acts had improved Agricultural Education (Gordon, 1999, p. 52).

In an effort to increase wages, through a reduction in the labor force, labor leaders supported vocational education. They believed vocational education classes would lengthen the school day for children and protect them for the working conditions experienced on their behalf. Agriculturists encouraged a curriculum that would continue to help students advance in their area of study. Social reformers hoped that vocational education would assist individuals in their efforts transcend their current state of poverty. Educational leaders found themselves in the middle of these interests: many leaders of education feared vocational education would interfere with the overall goal of public education, "providing a common education for all students" (Gasbarre, 2006, para. 4).

In 1906 the National Society for the Promotion of Industrial Education (NSPIE) brought its study of vocational education needs to the public's attention. The members of the society consisted of "educators, manufacturers, mechanics, businessmen, and representatives of other occupations" (Gordon, 1999, p. 53). They were successful in laying the foundation for vocational education in America by lobbying for and having Congress pass legislation.

The Smith-Hughes Act of 1917 established a Federal Board of Education. The Act also made \$1.7 million available for secondary-level educational programs. States participating in the plan had to appoint state directors, match federal monies, and elect

boards of vocational education, and define local guidelines for use of the funds (Gasbarre, 2006).

Charles A. Prosser was appointed as the initial federal administrator of vocational education. Prosser believed the training courses offered in vocational education programs should be closely aligned with local labor markets and offer job skills specific to areas being studied. He felt that the current course offerings limited students to trade-based, farming and home economics courses of study. Prosser pushed for academic courses of study and their vocation based counterparts to be housed in separate settings. Over the next 60 years, secondary vocational education programs focused on providing aligned training in job readiness, which eventually started to take precedence over academics. By the late 1970s, spending on vocational courses topped \$6.6 billion, and enrollment in such programs exceeded 19.5 million (Gasbarre, 2006).

In 1983 the National Commission on Excellence in Education published *A Nation at Risk*. The report accused America's public education system, which included vocational education of doing little for the 50% of students who dropped out of or did not continue their education after high school. Dubbed "forgotten youths," these students were characterized by "poor basic skills, the inability to link theory and practice, a lack of participation and interest in school activities, and lack of transition from high school to college or the workplace" (Gasbarre, 2006, p. 8).

Federal Legislation and Vocational Education

Although 1917 marked the first significant legislation relating to vocational education, several pieces of supportive legislation were passed earlier (Gordon, 1999). Listed below is a brief history of select pre-1917 legislation:

Morrill Act of 1862. The Morrill Act, also referred to as the Land Grant College Act was introduced by Justin Smith Morrill, a congressman from Vermont. The Act served as an incentive to higher education in America by providing the necessary training regardless of social class. The Act established educational institutions in each state responsible for educating students in the fields of in agriculture, home economics, mechanical arts, and other professions that were relevant at the time.

There were a number of these acts, the initial passed in 1862 was signed July 2 by Abraham Lincoln. Based on the census of 1860 each state was allotted 30,000 acres of land which was to be sold. The profits of the land sales were to be placed into an endowment which would provide the monetary capital for supporting the colleges in each of the states (U.S. Information Agency, 2006).

Hatch Act of 1887. The Hatch Act of 1887 authorized federal-grant funds for direct payment in the amount of \$15,000 to each state for the development of agricultural experiment stations in connection with the land-grant college established under the provisions of the Morrill Act of July 2, 1862 (Gordon, 1999).

Davis and Dolliver-Davis bill. This bill proposed to allocate federal funds to agricultural high schools for teaching agriculture and home economics and to secondary schools in urban communities for the teaching of mechanical arts and home economics (Gordon, 1999).

The United States Constitution does not outline or provide a role for the federal government in vocational education. However, past legislation such as the Morrill Act displays the federal government's belief in vocational education as a national interest (Gordon, 1999).

George-Reed Act of 1929. Following closely on the heels of Smith Hughes, the George-Reed Act furthered the funding for Vocational Education. Due to the increase in funding, this law allowed for an increase of over twenty% in statewide vocational education enrollments. The act provided for Federal funds of \$2,500,000 given annually over a period not to exceed 5 years. The money was to be divided equally between home economics and agriculture based respectively on the rural population and the farm population in each state. However, these funds were specifically designated for the purpose of hiring subject matter specialists in Home Economics and Agriculture (Oklahoma Department of Career and Technology Education, 2006).

National Defense Education Act (NDEA) of 1958. NDEA passed in 1958, provided educational aid to all levels of public and private education. The primary goal of NDEA was the advancement of subject such as science, mathematics, foreign languages, technical education, geography, English as a second language, counseling and guidance, school libraries and librarianship, and educational media centers. NDEA also provided post-secondary schools with the monies to offer students with low-interest loans, while providing federal support for improvement and change at the intermediate and secondary educational institutions (Wikipedia, 2006).

Area Redevelopment Act of 1961. Passed in 1961, the Area Redevelopment Act was a spending package aimed at the private sector. The \$394 million earmarked was an attempt at job creation in depressed urban and rural areas. The Act provided \$4.5 million annually for 4 years specifically for vocational training programs (Brookings Institute, 2006).

Vocational Education Act of 1963. The Vocational Education Act replaced the Smith-Hughes Act and ended funding for vocational education training programs such as agricultural education. The Act allowed states to determine how funds were to be spent. Instead of education that could be “supervised practice on a farm,” all areas of agricultural education became eligible. This act also expanded home economics education to include all areas of home economics, not just homemaking. States receiving monies submitted plans for implementation. The result eliminated federal control of vocational programs and eventually led to substantial increases in funding for vocational education (Swortzel, 2006).

Vocational education amendments of 1963. The amendments to the 1963 Vocational Education Act increased funds for vocational education and expanded the scope of how funds could be used. High schools, dropouts, job retraining, students with special needs, the construction of new vocational schools, pairing private institutions with vocational education, research, instructor training and administering the state plan were all eligible under the amendments. The amendment also earmarked specific monies to Consumer and Homemaking Education. Of the monies provided to each state, 25% had to be spent on disadvantaged populations, 25% had to be spent on individuals who were out-of-school and seeking employment while 10% had to be spent on individuals designated handicapped. The Act also provided money for:

- Curriculum development
- Residential vocational schools
- Research (established the National Center for Vocational Education Research)

- Leadership development (Foundations of Agricultural and Extension Education, 2006)

Education Amendments of 1972. The Education Amendments of 1972 introduced Title IX. Title IX made provisions for the rights of pregnant students and students with children, and provided the guidelines for equity and opportunity based on gender. Title IX pertains to education at all levels from preschool to college.. Title IX mandates apply to all institutions receiving funds from the federal government (California Department of Education, 2006b).

Carl D. Perkins Vocational Education Act of 1984. The Act made federal monies available to fund vocational education programs. One of the main goals of the Act was aimed at improving the access to vocational education programs for those who have been historically underserved or those who have increased educational needs. “Special Populations” identified by the act were individuals who have a disability, are disadvantaged or have limited English skills (Association for Career and Technical Education, 2007).

Carl Perkins Vocational and Applied Technology Act (VATEA) of 1990. VATEA was passed July 1, 1991. The Act established \$125 million for secondary and community college programs. The Ca Department of Education in conjunction with the State Community Colleges Office of the Chancellor are overseeing the implementation of the grant. Part of the grant and its intent is to develop multi-year plans of action for tech prep and training. The Tech Prep section of the Act provided grants to local educational institutions for the development of 4-year educational programs that lead to an associates

degree or certificate through expanded partnerships among schools, colleges and employers (Orrell, 2000).

Goals 2000: Educate America Act. The Goals 2000: Educate America Act (P.L. 103-227) was signed into law on March 31, 1994. The aim of Goals 2000 was to assist students in reaching their full potential. The premise of the Act was that students will attain higher levels of achievement when elevated expectations are set. Congress earmarked \$105 million for Goals 2000 for fiscal year 1994, with first-year funds available to states July 1, 1994. States submitted applications outlining their action plan.

Goals 2000 established a framework in which to identify world-class academic standards, to measure student progress, and to provide the support that students may need to meet the standards. The Act enacted in law six education goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools. It also added two additional goals grounded in encouraging teacher professional development and parental participation (North Central Regional Educational Laboratory, 1999).

In the 2006 budget proposals President George W. Bush cut funding for education by 530 million dollars and proposed eliminating vocational and technical education, opting instead for new high school initiatives that centered on testing and remediation. During a meeting with California Governor Arnold Schwarzenegger's deputy education policy director, Leighann Lentl, California School Boards Association President, Dr. Kerry Clegg shared the local view on vocational ed. "Carpentry unions are approaching us to provide career-tech-training, because they anticipate a huge job market that will have a void in the carpentry industry," Clegg said, "We'll need to train the students who

don't want to go on to college. Career Tech and voc-ed is a great alternative for students” (California School Boards Association, 2005, para. 1).

History of California Vocational Education Legislation

The remnants of vocational education first appeared in California's public education system around 1900. There were two influences that played an important part in bringing vocational education to the schools. The first was practical needs, vocational education in California evolved due to social and economic necessity. Second, was the need for attaining occupational competencies.

In 1866, California's Legislature established the Agricultural, Mining and Mechanical Arts College, a California land grant institution. Eventually becoming the University of California in 1868, it espoused the value of, “practical education of the classes in several pursuits and professions of life” (University of California, 2006).

In 1901 the Legislature authorized the establishment of a “poly-technical school” near San Luis Obispo, the school included instruction at the high school level in the subjects of agriculture, mechanics and household arts. In 1906, 100 students—67 boys and 33 girls—enrolled (Bogetich, 2001).

In 1906, Los Angeles High School offered six vocational education based courses. That same year San Jose built a high school patterned after the university, which offered classes centered around vocational education.

In 1910 Edward Hyatt, State Superintendent of Public Instruction, noticed a severe decrease in the enrollment of Grades 1 through 8. His solution to the problem was the “introduction of practical subjects and practical methods which will hold boys in school until they have a fair education” (Bogetich, 2001, p. 2).

The Lux School for Industrial Training, a privately-funded vocational education school, was founded in San Francisco in 1912. The school served girls and provided occupational training in subjects pertaining to all facets of housekeeping, home nursing and planning and furnishing homes (Lick-Wilmerding High School, 2003).

In 1913 the California State Board of Education appointed Dr. Edwin R. Snyder to the newly created post of Commissioner of Industrial and Vocational Education. The creation of this California Department of Education position established vocational education as a significant and important component of California's public schools (Bogetich, 2001).

On February 23, 1917, shortly after World War I, Congress passed the Smith-Hughes Vocational Education Act. The California Legislature took quick measures to accept the Smith-Hughes Act. On March 31, 1917 it was enacted as law. The acceptance of this law began to shape vocational education as an integral and important part of California's public schools system. During the 1950s approximately 20% of high school students were prepared for higher education, 20% for work and the remaining 60% were relatively underserved or ill-prepared (Bogetich, 2001).

The passing of the National Defense Education Act in 1958 marked a severe change in federal support for vocational education. Almost overnight the federal government made vocational education a minority within the programs sponsored by federal monies. California immediately began efforts to extend and improve curriculum concerning science, math and foreign languages and supportive counseling and guidance services.

The 1960s and the 1970s brought about a very active California Legislature in regards to vocational education. The 1960s brought about a change from support services to equal access. Vocational education no longer meant only preparing students for employment, instead it became a social responsibility and a means of providing access to students who may have been previously excluded.

The first major federal job training program, the Manpower Development and Training Act (MDTA), was enacted in 1962. After a 12-year run, MDTA claimed an 80% employment record upon completion of training its clients (Almanac of Policy Issues, 2001).

The Vocational Education Act of 1963 stimulated growth of vocational education. It increased federal support and by 1975 increased state funding from 3 million to 44 million (Bogetich, 2001).

The platforms of sessions of the legislature included vocational education agendas. The result was a series of statutes designed to remove existing barriers that inhibited vocational education.

In 1963 the Legislature enacted a law, County Vocational High Schools. The law was rejected by the educational community as a whole. The law was amended in 1966, 1968, and again in 1969. The final amendment allowed for the establishment of Regional Occupation Centers and Programs (ROCP) that served both youth and adults. By 1970, 24 California ROCPs were operational (Bogetich, 2001).

The California Advisory Council on Vocational Education and Technical Training (CACVE) was implemented shortly before the passage of the Vocational

Education Act of 1968. The sole purpose of CACVE was to provide citizen oversight on the use and effectiveness of vocational education (Bogetich, 2001, p. 6).

The 1970s brought a variety of change and challenges to vocational education in California. The most significant state statute was enacted in 1974. The addition of Section 7504, now Section 51004, to the California Education Code now reads as follows:

The Legislature hereby recognizes that it is the policy of the people of California to provide an educational opportunity to every individual to the end that every student leaving school should be prepared to enter the world of work; that every student who graduates from any state-supported institution should have sufficient marketable skills for legitimate remunerative employment; and that every qualified and eligible adult citizen should be afforded an educational opportunity to become suitably employed in some remunerative field of employment. (AroundtheCapitol.com, 2006, para. 1)

The 1976 Vocational Education Amendments outlined a commitment to gender equity, provided specific funding for program improvement, curriculum development, teacher training, research, demonstration and innovation. In 1981 the legislature enacted Senate Bill 187, which established vocational agriculture as a mandated state program and added Section 52450 of the Education Code.

In 1983, the Agricultural Vocational Education Incentive Program was enacted as part of Senate Bill 813, an educational reform bill, adding Section 52460 of the Education Code. This program provided funds collected from horse racing venues to schools that could be used for purchasing or leasing agricultural equipment, or any non-salary items. By 2000, an excess of 48 million dollars in incentive grant monies had been distributed to school districts. The bulk of the monies were used for technology-based items such as computers, equipment, tools, texts and manuals. With the new resources vocational education was moving into state-of-the-art facilities with timely technology.

In 1996, Senate Bill 1454 was introduced by Assemblyman Dave Kelly. The bill defined consumer home economics education and related occupations as a growing and essential part of the Californian economy. Because of this bill the legislature also established a permanent Home Economics Careers and Technology Vocational Education Unit.

In 1991, Governor Pete Wilson issued Executive Order W-94-94 to establish a new School-to-Career Opportunities System that included school-based learning, work-based learning, and support/connection activities that assist all students in meeting their career goals. California submitted a grant proposal to the U.S. Department of Education in August of 1996 and received the initial funding for a 5-year period in the amount of 131.4 million dollars. At the end of the 5-year period the state would have to assume full responsibility for maintaining the system.

In 1996, the Legislature initiated the Regional Workforce Preparation and Economic Development Act (RWPEDA), as part of the Welfare to Work Act. The intent of the Act was to move California toward a more comprehensive workforce and to develop a system that would assure the State a world-class workforce capable of competing in the global economy of the 21st century. Senate Bill 1744 reauthorized the Act in 1998. The Act required linkages with local government, economic development agencies and private sector employers to implement accountability measures.

The year 1998 brought the passage of Senate Bill 1832 which added Section 53495 to the Education Code. This established an incentive grant program for home economics. The purpose of the grant was to improve, expand and establish instructional programs in home economics careers and technology vocational education to improve

academic achievement and career preparations for the students it served. A total of 27 incentive grants were made available to school in June of 2000. The incentive program provisions expired in 2003.

On May 11 of 2005, the California Career Technical Education Model Curriculum Standards were adopted by the State Board of Education. The Standards are the foundation for the curriculum frameworks, instructional materials, and statewide assessments in California. The curriculum developed by the CCTE have been designed for implementation in Grades 7 through 12.

There standards contain two distinct parts: standards and subcomponents. Standards are expectations of what students should know and be able to do. All standards contain a minimum of two subcomponents that identify the knowledge and skills students should master. Standards are may fall into two different categories: foundation standards and pathway standards. Foundational standards are uniform, although the subcomponents differ. They cover the 11 areas essential to all students' success: 1.0 Academics, 2.0 Communications, 3.0 Career Planning and Management, 4.0 Technology, 5.0 Problem Solving and Critical Thinking, 6.0 Health and Safety, 7.0 Responsibility and Flexibility, 8.0 Ethics and Legal Responsibilities, 9.0 Leadership and Teamwork, 10.0 Technical Knowledge and Skills and 11.0 Demonstration and Application (California Department of Education, 2006c).

With assistance from business and industry the standards have been designed to build on existing career technical education standards and academic content standards (California Department of Education, 2006c). Through the use of ratings developed by Willard Daggett, of the International Center for Leadership in Education, the standards

have been evaluated to determine how readily an academic standard can be incorporated into technical instruction (California Department of Education, 2006c).

While under contract with the U.S. Department of Education, John Kendall and Robert Marzano developed a model that incorporated a research-based format for writing content standards and subcomponents that:

- Incorporates both declarative and procedural statements
- Focuses on the higher-order declarative statements, often expressed as what the student “understands” or “knows”
- Uses clear, concise statements of the underlying (declarative) knowledge and skills and the main, overarching performance requirements (procedural), resulting in fewer but more important standards

The Superintendent’s Advisory Group adopted the format as the basis for development of the California Career Technical Education Model Curriculum Standards (California Department of Education, 2006c).

In an effort to prepare students for careers in the building and construction trades, programs have been developed that bring together academics and technical preparation. The programs include sequential learning and instruction that provides experienced based learning, internships, apprenticeships and partnerships that prepare students for entry level positions (California Department of Education, 2006c).

National Assessment of Vocational Education

The Perkins Reauthorization of 2006 made provisions for the Secretary of Education to evaluate and assess vocational and technical education programs. The act also required the appointment of an advisory panel. The primary of the panel is to advise

the Secretary on the implementation. A congressionally-mandated final report summarizing all studies and analyses that relate to the assessment was made available in 2004. The report titled “National Assessment of Vocational Education: Final Report to Congress” examined questions about the effectiveness of vocational education in improving student outcomes, the consequences of new funding and accountability provisions for programs and participants, the implementation and quality of vocational education, and the extent of its alignment with other reform efforts. The report also provided options for the future direction of vocational education legislation (Silverberg, Warner, Fong, & Goodwin., 2004, p. 13).

The Perkins Act applies to all levels of government specifically within education and workforce development policies. The National Assessment of Vocational Education (NAVE) focuses on the role of vocational education and issues of Perkins management and administration. The Advisory Panel has two major functions: (a) advise the Department of Education on how to conduct the assessment, and (b) submit its own analysis and recommendations to Congress (Silverberg et al., 2004, p. 13). In an effort to inform policy, NAVÉ examined the status of vocational education across the country and the impact of the 1998 law on vocational education practice. The research agenda investigated topics Congress mandated in Perkins III, including (a) implementation of state and local programs, (b) the impact of changes in federal funding formulas, (c) teacher quality and teacher supply and demand, (d) student participation in vocational education, (e) academic and employment outcomes, (f) employer involvement and satisfaction with vocational education programs, (g) education technology and distance

learning, and (h) the effect of accountability requirements on program performance (Silverberg et al., 2004, p. 14).

Office of Vocational and Adult Education

The Office of Vocational and Adult Education's (OVAE) goal is to provide useful and timely information that will enhance the body of knowledge related to vocational and adult education programs and related issues. The website supported by the Department of Education provides general information, research, and resources to help prepare young people and adults for postsecondary education, careers, and overall productive lives. (OVAE, 2006a).

The Assistant Secretary for Vocational and Adult Education serves as the principal adviser to the Under Secretary on departmental matters related. The OVAE Under Secretary oversees policies, programs and activities related to vocational and adult education, postsecondary education, college aid and the President's financial reforms for the Pell Grant program. The Office of the Under Secretary (OUS) works closely with the OVAE, Office of Postsecondary Education (OPE), and Federal Student Aid (OVAE, 2006b). The Assistant Secretary represents the Department at national and international meetings related to vocational and adult education as well as advises on matters pertaining to high school, career and adult education, community colleges, workforce and economic development. The office administers, coordinates, and recommends policy for improving programs designed to:

- Prepare students for postsecondary education and careers through strong high school programs and career and technical education.
- Provide opportunities to adults to increase their literacy skills.

- Promote identification and dissemination of effective practice in raising student achievement in high schools, community colleges and adult education programs, and lead targeted research investments.
 - Promote improved coordination and communication among programs and activities that prepare youth and adults for postsecondary education and careers.
 - Insure the equal access of minorities, women, individuals with disabilities and disadvantaged persons to careers and technical and adult education.
 - Provide a unified federal approach to high school, career and technical and adult education as well as community colleges with a focus in particular on low achieving areas.
 - Promote the implementation of education technology, as it applies to access and service delivery, as well as instructional methodology (OVAE, 2006c, para. 1)
- OVAE supports national research, evaluation, demonstration, technical assistance and capacity building activities. Each year, OVAE sponsors national activities aligned with the Under Secretary's policies (OVAE, 2006d).

OVAE is guided by the Department of Education's four key principles as outlined in the No Child Left Behind Act of 2001. They are as follows:

- Principle One: Increase accountability and academic achievement
- Principle Two: Increase options and involvement for parents and students
- Principle Three: Increase flexibility and reduce bureaucracy
- Principle Four: Focus on what works (OVAE, 2006c)

Vocational Education Research Trends

In 1964 under the supervision of the University of Michigan, the Ann Arbor study was conducted by Ralph Wenrich and Robert Crowley. The study measured perception of vocational education by different segments of the population. One of the outcomes of the study was the creation of measurement tool the *Image of Vocational Education Assessment, IVE* (Appendix C). The IVE measures attitudes and perceptions of the group being surveyed regarding vocational education.

In the spring of 2000 the Research Triangle Institute presented a study conducted on behalf of the U.S. Department of Education's OVAE. The study's intent was to identify vocational education practices that would support welfare reform by preparing individuals for workforce entry that would ultimately lead to job retention and advancement. RTI identified sites that were fully implemented, could provide some evidence of effectiveness and were replicable and prepared participants for employment. RTI identified 12 programs and conducted case studies. The result of the research, a *Compendium of Promising Practices*, a number of promising practices that enable vocational education programs to contribute to effective workforce preparation. These practices have been included in the study as the Program Characteristics Scale (Appendix D) to assist in the identification of practices the respondents feel are most desirable in the design and implementation of a high school vocational education/career tech school.

Research Triangle Institute

In April of 2000, the Research Triangle Institute (RTI), under contract to the U.S. Department of Education's Office of Vocational Education, conducted a study of vocational education programs that provided individuals the necessary training for

workforce entry that lead to job retention and advancement. The two questions that guided the design of the research were:

- What training modalities work best for what population groups under what circumstances?
- What resources, financial and non-financial, are needed to support different training approaches?

RTI developed a framework for the study that was constructed of five categories of variables related to: the programs context, organizational structure, services participants receive, resources, and participant and program outcomes. RTI identified three approaches that state and local programs could use to provide vocational services to individuals in need of services: (a) as a stand alone work activity, (b) in combination with other work activities, or (c) after employment.

Through a thorough review of literature a number of programs were identified as possible candidates. To augment the group of candidate sites, RTI solicited input from the study's advisory group, which included representatives of the American Association of Community Colleges, the National Governors Association, the National Alliance of Business, and the Welfare Information Network as well as state directors for vocational education. Nominators were asked to recommend programs that:

- Were fully implemented;
- Served individuals who received Temporary Assistance for Needy Families (TANF) funds;
- Could provide some evidence of effectiveness in terms of employment, reduced dependence on welfare, and attainment of educational skills/certification;

- Owed their success to the activities or components that could be replicated elsewhere; and
- Used vocational education to prepare participants for employment with career potential.

To identify programs for the case study, RTI collected detailed information from the most promising candidates, including information regarding:

- Whether the program provided vocational education (a) as a stand alone work activity, (b) in combination with other work activities, or (c) after employment;
- Agencies and organizations involved in the program and their respective roles;
- Characteristics of targeted participants;
- Major program activities and how they were coordinated to provide an integrated program;
- Type of employment for which participants are trained;
- Ways in which the program uses technology to deliver vocational education training services; and
- Any evaluation activities the program had undertaken.

The end result was the identification of a group of 12 programs that provided variation along a number of dimensions, including program models, geographic region, organizational structure, resources, context and array of services. RTI conducted site visits, interviews of staff, administration, participants as well as employers and representatives of collaborating agencies. In addition interviews of state-level administrators and other respondents not available on-site were also conducted. Data was

compiled per case study program – interviews, observations, and documents – in preparation for data analysis.

The result of the study was not only a list of successful programs but also a breakdown of vocational education practices that support welfare reform. The following is an index of promising practices:

- Access to further education and training
- Advisory groups
- Assessment
- Comprehensive/holistic service provision
- Cross-training
- Curriculum alignment with community development issues and with the local labor market/ needs of area employers
- Employer involvement
- Instructional strategies that promote program retention
- Integrated instruction
- Inter-sector partnerships with postsecondary institutions and social service agencies
- Joint assessment and intake procedures
- Participant support services for post-employment and pre-employment
- Political attention
- Resource blending
- Tailoring programs by developing short-term skills training programs

- By offering training in conjunction with employment and using state maintenance of effort funds
- Targeting harder-to-serve clients

A Compendium of Promising Practices, presented in April of 2000, to the U.S. Office of Vocational and Adult education documents the practices of identified programs, and provided decision makers with information regarding vocational education's contribution to workforce preparation.

Vocational Education as Perceived by Different Segments of the Population and IVE

In 1964, Ralph Wenrich and Robert Crowley presented to the University of Michigan, Ann Arbor cooperative research project number 1577, *Vocational Education as Perceived by Different Segments of the Population*. The research was supported by the Cooperative Research Program of the Office of Education, U.S. Department of Health, Education, and Welfare.

The study set out to describe, by means of a measuring instrument, perceptions of individuals regarding vocational education. The authors felt that the criteria for effective vocational programs must derive from the sound judgment of experts in that particular field. The instrument designed, tested and implemented was the Image of Vocational Education (IVE).

The use of the IVE involved isolating characteristics of relevant groups surveyed. The questionnaire was mailed and used a Likert-type scale to analyze the characteristics. The intended design of the Likert scale was to permit the determination of degree of favorableness of unfavorableness in attitude towards vocational education in high school.

The site chosen for the study was a city cited as Centerville, a city that belonged to the industrial part of town in Michigan.

The study specifically looked at perceptions of vocational education based on sex, age, income, occupational status, education and interaction with vocational education. In regards to sex, the study found no significant differences. Age resulted in similar findings, although the proportion of individuals who claim no experience with vocational education and are less favorable increased with age. Income determined that individuals with income in the midrange of the scale (\$7,000 to \$9,999) and were more favorable also fell within the bracket for the youngest respondents. Occupational status found that administrators and professionals were less favorable towards vocational education than workers. Looking at education revealed that the more highly educated employers were less favorable and so were the more highly educated school professionals. The breakdown also found that those who were acquainted with a vocational education student responded with increased favorability. Likewise those with little or no interaction responded less favorably. When income was used as a variable, it revealed that the largest number of individuals with little or no interaction and less favorable responses fell within the upper-range (\$10,000-\$14,999) of the scale.

The report also discussed the existence of trends in the current workforce, awareness of the current situation with regards to vocational education, and satisfaction with education and student preparation in general. The trends revealed that the labor force will continue to expand at a rapid rate, the changing American industry will continue to raise employment requirements and diminish the need for the unskilled. Those who have an awareness of the situation felt that there was an unemployment problem regarding

youth, and that problem would intensify over the next 10 years. Respondents stressed the need for specialized labor and the need for a supply of skilled workers. There was also an overwhelming feeling that there would be fewer unskilled jobs available in the future.

Regarding the current state of education respondents estimated the percentage of students enrolled in college oriented programs to 50 percent, the actual estimate was between 61 and 70%. Respondents who scored less favorable were more likely to believe their estimate of number of students enrolled appropriate for the community than those high in favorability to vocational education. The summary concluded the following:

- Few households reported difficulty deciding on a program of study for Grade 11.
- Most parents were happy about the course of studies in which their child was enrolled and that the studies would prove helpful to vocational plans.
- Many students with no career plan intend to continue school.
- Six out of 10 parents felt their Grade 11 offspring planned to attend college, 2 of the 10 were not going, and the remaining 2 did not know.
- One out of seven students held part-time jobs relevant to their desired occupation.
- Many respondents believed their child from sources outside the home. The greatest contributors were school and church.
- More students with definite plans had support such family assistance and part-time jobs, those with general non-specific plans had less family assistance and fewer part-time jobs, although they received some career counseling while those with no plans had little or no direction. Others simply planned to marry.

The recommendations from the report were that any expansions of Centerville's vocational programs come at a time where it is assured of the greater popular and

financial support. Centerville should publicize the strengths of its vocational programs more than it did, recognize outstanding students in the program and possibly publish the names of competent graduates in the local newspaper and establish a certification system whereby graduates could identify themselves to local employers.

California's Central San Joaquin Valley

The San Joaquin Valley is located in the center of California. The San Joaquin Valley is California's leading agricultural producing region. The region is bordered on the west by the coastal mountain ranges while the eastern boundary joins the southern two-thirds of the Sierras, which features Yosemite, Kings Canyon, and Sequoia National Parks.

Eight counties comprise the San Joaquin Valley region, including Kings County, Fresno, Kern, Merced, and Stanislaus counties, portions of Madera, San Luis Obispo and Tulare counties are also included in the region. The San Joaquin Valley has an estimated population of over 3 million people, according to census data. The largest cities are Fresno, Bakersfield, Modesto, and Stockton. According to the California Environmental Resources Evaluation System (CERES), some of California's poorest cities are in Fresno, Kern, and Tulare counties (CERES, 2000).

A recent article from the Fresno Bee claims that education and training are key to a better economy. It states that there are many good jobs going begging, and there are not sufficient skilled people to fill them. A recent study by the Fresno County Workforce Investment Board revealed that approximately 27,000 jobs would go unfilled in the next 3 years because potential employees lack the needed skills for the positions (Fresno Bee, 2007).

There are a number of reasons for this shortfall. Too many young people are poorly prepared when they leave high school, even if they've earned a diploma and

passed all the tests. Witness the marked increase in remedial education at America's colleges in recent decades (Fresno Bee, 2007).

Chapter 3: Methodology

Overview

The purpose of this study was to investigate and compare the attitudes and perceptions of community college leadership, union officials and school-to-career high school counselors regarding vocational education in the California's Central San Joaquin Valley and to identify those characteristics deemed most necessary in the design of a vocational education program for this region. The questions that guided this study were:

1. What are the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, regarding vocational education in California's Central San Joaquin Valley?
2. How do the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, with and without prior work related experience, compare regarding vocational education in California's Central San Joaquin Valley?
3. What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a vocational education program in California's Central San Joaquin Valley?

Study Design

The design of this study was descriptive in nature and survey in approach. Specifically, this study utilized two written questionnaires with rating scales: (a) one questionnaire to evaluate attitudes/perceptions regarding vocational education in the Central San Joaquin Valley of California and (b) a second questionnaire to evaluate the importance of vocational education program design characteristics. Both questionnaires

were administered together by this researcher. The State Center Community College District was contacted and permission was sought to approach the State Center Campus Presidents and their leadership teams. The Central Labor Council of Fresno, Madera, Tulare & Kings County, as well as the Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties, were contacted and surveys were distributed at the monthly board meeting. A search of California state school databases produced a list of 10 active ROP/ROTC programs in the Central San Joaquin Valley, all of the districts and principals were approached for permission to administer surveys to the counselors.

A descriptive study is a study that focuses on a particular situation or set of situations, reports on important aspects observed, and attempts to determine the interrelationships among them. Descriptive research or statistical research provides data about the population being studied. It can only describe the "who, what, when, where and how" of a situation, not what caused it. Therefore, descriptive research is used when the objective is to provide a systematic description that is as factual and accurate as possible (Ryerson University, n.d.a).

The reason for selecting a descriptive study is due in large part to the desire of the researcher to effect change in what has been and begin to evaluate what needs to be. By answering the who, what, where, when and how of the situation it is the belief of this researcher a clearer picture of what needs to be will arise.

Survey research is a commonly used approach for collecting many different types of information including: attitudinal, motivational, behavioral and perceptive aspects. "Reduced to its basics elements, a survey is quite simple in design: The researcher poses

a series of questions to willing participants: summarizes their responses with percentages, frequency counts or more sophisticated statistical indexes: and then draws inferences about a particular population from responses of the sample” (Leedy & Ormrod, 2004, pp. 184-185). If properly designed and implemented, surveys can be an efficient and accurate means of determining information about a given population. Results can be provided relatively quickly, and depending on the sample size and methodology chosen, they are relatively inexpensive (Ryerson University, n.d.b). Surveys can be administered through face-to-face, online, telephone and email. Surveys create a tremendous amount of flexibility from when and how the survey is to be administered to what types of questions are asked of a given topic or subject. Surveys allow for standardization and uniformity both in the questions asked and in the method of approaching subjects, making it far easier to compare and contrast answers by respondent group. Surveys also ensure higher reliability than some other techniques.

The weaknesses associated with the written survey are that the researcher must present respondents with questions that are general enough for all respondents. There is some inflexibility in the design because it must remain the same throughout the duration of the data collection. The researcher must ensure that the sample size is large enough and that response rate is sufficient. It may be difficult for respondents to have total recall when answering the survey (Colorado State University, 2007).

A survey approach, specifically written questionnaires, was selected for this study because it facilitated the collection of data from a distributed sample population of 150 professional stakeholders from three respondent groups: community college leaders, union officials, and high school school-to-career counselors in the Central San Joaquin

Valley of California and it provided for comparison of responses by respondent group and by respondents with and without prior work related experience.

Checklists and rating scales are two techniques commonly used to facilitate the evaluation and quantification of people's behaviors, characteristics, attitudes and opinions. A rating scale is more useful when "a behavior, attitude, or other phenomenon of interest needs to be evaluated on a continuum. Rating scales were developed by Rensis Likert in the 1930s to assess people's attitudes; accordingly, they are sometimes called Likert scales" (Leedy & Ormrod, 2004, p. 185).

A rating scale was selected as the technique for the two written questionnaires administered in this study because it allowed for the attitudes/perceptions of professional stakeholders regarding vocational education in the Central San Joaquin Valley of California and their perceptions regarding the importance of vocational education program design elements to be evaluated on a continuum.

Study Population

The respondent population consisted of State Center Community College District Campus Presidents and their Leadership teams, executive board representatives of the Central Labor Council of Fresno, Madera, Tulare & Kings County, the Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties, and school counselors from identified ROP/ROTC programs.

State Center Community College leadership was selected as a response group for this study because many students, once graduated from high school find themselves attempting to continue education at the local community college. The State Center Community College District has started focusing on career tech/vocational education as

areas of study aimed at providing skills to individuals to be used for gaining employment in vocational settings.

Trade union officials were selected because they represent the industry most likely to be directly affected by a program that prepares students for entry level apprenticeship work. The input from the trade unions would be valuable in the design of a program and create a starting point for a partnership that would be of benefit for the unions, in that it would create a pool of skilled apprentices from which to fill open positions that currently go unfilled. It would also create an alternative, other than college, for students exiting high school. It would enable students to step into entry level jobs for which they prepared and also save the unions from having to train apprentices in the basic skills needed to start working. The union officials that participated in the study were all participating board members of the Central Labor Council of Fresno, Madera, Tulare & Kings County, as well as the Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties.

The rationale behind the selection of the high school school-to-career counselor has a great deal to do with their dealings with today's students. They see the end product of our educational institutions. They are also responsible for guiding and nurturing students as they transition from school to life. No matter if that means continuing education or a life of work, the high school school-to-career counselor is an integral part of a student's planning for the future. The selection of the high school school-to-career counselors was based largely on the representation of ROTC and ROP programs in the Central San Joaquin Valley. There are a total of 10 identified schools that fit the profile according to the California Department of Education website. Additionally a random

sampling of counselors in magnet school settings, that had vocational components, were also contacted for participation in the study.

Human Subject Protection

This research study adhered to the guidelines of Pepperdine University's Institutional Review Board (IRB) in cooperation with various school districts in California's Central San Joaquin Valley, the State Center Community College District and local trade unions. Approximately 50 local community college leaders, 50 local trade union officials and 50 school-to-career counselors from California's Central San Joaquin Valley public high schools were asked to complete two written survey questionnaires regarding vocational education and vocational education program design characteristics.

Permission to administer the two questionnaires was obtained from community college administration, local area union boards, area school superintendents and the principals of local area high schools. Once proper permission was obtained, recruitment occurred at designated meetings, through e-mail and postal carrier. There was no compensation for participation and participants were assured that their participation was voluntary and they could withdraw from completing the survey at any time. The researcher distributed the survey to all participants in attendance at the meetings, along with a cover letter that explained the purpose of the survey. The participants were informed of their right not to participate and were informed that the survey was anonymous and no personal information was to be collected. The researcher gave a brief introductory statement before participants began the survey that informed participants of the purpose and nature of the survey, their participation and their rights as participants. Those who participated dropped off the completed surveys in a designated collection box

before exiting the meeting. Those who chose not to complete the survey returned the survey form to the researcher before they exited the meeting.

The research activities of the study presented no risk (no more than minimal risk) to human subjects. They involved research on individual or group characteristics or behavior (i.e., research on cognition and perception) and utilized data from an anonymous survey. There were no drugs, medical devices or procedures involved in this study, and no teacher or student identification was required or requested. The identification of the participants was not published and this confidentiality was maintained throughout the entire process including publication of the study. The completed surveys were kept in a locked cabinet and destroyed 30 days following the conclusion of the study and publication of the results.

Instrumentation

A written questionnaire with a Likert rating scale was the most appropriate instrument for this study in response to research questions one and two in this study. The literature review provided a study conducted by Crowley and Heinrich in 1964, while at the University of Ann Arbor Michigan. One of the results of the study was the creation of the Image of Vocational Education (IVE) scale. This instrument was created, tested and found to be an effective and reliable way of measuring individual's attitudes and perceptions in regards to vocational education (Wenrich & Crowley, 1964).

The IVE scale involves isolating characteristics of groups in the community being surveyed: demographic variables, age and income are examples of one kind; the make-up of the community may suggest others. The IVE contained 28 questions designed to

permit ordering into groups on the basis of scores on the Likert scale, and allow for analysis of the characteristics (Wenrich & Crowley, 1964).

The instrument that was envisioned had to be general yet pertinent, concise but not erudite, simple and clear in its directions, inexpensive to prepare and light enough to mail first-class, of sufficient length to interest but not tire, operationally it had to have a respectable reliability and validity. These criteria served as guidelines in the instrument that was finally administered (Wenrich & Crowley, 1964).

A summated rating scale involves a series of attitude items. All items have similar attitude values and ask respondents to answer in agreement or disagreement. The answers given by respondents are scored and averaged to provide an individual's attitude score. During its development, the IVE scale underwent considerable pre-testing in the area around Ann Arbor. The initial instrument contained both fixed-choice and open-ended questions. There were informal reliability checks made to ensure uniformity and accuracy of the coding and tabulating. The data gathered by personal interview provided many of the statements that constituted the initial statement pool. The initial draft of the summated-rating scale contained 80 items. Subsequent administrations and refinement of the questionnaires produced a scale of 28 items which were significant at the .05 level or more (Wenrich & Crowley, 1964). Each item in the scale underwent analysis by T-ratio test.

Gulliksen (1966) suggested a method to determine the intrinsic validity of a scale. It included studying the judgments of a group of experts. During the design of the IVE a pool of 42 items were assembled and administered to a group of participants in a leadership training course at the University of Ann Arbor, Michigan. The Vocational

Department had selected these individuals based on their experience in vocational education as future leaders in the state's leadership development program. They were asked to rank the items in terms of relevance to vocational education. They had seven categories from which to choose: most relevant to most irrelevant. The rankings of the 28 items produced a mean validity rating for relevance at the 5.90 level (Wenrich & Crowley, 1964).

Research question three data was informed by the use of a questionnaire with a Likert rating scale similar to the one used to inform research questions one and two. All of the questions were based on the research and findings outlined in the U.S. Department of Education's report *A Compendium of Promising Practices*. The report was prepared by the Research Triangle Institute for the Office of Vocational and Adult Education. All of the questions were based on the findings of the report. The report outlines the findings of the study, vocational education practices that support welfare reform.

RTI identified 12 programs for case study. Input was sought from the study's advisory committee that included representatives from the American Association of Colleges, the National Governors Association, the National Alliance of Business, and the Welfare Information Network, as well as state directors of vocational education. The selected case study sites provided variation along a number of dimensions, including program model, geographic region, organizational structure, resources, context, and services. RTI conducted both within-site and cross-site analyses to develop case studies and to generate themes that explained vocational education practices that support social reform. Data from interviews, observations and document review was organized into

categories of information about the context, structure, participants, services, resources, and outcomes of programs.

Following the recommendations of the study, RTI published the list of practices resulting from the study. In the use of the list of practices for the purpose of this study, the list of practices was compiled and analyzed for relevance, questions were derived from the list. The order and amount of questions was based on the report findings. All of the individual practices were placed into close-ended questions on a 5-point scale. The justification for the organization of the questions was the result of the study issued by the Department of Education and RTI. The list of practices used was a direct result of the original study. Given that the study had already identified the items for inclusion, a Likert-type scale was decided upon because of the familiarity the study participants would have with the first questionnaire. By allowing the participants to rate the practices identified by the report the goal was to identify those practices the experts deemed most appropriate for the Central San Joaquin Valley.

Survey Validity

After the focus group produced a workable copy of research survey number two, it was submitted to three experts in the field for review. These experts included a local superintendent of a major building/construction company who oversees jobsites throughout the valley, a master millwright who is responsible for overseeing installation and removal of industrial equipment for major corporations and a high school school-to-career counselor who was not part of the study's respondent pool. The experts were given an overview of the study's focus, and the process by which the survey was created. The experts were then asked to pay particular attention to the following:

1. Clarity: Are the survey directions and statements clearly stated so as to be understood by all participants?
2. Characteristics: Are the characteristics too broad, too narrow or appropriate?
3. Length: Is the survey long enough to appropriately address the goal of the instrument within a specific timeframe?
4. Depth: Does the survey cover everything or only touch the surface of the topic?
5. Validity: Are characteristics included valid and appropriate for the design of a high school vocational education program in the Central Valley?

All experts agreed overall with the characteristics' significance and set up of the instrument. It was suggested that the level (elementary, middle, or high) needed to be clarified in the directions, although it was assumed to be high school. The superintendent thought the survey to be brief enough to be completed quickly which would result in a high rate of return. This expert also believed the characteristics were valid for a program designed at the high school level but was concerned that some respondents would need additional information to completely understand the characteristics presented. He would like to see greater detail in the explanation of characteristics so that all respondents, regardless of experience, understood what each characteristic included.

The researcher included "high school" in the survey directions for clarity. The researcher also emphasized the purpose of this survey when giving directions to the survey participants so that it was understood that the results of the survey will assist in identifying the characteristics needed in the design of a high school vocational education program. The instrument should not be used to identify characteristics they found favor in

personally, but those items they believed to be needed in a program suited for the students of the Central San Joaquin Valley.

Fraenkel and Wallen (1990) addressed content-related evidence of validity as the nature of the content included with a survey instrument and the specifications the researcher used to formulate the content. Further, they described content validity as partly a matter of determining if the content that the instrument contains is an adequate sample of the domain of content it is supposed to represent. Content validity requires the careful analysis of an instrument to be sure the content is both representative and suitable for the purpose of the research. Because of the method employed in the construction of the characteristics survey (research and focus group), it was assumed that the instrument had sufficient validity.

Survey Reliability

To determine test-retest reliability, seven individuals (three union members, two high school counselors, and two college administrators) were interviewed by the researcher and selected through the following criteria:

1. Years of service (minimum of 10 years given that the survey is concentrating on individuals with experience),
2. Experience working with students or experience in an established vocation, and
3. Willingness to assist in rating a survey instrument related to vocational education and characteristics needed in the design of a high school vocational education program.

These criteria limited the number of individuals who were selected. The individuals selected represent a sampling of all three of the respondent pools. Sampling is a

technique used to determine the size and types of group subsets needed to provide representative information about the larger group (Houston, n.d.). The researcher met with the selected participants at the agreed upon site and time designated to complete the survey. Upon completion of the survey, a date and time for the following week was designated for the same individuals to once again complete the same survey at the same site. A Pearson Product Moment Correlation was computed between the two sets of scores. The most obvious method for determining reliability of an instrument is to administer the survey to the same people on two different occasions (Statistics.com, n.d.). Upon completion of the pilot study, it was determined that the reliability factor was a minimum of .7 and, therefore, was used intact when distributed. A Pearson Product Moment Correlation Coefficient of .57 is significant at the .05 level (Statistics.com, n.d.). This study sought to meet or exceed this criterion.

Data Analysis

A review of the literature was used to inform all of the research questions. The literature review identified the IVE scale used to collect and analyze data regarding research questions one and two, as well as identified the program characteristics, selected by the U.S. Department of Education, used to address research question three.

The survey instruments addressed all study questions. Survey responses were collected as raw data and entered into a software program known as Statistical Package for the Social Sciences (SPSS) for statistical analysis. Analysis of data was conducted by recording individual responses for each of the statements in the survey instrument after the answers to the survey statements were recorded. Fraenkel and Wallen (1990) stated that the first step in data analysis is to describe it in a summary fashion using one or more

descriptive statistics. They contended that in some types of research, such as questionnaire studies, the entire process of analysis may consist of computing and then interpreting statistics.

The first survey, the IVE, contained 28 questions. The statements were rated on a 5-point Likert scale and were used for this study as opposed to any other design for several reasons: (a) descriptive statements are easier to understand and rate on a graduated scale, (b) descriptive statements are more reliable and less prone to subjective interpretations as opposed to open-ended questions which are more difficult to quantify, and (c) since the Likert scale has interval properties which permit more meaningful interpretations, the results included a more detailed analysis. In addition, using interval data allows questions to be answered on a quantified scale, which can then be examined with common mathematical operations (Statistics.com, n.d.). Therefore the use of this data permitted the researcher to analyze the information in an expedited manner and provided for more timely return on data results. The IVE data was reported collectively for the three stakeholder groups.

The second survey contained 22 close-ended statements. The statements were rated on a 5-point scale as well for the reasons previously stated. A cluster analysis was completed on the responses to the 22 statements dealing with program characteristics/ Clustering is the process of grouping data into a set of clusters in order to more easily identify patterns. The responses from the participants completing the survey were clustered into the following three categories: (a) high response ratings (SA – A), (b) average response ratings (U), and (c) low response ratings (D – SD). The following criteria were used to assist in clustering the responses:

- Identify program characteristics deemed most necessary in a vocational education program, and
- Identify program characteristics least favorable in the design of a vocational education program for the Central San Joaquin Valley.

Clustering responses provided more comprehensive analysis and interpretations of the data. Clustering also provided more insightful understanding of the data to readers of the published study. Finally, a comparative analysis was conducted to determine which program characteristics rated as most important in the development in a vocational education program designed to meet the needs of students in the Central San Joaquin Valley.

Materials

The two scales used in this study are included as Appendix C and D. Letters of introduction, permission, and informed consent are included as Appendix E, F, G, H, I, J, K, L, M, and N. Each signed letter of consent (LOC) is included as an appendix; these are Appendix O, P, Q, R, S, T, U, V, W, and X. Appendix Y is a letter of permission to use the IVE scale. Appendix Z shows completion of a required online education tutorial for human subjects protection.

Procedures

The first step in the process was to identify a working definition for vocational education. The following definition outlined by the Perkins Act was used for this study:

Organized educational programs offering sequences of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Programs include competency-based applied learning, which contributes to an individual's academic knowledge, higher-order reasoning, problem solving skills, and the

occupational-specific skills necessary for economic independence as a productive and contributing member of society. (Orrell, n.d., para. 1)

Next the researcher conducted online searches, consulted journals and investigated books, using the study definition of vocational education to identify relevant research for further investigation. Selected research was studied in order to explore and identify the history and current state of vocational education and to look for possible national and state trends. The national trends revealed research that led to the identification of vocational education practices that support social reform and to a study responsible for the creation of the IVE.

Written permission was obtained for the use of the IVE (Appendix Y) in the study and a second survey was constructed by the researcher using the identified vocational education practices that support social reform. The survey constructed by the researcher with input from a select focus group of educators and union members as described earlier in the survey design and validity sections of this chapter. The survey was refined further as a result of a pilot conducted with counselors and trade based professionals internal to the area being studied but external to the study population identified for this study.

Once the survey concluded the developmental process, the final versions of both surveys accompanied with a cover letter, and letter of permission was submitted to the local area school Superintendents, union officials and the Chancellor of the State Center Community College District, for permission to distribute the surveys to participants selected for the study (Appendices D, E, F, G, I, & K). After permission was granted the survey were printed and distributed accordingly for completion. To enhance the completion of the survey the researcher attended meetings when allowed, presented the study along with a cover letter outlining the purpose of the study, specific instructions

and rights of participants and informed them of their protection as human subject in a university-approved research study (Appendices C, H, & J). The researcher then gave a brief overview of the introductory statement prior to the selected participants completing the survey. A collection box was provided in face-to-face meetings and a self-addressed stamped envelope was provided for those who did not complete the survey in a face-to-face setting. Those who chose not to complete the survey returned them to the researcher prior to exiting or mailed them as they were issued. All data collected was confidential and used exclusively for the purpose of addressing the research questions. The physical surveys were kept under lock and key, made available to no one other than the researcher and destroyed 30 days following the conclusion of the study and publication of the results.

Finally, the three sets of data were compared and analyzed in regards to study questions one and two. The data set for study question three was also compiled and analyzed. The data sets were compiled analyzed and for commonalities and differences. The commonalities and differences were portrayed in table form and described in narrative analysis.

Chapter 4: Findings

The purpose of this study was to investigate and identify the attitudes of California's San Joaquin Valley community college leaders, union officials and high school school-to-career counselors toward vocational education and to identify what they deem as ideal attributes for a future state-of-the-art vocational education program in the Central Valley area.

The following three research questions guided this study:

1. What are the attitudes/perceptions of community college leadership, union officials and high school school-to-career counselors, regarding high school vocational education in California's Central San Joaquin Valley?
2. How do the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, compare regarding high school vocational education in California's Central San Joaquin Valley?
3. What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a high school vocational education program in California's Central San Joaquin Valley?

Two written surveys were utilized to collect data for this study. The Attitudes Toward Vocational Education Survey, the IVE (Appendix C) was comprised of 28 attitudinal statements and was administered in response to research questions one and two in order to solicit the attitudes and perceptions of community college leaders, union officials and high school counselors regarding vocational education in California's Central San Joaquin Valley. The Evaluation of Successful Program Characteristics Questionnaire (Appendix D) included 21 vocational education program characteristics

and was administered in response to research question three for the purposes of identifying program characteristics deemed to be most important to the design of a high school vocational education program in California's Central San Joaquin Valley by community college leaders, union officials, and high school counselors. A total of 103 respondents representing the three aforementioned stakeholder groups, college administrators ($n = 50$, 48.6%), union officials ($n = 19$, 18.4%) and high school counselors ($n = 34$, 33.0%), responded to both written questionnaires. The findings are presented in the following sections of this chapter and are organized by research question.

Research Question One: Findings

Table 3 represents the collective responses of the three stakeholder groups to the 28 attitudinal statements included in the Attitudes Towards Vocational Education. In Table 3, the mean scores for the 28 attitudinal statements are ordered by the most favorable response. For 14 of the statements (1, 3, 5, 7, 10, 12, 13, 14, 15, 17, 19, 21, 23, and 26) the ratings were reversed-scored because a response of *strongly disagree* was deemed to be the most favorable attitude pertaining to vocational education. Both of the items with highest mean ratings were reverse-scored. These were items 7, "Most vocational education courses, in my opinion, lead to nowhere" ($M = 4.64$) and 15, "In my opinion, a graduate of a high school vocational education program is suited only for unskilled work" ($M = 4.59$). The two items with the least favorable mean ratings were items 24, "In my opinion, most public schools do not provide vocational education programs early enough" ($M = 3.60$) and 2 "A high school graduate of a vocational education program impresses me a great deal" ($M = 3.61$). Individually and collectively, the three stakeholder groups responded favorably towards vocational education and there

was more agreement of responses across groups than there was disagreement. In Table 3, attitude ratings were reverse scored when a response of “strongly disagree” was considered to be the most favorable attitude about vocational education.

Table 10

Attitudinal Ratings about Vocational Education

IVE Statement	<i>M</i>	<i>SD</i>
7. (Reversed) Most vocational education courses, in my opinion, lead to nowhere.	4.64	0.52
15. (Reversed) In my opinion, a graduate of a high school vocational education program is suited only for unskilled work.	4.59	0.60
28. I am thoroughly sold on offering vocational education in high school.	4.50	0.64
5. (Reversed) Vocational education does not make enough students useful members of society to justify its cost	4.50	0.75
3. (Reversed) Those high school students who would want to take vocational education are not mature enough to profit from it.	4.47	0.62
13. (Reversed) In my opinion, taking vocational education hinders students from further education after high school.	4.35	0.62
9. I should like to see the values of vocational education made known to more parents than is now the case.	4.34	0.55
25. I would cooperate with others in order to develop the best vocational education program for the community.	4.30	0.59

(table continues)

IVE Statement	<i>M</i>	<i>SD</i>
18. I should like to see vocational education encouraged more among high school students.	4.23	0.60
23. (Reversed) I am of the opinion that vocational education is too costly in proportion to its worth to the community.	4.19	0.67
19. (Reversed) In my opinion, vocational education in the high school is highly overrated.	4.18	0.61
10. (Reversed) I am opposed to expanding vocational education programs in high school when so many students need the basic subjects.	4.14	0.85
27. The community should provide a wide variety of vocational programs to fit the abilities of most students not going to college.	4.10	0.68
21. (Reversed) It seems to me that vocational education in high school does not prepare a student for advancement in an occupation.	4.09	0.78
12. (Reversed) Vocational education programs cannot possibly prepare high school students for the range of job opportunities available to them.	4.04	0.95
16. There should be more money set aside in the school budget for vocational education.	4.03	0.86
14. (Reversed) I do not think vocational education in high school in high school is as necessary for most students as are other worthwhile programs.	4.00	0.85

(table continues)

IVE Statement	<i>M</i>	<i>SD</i>
26. (Reversed) I favor reducing vocational education programs when available school funds are in short supply.	3.97	0.81
17. (Reversed) Most students who take vocational education in high school, in my opinion, lack too many other scholastic skills.	3.95	0.75
20. I believe good vocational education programs in public schools attract new industries to a community.	3.85	0.76
8. In my opinion, there are not enough students in vocational education at the high school level.	3.84	0.89
11. For many students in high school there should be greater emphasis on earning a living through vocational education.	3.83	0.79
6. I would favor expanding vocational education programs even if available funds remain the same.	3.77	0.99
4. High schools should encourage bright students to enter a vocational education program.	3.72	0.97
1. (Reversed) It is more important to provide many students with a sound basic education than use the time for vocational education.	3.65	1.15
22. A more considerable portion of the high school curriculum than at present, should be devoted to vocational education.	3.63	0.86
2. A high school graduate of a vocational education program impresses me a great deal.	3.61	0.92
24. In my opinion, most public schools do not provide vocational education programs early enough.	3.60	0.78

Note. Ratings based on 5-point metric: 1 = *least favorable* to 5 = *most favorable*.

Factor Analytic Results

In an effort to provide a greater understanding of the underlying constructs, the 28 attitudinal statements were subjected to two factor analyses. All 28 statements were analyzed for and distributed among factors. The 28 attitudinal statements yielded eight factors. Further inspection of analysis results revealed 2 factors for all attitudinal 28 statements. These two factors were labeled, “Enhance vocational education,” and “Vocational education is a waste.” Eleven of the attitudinal statements identified vocational education as a waste/negative, while 16 of the attitudinal statements identified vocational education as an enhancement/positive. One of the statements had no connection to either of the groups and was excluded. The analysis provided a means of identifying questions as either positive or negative towards vocational education.

Table 11

Psychometric Characteristics for Scales (N = 103)

Scale	No. of Items	M	SD	Low	High	α
Enhance Vocational Education ^a	16	1.97	0.47	1.00	3.31	.88
Vocational Education is a Waste ^a	11	4.16	0.47	2.55	5.00	.82

Note. Scale based on five-point metric: 1 = *strongly agree* to 5 = *strongly disagree*

Table 4 displays the psychometric characteristics for the two scales, Enhance Vocational Education Scale and Vocational Education is a Waste. Both scales had Cronbach alpha reliability coefficients greater than $r = .80$ which suggested adequate internal reliability of all scales. Cronbach alpha is a statistic. It provides a measure of the reliability of a psychometric instrument. Psychometrics deals with theory and technique

of educational and psychological measurement. These measurements include knowledge, abilities, attitudes, and personality traits.

Research Question Two: Findings

Research question two data compared the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors regarding high school vocational education in California's Central San Joaquin Valley. To answer this question, one-way ANOVA tests were performed for the 28 attitudinal scores comparing the three groups of respondents. An ANOVA test, is in essence a method to determine if three or more population means are equal. In only 2 of the 28 ANOVA tests, there were significant differences between the groups at the $p < .05$ level.

Table 5 contains the results of the ANOVA models for the two attitude scores "Enhance Vocational Education" and "Vocational Education is a Waste" in addition to the two attitude scores that yielded significant differences between subgroups, items 11 and 25. The two factors, "Enhance Vocational Education" and "Vocational Education is a Waste," identify respondent groups' overall responses to the related statements. Respondents strongly agreed with most of the positive statements regarding vocational enhancement and disagreed with statements identifying vocational education as a waste. Specifically, no significant group differences were noted for the Enhance Vocational Education scale ($p = .89$) or the Vocational Education is a waste scale ($p = .89$).

Also in Table 5, significant group differences were noted for item 11, "For many students in high school there should be greater emphasis on earning a living through a vocational education program" ($p = .03$), and for item 25 "I would cooperate with others in order to develop the best vocational education program for the community" ($p = .001$).

Table 12

One-Way ANOVA Tests for Selected Attitude Scores Based on Group (N = 103)

Scale	Group ^a	<i>M</i>	<i>SD</i>	eta	<i>F</i>	<i>p</i>
Enhance Vocational Education Scale ^b				.05	0.12	.89
	1. HS	1.97	0.42			
	2. Union	1.93	0.43			
	3. College	1.99	0.52			
	Total	1.97	0.47			
Vocational Education is a Waste Scale ^b				.05	0.12	.89
	1. HS	4.16	0.37			
	2. Union	4.21	0.56			
	3. College	4.15	0.50			
	Total	4.16	0.47			
11. For many students in high school there should be greater emphasis on earning a living through a vocational education program ^c				.26	3.76	.03
	1. HS	2.32	0.84			
	2. Union	1.74	0.56			
	3. College	2.22	0.79			
	Total	2.17	0.79			
25. I would cooperate with others in order to develop the best vocational education program for the community ^d				.36	7.52	.001
	1. HS	1.79	0.54			
	2. Union	2.05	0.71			

(table continues)

Scale	Group ^a	<i>M</i>	<i>SD</i>	eta	<i>F</i>	<i>p</i>
	3. College	1.50	0.51			
	Total	1.70	0.59			

Note. Ratings based on 5-point metric: 1 = *strongly agree* to 5 = *strongly disagree*

^a Group: HS = High school counselor ($n = 34$), Union = Union official ($n = 19$), College = College administrator ($n = 50$)

^b Scheffe post hoc tests: No significant differences between groups at $p < .05$ level

^c Scheffe post hoc tests: 1 > 2 ($p = .03$), 1 = 3 ($p = .83$), 3 > 2 ($p = .07$)

^d Scheffe post hoc tests: 1 = 2 ($p = .27$), 1 > 3 ($p = .06$), 2 > 3 ($p = .002$)

For item 11, Scheffe post hoc tests found union officials to have stronger levels of agreement than high school counselors ($p = .03$) and college administrators ($p = .07$). For item 25, college administrators had more agreement than high school counselors ($p = .06$) and union officials ($p = .002$). See Table 5.

In response to research question two, respondents in all subgroups expressed similar views on 26 of the 28 attitudinal statements. However, questionnaire items 11 and 25 revealed statistically significant differences between certain subgroups.

Responses to survey item 11, “For many students in high school there should be greater emphasis on earning a living through a vocational education program,” revealed that union leadership agreed more strongly than did high school school-to-career counselors, that there should be greater emphasis on earning a living through a vocational education significant at the .027 level.

Survey item 25, “I would cooperate with others in order to develop the best vocational education program for the community,” found that Union Leadership responded as less likely to cooperate in developing a program for the community as did both college administration and high school school-to-career counselors subgroups

significant at the .001 level. While the data analysis did find a slight significant difference in subgroup responses, it also showed that participants as a whole communicated an overall favorable attitude towards vocational education.

Research Question Three: Findings

Findings for research question three identified Vocational Education program characteristics deemed to be most important in the design of a high school vocational education program in California's Central Valley by community college leaders, union officials and high school school-to-career counselors. To answer this question, a rank order for statistical analysis was used. Table 6 displays the results. Table 6 displays an ordered ranking, sorted by the highest rated characteristic, for the 21 characteristic assessment scores comparing the three groups of respondents. In 3 of the 21 ANOVA tests, there were significant differences between the groups at the $p < .05$ level.

Table 7 contains the results of the ANOVA models for the aggregated vocational characteristics rating and the three other characteristics scores that yielded significant differences. Specifically, no significant group differences were noted for the aggregated characteristics score ($p = .20$). Also in Table 7, significant group differences were noted for item 8, "Employer involvement ($p = .02$)," item 9, "Strategies that promote program retention" ($p = .001$), and item 11, "Intersector partnerships with postsecondary institutions" ($p = .01$). For item 8, Scheffe post hoc tests found college administrators to report greater need than did union officials ($p = .04$). For item 9, college administrators reported greater need than did high school counselors ($p = .001$). For item 11, union officials reported less need than either high school counselors ($p = .04$) or college administrators ($p = .02$).

Table 13

Ratings for Program Characteristics. Sorted by Highest Rated Characteristics (N = 103)

Description of Characteristics	<i>M</i>	<i>SD</i>
1. Access to further education and training	4.58	0.65
8. Employer involvement	4.56	0.59
7. Curriculum aligned with the local labor market/needs of employers	4.52	0.62
9. Instructional strategies that promote program retention	4.38	0.74
6. Curriculum is aligned with community and economic development	4.36	0.79
3. Timely assessment and feedback	4.36	0.70
10. Integrated instruction	4.28	0.76
11. Intersector partnerships with postsecondary institutions	4.25	0.85
15. Participant support services in pre-employment	4.19	0.75
19. Tailoring programs to meet TANF-Training with employment	4.09	0.97
14. Participant support services in post-employment	4.05	0.87
12. Intersector partnerships with social service agencies	3.93	1.02
2. Access to advisory groups	3.90	0.93
5. Cross-training	3.88	0.96
18. Tailoring programs to meet TANF-Short terms skills training	3.87	0.98
17. Resource blending	3.85	0.91
16. Political attention	3.79	1.13
13. Joint assessment and intake procedures	3.79	0.89
21. Targeting harder to serve TANF clients	3.66	1.06
4. Comprehensive/holistic service provision	3.57	1.13
20. Tailoring programs to meet TANF-State maintenance of effort funds	3.53	1.02

Table 14

One-Way ANOVA Tests for Selected Need Ratings Based on Group (N = 103)

Rating	Group ^a	<i>M</i>	<i>SD</i>	eta	<i>F</i>	<i>p</i>
Aggregated Vocational Needs Rating ^b				.18	1.65	.20
	1. HS	4.00	0.53			
	2. Union	3.94	0.59			
	3. College	4.16	0.47			
	Total	4.07	0.52			
8. Employer involvement ^c				.28	4.11	.02
	1. HS	4.47	0.56			
	2. Union	4.32	0.82			
	3. College	4.72	0.45			
	Total	4.56	0.59			
9. Strategies that promote program retention ^d				.37	8.08	.001
	1. HS	4.00	0.95			
	2. Union	4.42	0.51			
	3. College	4.62	0.53			
	Total	4.38	0.74			
11. Intersector partnerships with postsecondary institutions ^e				.29	4.62	.01
	1. HS	4.35	0.65			
	2. Union	3.74	1.10			
	3. College	4.38	0.81			
	Total	4.25	0.85			

Note. Ratings based on five-point metric: 1 = *Not Needed* to 5 = *Strongly Needed*

^a Group: HS = High school counselor ($n = 34$), Union = Union official ($n = 19$), College = College administrator ($n = 50$)

^b Scheffe post hoc tests: No significant differences between groups at $p < .05$ level

^c Scheffe post hoc tests: 1 = 2 ($p = .64$), 1 = 3 ($p = .15$), 3 > 2 ($p = .04$).

^d Scheffe post hoc tests: 1 = 2 ($p = .11$), 3 > 1 ($p = .001$), 2 = 3 ($p = .57$)

^e Scheffe post hoc tests: 1 > 2 ($p = .04$), 1 = 3 ($p = .99$), 3 > 2 ($p = .02$)

All of the individual characteristics from Survey 2, Evaluation of Successful Program Characteristics, were placed on a five-point scale 1 = Not Needed through 5 = Strongly Needed. Respondents in all subgroups expressed similar views and importance ratings on 18 of the 21 characteristics presented. The three characteristics that showed a statistically significant difference were characteristics 8, 9, and 11.

Characteristic 8 “Employer involvement,” revealed that college administration responded more favorably than union leadership in the perceived need for employer involvement in a program designed for the students of the area, significant at the .036 level. Characteristic 9, “Instructional strategies that promote program retention,” showed that college administration responded more favorably than high school school-to-career counselors in regards to providing instructional strategies then promote retention, significant at the .001 level. Characteristic 11, “Inter-sector partnerships with postsecondary institutions,” revealed that union leadership viewed inter-sector partnerships less favorably than did college administration and high school school-to-career counselors, significant at the .017 level. However, with the exception of these three characteristics, all respondent subgroups expressed similar views about remaining program characteristics. Three characteristics (1, 8, and 7) were identified as most needed in the design of a program. Characteristic 1, “Access to further education and training,” had a mean of 4.58. Characteristic 8, “Employer involvement,” had a mean of 4.56 and

characteristic 7, “Curriculum that is aligned with the local labor market/needs of area employers,” returned a mean of 4.52. These three characteristics were identified as most needed, as indicated by the average score of over 4.5 out of 5.

The three characteristics at the bottom end of the scale were items 21, 4, and 20. Characteristic 21, “Targeting harder to serve TANF (Temporary Assistance to Needy Families) clients,” had a mean of 3.66. Characteristic 4, “Comprehensive/holistic service provision,” revealed a mean of 3.57. Characteristic 20, “Tailoring programs to meet TANF constraints by using state maintenance of effort funds,” resulted in need of 3.53. Although these characteristics represent the lower end of the characteristics scale, the respondents cumulative score of over three, expressed a minimal amount of need.

In summary, study findings revealed that community college leaders, union officials and high school counselors collectively view vocational education in California’s Central San Joaquin Valley in a positive light. Not only did all respondents from each of these three stakeholder groups respond favorably to 28 attitudinal statements, they responded similarly regarding their attitudes toward the statements presented; 103 study respondents agreed with one another on 26 of the 28 attitudinal statements presented. Results from items 11 and 25, however, showed some statistical differences among respondent groups.

Finally, respondents in all three subgroups expressed similar rankings regarding 18 of the 21 program characteristics. Characteristics 8, 9, and 11 (employer involvement, instructional strategies that promote program retention, and inter-sector partnerships with postsecondary institutions) showed significant statistical difference between the three respondent groups. Moreover, respondents identified “access to further education and

training,” “employer involvement,” and “curriculum alignment with local labor market” to be most needed in the design of a program to serve students of California’s Central San Joaquin Valley. Characteristics 21, 4, and 20—targeting harder to serve TANF clients, comprehensive/holistic service provision and tailoring programs to meet TANF constraints by using state maintenance of effort funds—were identified at the bottom of the scale although each of the characteristics presented received a scale score over 3, revealing that respondents felt at least a minimal amount of need for all characteristics presented. In conclusion, all respondents responded similarly and favorably towards vocational education and were in agreement regarding the ranking of program characteristics presented.

Chapter 5: Study Conclusions and Recommendations

The purpose of this study was to investigate and analyze the attitudes and perceptions of community college leadership, union officials and high school school-to-career counselors regarding high school vocational education in the California's Central San Joaquin Valley. The study also presented the respondents with the characteristics of vocational education programs identified by the U.S. Department of Education, that support social reform and asked them to identify those characteristics they deemed most necessary in the design of a high school vocational education program in California's Central San Joaquin Valley.

Research questions guiding this study were as follows:

1. What are the attitudes/perceptions of community college leadership, union officials and high school school-to-career counselors, regarding high school vocational education in California's Central San Joaquin Valley?
2. How do the attitudes/perceptions of community college leaders, union officials and high school school-to-career counselors, compare regarding high school vocational education in California's Central San Joaquin Valley?
3. What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a high school vocational education program in California's Central San Joaquin Valley?

Analysis of Findings for Research Question Two

Research Question 2, "How do the attitudes/perceptions of community college leaders," union officials and high school school-to-career counselors, compare regarding high school vocational education in California's Central San Joaquin Valley?" uncovered that respondents in all subgroups expressed similar views on 26 of the 28 attitudinal

statements that were presented. It revealed that all subgroups compared similarly in their favorable attitude of vocational education. However, attitudinal survey items 11 and 25 revealed statistically significant differences between certain subgroups.

Survey item 11, “For many students in high school, there should be greater emphasis on earning a living through a vocational education program,” revealed that union leadership agreed more strongly than did high school school-to-career counselors, that there should be greater emphasis on earning a living through a vocational education. One explanation for union members’ response may have to do with historical context. Historically there has been some mistrust between labor/industry and education. Most vocational education programs of the past have reflected the needs of corporations instead of labor and industry. “Without such attention, the curriculum of vocational education will continue to reflect the narrow interests of corporate leaders, who want a compliant, safe, and non-union workforce” (Kincheloe, 1999, p. 323). With this being the case, labor and industry felt restricted in their access to students. “Indeed organized labor should have just as much access to students to speak about the virtues of labor union membership as corporations do to speak about the benefits of working for their organization” (Kincheloe, 1999, p. 324).

In the past, vocational education has been looked down upon. Work done outside of academia took less knowledge or was in some way inferior to academic based work,

We need to reassess long-standing and seemingly self-evident distinctions between levels and kinds of knowledge. Certainly, distinctions can be made; expressions of mind are wide and varied. But there is a tendency—in the school and in the culture at large—to view all knowledge and skill associated with physical work as rudimentary, even primitive, "neck-down" activity. (Rose, 2008, pp. 30)

Although there was a statistically significant difference in response between the high school counselors and union officials it must be noted that all groups answered with SA = strongly agree or A = agree. The response is encouraging, given literature on the topic. In his book, *How Do We Tell the Workers*, J. L. Kincheloe writes,

Organized labor and vocational education must come together in a dynamic alliance that addresses the workplace. If critical vocational educators are serious about empowering students to shape and determine their working lives, a thorough understanding of labor, its history and possibility are in order. (Kincheloe, 1999, p. 326)

Survey item 25, "I would cooperate with others in order to develop the best vocational education program for the community," found that union leadership responded as less likely to cooperate in the development of a program for the community than did both college administration and high school school-to-career counselors. Although the question did reveal a difference among subgroups, the response rates overall also revealed a strong response and willingness to assist with the design of a program. Both the community college leadership and school counselors responded with an overall rate of SA = strongly agree. The unions, identified as statistically different, responded with an overall response rate of A = Agree. With a group of 103 and an overall willingness to get involved, the response would indicate that all respondent groups feel favorably towards vocational education.

Not only are respondents recognizing the need for their involvement in the planning and formation of vocational education programs recently, the U.S. House of Representative and Senate expressed their willingness to assist with the development of vocational education programs for communities. By a bipartisan vote of 399-1, the U.S. House of Representatives agreed to the Carl D. Perkins Career and Technical Education

Improvement Act of 2006 according to the conference report on July 29, 2006. This action followed U.S. Senate agreement of the conference report by unanimous consent on July 26, 2006. The President signed the Carl D. Perkins Vocational and Technical Education Act of 2006 into law on August 12, 2006. The new Act provided increased focus on the academic achievement of career and technical education students, strengthened the connections between secondary and postsecondary education, and improved state and local accountability (U.S. Department of Education, 2007).

The comparison of the groups' responses revealed very strong levels of agreement in response. In constructing a plan of action, it is important to have support from respondent/stakeholder groups from the beginning. Because all three respondent groups responded favorably, practitioners can continue to foster relationships and further discussions of what outcomes and desires a program would include. Having three respondent/stakeholder groups in agreement in attitude and perception will help to establish a strong foundation from which to build. By starting the process of bringing education and industry together, relationships can be formed that will be beneficial to all parties involved. "In short, research to date suggests that multiple pathways integrating challenging academics with demanding career in technical education around major industry themes can produce many benefits for students, especially those who have not done well in conventional high school programs" (Association for Supervision and Curriculum Development, as cited in Hoachlander, 2008, pp. 23-27). This does not happen without respondent/stakeholder groups that work together with a common goal and an agreed upon purpose.

Analysis of Findings for Research Question One

Research question one, “What are the attitudes/perceptions of community college leadership, Union officials and high school school-to-career counselors, regarding high school vocational Education in California’s Central San Joaquin Valley?,” revealed that all respondents had a positive attitude towards and perception of vocational education. They agreed on 26 of the 28 questions that were asked of them regarding attitude; they had an overall response rate that reflects positively on vocational education.

Not only are individuals taking notice of the need for more vocational education, but educational leaders, such as the National Education Association (NEA), are as well. In their report, *Priorities for the 109th Congress*, presented in March of 2005, NEA stated that career and technical education gives students the opportunity to bring relevance to their studies and plan for future education and employment. The following are recommendations to congress that NEA provided for consideration:

- Reauthorize career and technical education in a manner that helps close achievement gaps;
- Efficient, effective provision of adequate resources to local career and technical educational authorities and 2-year programs at public or non-profit postsecondary institutions to maintain, enhance, and expand quality programs;
- Continuation of the Tech Prep program as a separate program with its own funding stream;
- Direction of federal assistance to secondary educational agencies and postsecondary agencies and/or institutions for purchase or lease of up-to-date

equipment for career and technical education programs in response to changes in the job market;

- The provision of equity and access to quality career and technical education programs for those underserved in the past as well as for traditional students, and the use of career and technical education as a tool for eliminating biases in employment opportunities;
- Cooperation with the business community in the implementation of career and technical education programs;
- Lowering of Perkins funding allocation base limits to allow smaller and rural programs to participate (National Education Association, 2005, para. 1).

Along with groups such as the NEA, California as a state seems to be headed towards a more hands-on approach with vocational education itself. A recent article regarding California's Governor, Arnold Schwarzenegger, noted that based on his past experiences the Governor, in his 2006 state budget, asked for \$50 million in new funds for high school vocational-ed programs. In 2005, he pushed through \$20 million in new funds. "I have talked to many kids who tell me they don't want to go to college, so why graduate?" says the Governor. "They don't see an end goal. They can't visualize it" (Winters, 2006).

The State Center Community College District (SCCCD) has taken a proactive approach with vocational education. In the Strategic Plan for the SCCC, it identifies the following as one of its main challenges:

to remain in touch with our students, continuing to provide them the services, skills and education they require to succeed in today's job market, and the job market of the future. In addition, we will continue to strengthen our collaboration with our alumni and our business community; and increase our focus on job

readiness, the diversity of our region, and the technological advances of our world. (Crow, 2008)

Through a number of approaches, the SCCCD aims to open the doors to vocational education for all of its students.

Understanding the attitudes and perceptions of possible stakeholders is important to the building of a vocational educational program because it informs the practitioner. It allows areas of concern to be identified based on respondent attitudes. This allows for a practitioner to have prior knowledge of difficulties being experienced on behalf of stakeholder groups. By preparing for sticking points, this allows for information, support and guidance on behalf of the practitioner. It allows for assistance to be provided to stakeholders and assists in the development of the vocational educational program. By allowing stakeholders to work through difficulties or sticking points with some assistance, the practitioner allows stakeholders to shed their preconceptions and work from within possibility.

Analysis of Findings for Research Question Three

Research question three, “What characteristics do community college leaders, union officials and high school school-to-career counselors deem most important in the design of a high school vocational education program in California’s Central San Joaquin Valley?” found that respondents in all subgroups expressed similar views regarding 18 of the 21 program characteristics presented. Items 8, 9, and 11 showed significant statistical difference. Moreover, respondents identified characteristics 1, 8, and 7 as most needed in the design of a program. Characteristics 21, 4, and 20 were identified as the bottom of the scale although respondents felt at least a minimal amount of need for all

characteristics presented. Overall, respondents agreed favorably to the characteristics presented.

Not only was there an overall favorable response, but there was an overwhelming amount of agreement between subgroups when rating program characteristics. This is a very important finding because to have agreement on program characteristics quickly identifies some of the foundational elements respondents/stakeholders are looking for in a vocational education program.

Respondents were collectively unified in their responses toward program characteristics. A call for access to further education and training was identified as the most needed characteristic. The absence of access to vocational education in high schools is evident today.

Unfortunately for those in the middle, who might want to make a living with their hands, not to mention those who might want to hire them to do a job, trade classes like print shop and wood shop and home economics no longer fit easily into the educational bureaucracy's pattern of what constitutes a comprehensive liberal education for the 21st century. (Sharkey, 1996)

The result has been a vast amount of postsecondary training provided by public and private colleges and universities, junior and community colleges and vocational schools. Nearly 2.9 million awards and degrees were received by individuals during the 1989-90 school academic year according to the National Center for Education Statistics (NCES, n.d.). While accredited schools and colleges meet the need of some students,

The rush to cash in on dropouts has made such correspondence courses and “virtual high schools” the Wild West of secondary education, a multi-million dollar industry that can offer a valuable second chance but has suffered at times from poor oversight and a dizzying array of self-styled accrediting institutions, many of which aren’t recognized by mainstream colleges. (Thornburgh, 2006, p. 30)

The ability to leave high school with a vocation based skill set would diminish the need for such risky ventures for students and possibly allow for entry into apprenticeship programs or continuing at an accredited program a reality or a means of making a living.

Employer involvement, the second highest rated characteristic, seeks increased levels of involvement and partnering with local employers and trades.

Engaging business partners in contributing to the development of appropriate outcomes for graduates and supplementing scarce resources to implement improvements are areas where state affiliates should be particularly aggressive. Assuring that graduates leave high school with the high-level skills required by today's workplace necessitates a new look at curriculum and the "essential learning" students must acquire for successful transition into postsecondary life. (Tirozzi, 2005, para. 1)

Curriculum that is aligned with local labor market/needs of area employers came in a very close third. In, *A New Century: A Blueprint For Lifelong Learning*, Vice-President Al Gore challenges education to meet the ever-changing demands of the workplace, "Changing skill needs require colleges and other education and training providers to continually modify and upgrade their programs based on input from local employers and unions" (National Partnership for Reinventing Government, 1999, para. 10).

Although today's schools may look similar to those our parents attended, but something is missing. Shop, auto, plastics, in short vocational education is missing. A recent article in the *Washington Post* outlines some of the problems with the situation. "School districts are eliminating high school shop classes for a number of reasons, but the bottom line, of course, is money. The American secondary educational system pumps as many of its competent students as possible into college" (Post Secondary Education Commission, 2006, para. 1).

With few or no skill sets, what remains for the graduates or dropouts? The emergence, some may even say explosion, of the private technical and trade schools serves as an additional sign that vocational based education would fill the need of some of our high school students. The National Center for Educational Statistics published the condition of education in 2004. In their study NCES stated, “In an age of rapid economic development and technological change, work-related adult education can provide benefits for individuals and for society as well” (NCES, 2004, p. 42). Imagine the difference if we were proactive in this approach and offered training such as this at the high school level with input and expectations from respondents/stakeholders from the very start. The identification of the program characteristics is an important first step. The ability to see the design and implementation through to completion may prove to be a more important and difficult accomplishment. Theory is great, but alone, without practice it serves little purpose.

There is a tremendous amount of information today regarding vocational education. Most of the information found was in support of increasing and/or expanding the role of vocational education in schools. The U.S. Department of Education has been very active in identifying vocational education as a need for today’s student. Historically, the mindset regarding vocational education has been to prepare students for entry level jobs in occupations requiring less than an undergraduate degree. However, the focus has now shifted toward broader preparation that develops the academic, vocational and technical skills of the students in vocational education programs (U.S. Department of Education, 2003c).

Today, vocational education or career & technical education, as it's commonly called—more often involves a computer mouse than a lathe. More than 15 million middle school and community-college students are enrolled, up 58% since 2000, in programs like biotechnology and computer networking.

According to a 1998 University of Michigan study, high-risk students are 8 to 10 times less likely to drop out if they enter a career-tech program. And the notion that career tech is useful only for the student with no college plans is outdated; students who have taken career tech enter college at the same rate as other high school graduates. (Winters, 2006, p. 27)

One need only look to our government's actions to gauge the true value the United States places on vocational education. Recent actions by President Bush reveal that vocational education is recognized as a need but not considered as an urgent necessity. President Bush's 2005-2006 fiscal year budget as presented, cut 48 education programs totaling \$4.3 billion, including \$2.2 billion for high school programs, mostly state grants for vocational education. The budget cut \$440 million in Safe and Drug-Free School grants, \$500 million in education technology state grants, \$225 million for the Even Start literacy program, \$280 million for Upward Bound programs for inner-city youths and a \$150 million talent research program, according to the documents. In his fiscal budget for the federal 2006-2007 year, President Bush proposed to end 42 U.S. Department of Education programs and significantly reduce spending for four other education programs, total budget cuts of \$4.279 billion.

Vocational education creates a very unique situation for supporters and opponents. There are those who support it thoroughly, and then there are those individuals who feel there is a place for vocational education, just not in the high schools. Proponents feel an expanded role is necessary and part of the equation involves

implementation at the high school level. Skeptics feel that schools' main concern should consist of academic endeavor and college preparation. Vocational education is not a part of their paradigm for high school. One possible explanation for the differing opinions may be simple confusion or lack of knowledge regarding the opportunities vocational education can provide. To provide a curriculum rich in vocation, trade based knowledge, hands on experiences combined with academic rigor is to provide some students with a marketable skill set. This would also allow students the ability to enter the world of work or pursue vocation-based areas of study after high school.

Conclusions and Implications

This study included input from community college leadership, union leadership and high school school-to-career counselors on their attitudes of vocational education in California's Central Valley and a rank ordering of program characteristics based on perceived need. The findings from this investigation suggest that respondent groups had an overall favorable view of vocational education and group responses reveal strong levels of agreement between groups. This investigation also revealed that respondent groups again displayed strong levels of agreement regarding characteristics. Three characteristics were unanimously identified by all respondent groups as most needed. The following paragraphs detail the conclusions drawn from the survey responses and literature on national trends

The respondents displayed favorable attitudes toward vocational education in the Central Valley. Given the individual and collective favorable attitudes/perceptions of community college leaders, union officials, and high school career counselors towards vocational education in San Joaquin Central Valley, it is likely that these same

stakeholder groups would value efforts to improve upon what exists and develop a state of the art program for the region. Federal and State initiatives and legislation are in place to assist with the process, what is missing are the individuals to begin and facilitate the process.

Being aware of issues and concerns and working to resolve them early before they turn into negative action is time and money well spent. On a positive note, ideas and suggestions from stakeholders can often be insightful and useful in improving a facility's planning and operation. (Batelle Memorial Institute, 2008, p. 2)

Because of the favorable responses, the next step may be the recruitment of representation from each respondent group in order to assist with program design, planning and implementation.

Because of the high levels of agreement among respondent groups, the process should be well accepted and supported by all groups. These same findings further suggest that these stakeholder groups would participate in program development/improvement efforts and that their representative participation would be critical to achieving desired outcomes. The three groups of stakeholders have favorable attitudes/perceptions regarding vocational education in general, and are in agreement. It could be concluded that vocational education will most likely continue to be supported in San Joaquin as an important component of high school education and as necessary preparation for future careers. Given that stakeholders value vocational education, it is also likely that stakeholders would value efforts to improve upon what exists.

The respondents rank ordered all 21 characteristics presented and displayed strong levels of agreement in the ranking. Stakeholder ratings of vocational program design characteristics indicate that although a number of characteristics are deemed to be important, priority importance is given to program alignment and articulation with

community and job needs and thus for program reform to be successful in San Joaquin Valley these priorities need to be addressed first and foremost. Because of the level of agreement amongst respondent groups, the three identified characteristics need to be an integral part of the program design. “Stakeholder analysis is a powerful technique to ensure that the key players are engaged and contributing to the success of an initiative or a project” (U.S. Army, 2008, para. 4).

Stakeholders not only want graduates to obtain employment in jobs in the community in which they live, they want to ensure that students are highly prepared and successful in their chosen fields. Bringing about change is a difficult process. Stakeholder attitude is an important factor in the process. “Stakeholder involvement and collaborative decision making represent a high level of participation and a goal for a wide range of public involvement programs” (U.S. Army, 2008, para. 8). By including them in the process of identifying program characteristics they are empowered to take ownership and maintain high levels of involvement in the program.

Many proponents of vocational education identify concerns in the local economy and unemployment rates as justification for increased vocational education opportunities for students. By equipping graduates with the skills needed to enter the local labor market and generate monies in the community, vocational education programs can assist in strengthening the local economy and increase rates of employment.

The lack of skilled workers entering the job market is also cause for concern. Apprenticeship positions go unfilled year after year in the local trade unions. Not because of a lack of applicants, but due to a lack of skilled workers applying for such programs.

Without skilled workers to fill positions such as these, work is performed by under-prepared and under-skilled workers.

Concerns over state and local graduation and drop out rates bring to the forefront of discussions the students who will not graduate or have no desire to continue on with their education. What are they prepared for and/or able to do? How will they be able to provide for themselves and eventually a family? NCLB proficiency rates call for 100% proficiency by 2014. How can this be achieved when we know 30% will not graduate or drop out all together?

Overall, proponents of vocational education are concerned for their local economy and also for the U.S. as a whole. We are now a part of a global economy, and without skilled and knowledgeable workers, we will find it increasingly difficult to be competitive.

Suggestions for Future Research

Some difficulties experienced while conducting the study centered around obtaining feedback from the respondents. The researcher had to make multiple individual contacts in order to receive feedback from identified respondents. One solution might be to distribute the survey instruments over a period of time such as 3 to 6 months and at designated meetings. This would allow respondents to return them at a designated time and place. This change might also increase the sample size by ensuring more individuals obtained and returned the surveys. Another approach would have been to administer the surveys in a single setting and collect after a brief response/answer period.

The researcher would have liked to explore additions to the respondent pool. An interesting addition to the study would be the attitudes and perceptions of local political

and community leaders. The additional respondent pools would allow for more comparison and analysis of key stakeholders groups in the area being studied.

In future administration of the surveys the wording of some terms and questions would be rewritten to allow more access to understanding. Some respondents noted misunderstanding due to wordy academic terms.

Policy Recommendations

I would first recommend that both the United States Department of Education and the California Department of Education take notice of the current path of the education system. While education as a whole is stressing the importance of data, we do not use it to guide who, what, and how we provide educational services. Over the past 10 years, the statewide graduation rate in California was approximately 71%. That simple and often overlooked piece of data lets us know that the lofty goals of NCLB are near impossible.

What skills do the students not headed to college need? And what difference would a trade based skill set provide for a graduate as opposed to a test heavy curriculum? In a test heavy curriculum testing strategies and best practices can take the place of hands-on and experienced-based teaching. When funding is tied to test results on the “biggest bang for your buck” is what wins out. As the percentages tied to NCLB increase and more and more schools fall victim to unrealistic goals the reaction could be an exodus of students from public schools and an overall negative reaction and lack of trust in the public school system.

This is not to say education is bound to doom and failure. The greatest ability education has is the ability to change. Data is an important part of education. How you look at it can sometimes make a significant difference. We know that 30% of the students

we see in public school do not graduate and of those who do graduate and attend college after high school only 17 out of 100 nationally and 14 out of 100 in California obtain a degree (Maitre, 2006).

Education and society had better address the problem of unskilled and unprepared workers, or make sure we provide some skill set that some students can use after graduation to provide for themselves and for their families. Unprepared young adults have a significant chance of becoming unprepared older adults. As a system of public education it is our responsibility to make sure what we teach that which reflects and meets the needs of the areas in which we serve. We must not forget that we are public servants.

The author would recommend school districts consider creating vocational education strands of education. Fitting 100% all students in the same box is very dangerous. The author would also advocate a bridge program from the high school to the local community colleges. Doing so would strengthen the transition possibilities for students exiting the program and allow for a more seamless transition from one program to the next for students who wish to continue their education. By working with the local community colleges, high schools can offer both school-to-career preparation as well as college preparation.

Practitioners' Recommendations

Practitioner recommendations would be to explore possible partnerships with local businesses and trade unions as well as the community colleges. Including businesses, trade unions and colleges might provide programs with needed insight of

local business needs and possibly lead to partnerships that would help increase job availability and continuing education for students exiting the program.

The author would recommend that vocational education programs align skill-set training and curriculum to the local area businesses and labor needs. By making sure that the program reflects the community in which it is situated, students exiting the program will have a viable skill set that is applicable locally and that allows for entry level jobs and a means of supporting one's self, while generating more monies in the community.

Final Summary

Under-preparedness for college and the world of work presents economic and social implications that have become too costly to ignore. We currently understand that as one of the richest nations we do a poor job of educating all of our children. Students still leave high school with no desire for college and little preparation for the world of work. Many feel that there is a need for reform in our schools and have turned to testing, data and a growing list of best practices. The purpose of this study was to investigate and identify attitudes and perceptions of working experts, community college leadership, union officials and high school school-to-career counselors, in California's Central Valley regarding vocational education and to identify the most desired attributes of a state-of-the-art vocational education program for that area. The study revealed that all respondents expressed an overall positive attitude and perception of vocational education. It also demonstrated that all respondents found particular importance with three program characteristics. The results of this study found that community college leaders, union officials, and high school career counselors in San Joaquin Central Valley place value on

vocational education, are willing to participate in and support the process of program alignment and articulation with community and job needs.

REFERENCES

- Almanac of Policy Issues. (2001). *Job training and vocational education*. Retrieved September 1, 2006, from http://www.policyalmanac.org/economic/job_training.shtml
- Ansary, T. (2006). *"Elementary" the myth of America's failing schools*. Retrieved August 1, 2006, from Encarta Web site: http://encarta.msn.com/encnet/departments/elementary/?article=Myth_of_Americas_Failing_Schools
- AroundtheCapitol.com. (2006). *California Laws California Codes Education Code Section 51000-51009*. Retrieved September, 2006, from <http://www.aroundthecapitol.com/code/code.html?sec=edc&codesection=51000-51009>
- Association for Career and Technical Education. (2007). *Perkins background*. Retrieved January, 2007, from Association for Career and Technical Education Web site: http://www.acteonline.org/policy/legislative_issues/Perkins_background.cfm
- Barton, P. E. (2006). The dropout problem. *Educational Leadership*, 63(5), 15-18.
- Basken, P. (2006). *States have more schools falling behind*. Retrieved July 1, 2006, from <http://www.washingtonpost.com/wpdyn/content/article/2006/03/28/AR2006032801794.html>
- Batelle Memorial Institute. (2008). *Communication and stakeholder involvement guidebook for cement facilities*. Retrieved May 3, 2008, from http://www.wbcsd.org/web/projects/cement/tf6/stakeholder_guide.pdf
- Bogetich, T. M. (2001). *A historical review-vocational education in California 1900-2000* (pp. 1,2,3,4,6). Sacramento, CA: California State Department of Education.
- Brookings Institute. (2006). *Government's 50 greatest endeavors*. Retrieved July, 2006, from <http://www.brook.edu/gs/cps/50ge/endeavors/communities.htm>

- Bureau of Labor and Statistics. (2006). *Current population survey*. Retrieved January 1, 2008, from <http://www.bls.gov/emp/emptab7.htm>
- California Department of Education. (n.d.). *Data and statistics query*. Retrieved March 1, 2006, from <http://dq.cde.ca.gov/dataquest/CompletionRate/CompRate1.asp?cChoice=StGradRate&cYear=2004-05&level=State>
- California Department of Education. (2003). *Preparing students for the workforce*. Retrieved July 1, 2006, from <http://www.cde.ca.gov/re/pn/fb/yr03studentwkwf.asp>
- California Department of Education. (2005). *Educational demographics unit*. Retrieved March 1, 2006, from <http://dq.cde.ca.gov/dataquest/CompletionRate/CompRate1.asp?cChoice=StGradRate&cYear=2004-05&level=State>
- California Department of Education. (2006a). *California school directory*. Retrieved September 1, 2006, from State of California Web site: <http://www.cde.ca.gov/re/sd/>
- California Department of Education. (2006b). *Title IX of the Education Amendments of 1972*. Retrieved August 1, 2006, from State of California Web site: <http://www.cde.ca.gov/ls/cg/pp/titlenine.asp>
- California Department of Education. (2006c). *California career technical education model curriculum grades seven through twelve*. Retrieved September 1, 2006, from <http://www.cde.ca.gov/re/pn/fd/documents/careertechstnd.pdf>
- California Post Secondary Education Commission. (2006). *Commission report 06-14*. Retrieved October 1, 2008, from <http://www.cpec.ca.gov/CompleteReports/2006Reports/06-14.pdf>
- California School Boards Association. (2005). *Federal budget swaps tutoring, testing for voc-ed funds*. Retrieved July, 2006, from <http://csba.org/csn/jan05/csnStory>

Template.cfm?id=215

California School Boards Association. (2007). *Federal budget swaps tutoring, testing for voc-ed funds*. Retrieved January, 2007, from <http://csba.org/csn/jan05/csnStory>

Template.cfm?id=215

Carl D. Perkins Career and Technical Education Act of 2006, Pub. L. No. 109-270, § 131(d)(2). (2006). Retrieved July 1, 2006, from <http://www.ed.gov/policy/sectech/leg/perkins/index.html>

Carter, J. (2005). *The national academies testimony before congress*. Retrieved July 26, 2006, from National Academies Web site: <http://www.cartercenter.org/documents/1187.pdf>

CERES. (2000). *The San Joaquin Valley Bioregion: An overview*. Retrieved August 1, 2007, from http://www.ceres.ca.gov/geo_area/bioregions/San_Joaquin_Valley/about.html

Cicerone, R. J, & Augustine, N. R. (2005). *The national academies testimony before congress: Rising above the gathering storm: Energizing and employing America for a brighter economic future*. Retrieved July 27, 2006, from National Academies Web site: http://www7.nationalacademies.org/ocga/testimony/Gathering_Storm_Energizing_and_Employing_America2.asp

Cloud, J. (2002, October 14). Who's ready for college? *Time Magazine*. Retrieved April 1, 2007, from <http://www.time.com/time/magazine/article/0,9171,1003430-1,00.html>.

Colorado State University. (2007). *Advantages and disadvantages of the survey method*. Retrieved January 1, 2007, from <http://writing.colostate.edu/guides/research/survey/com2d1.cfm>

- Crow, T. A. (2008). *Strategic plan*. Retrieved May 3, 2008, from the State Center Community College Web site: <http://retrieve.scccd.edu/strategicplan/message.html>
- Delsohn, G. (2005, September 28). Training for trade. *Fresno Bee*, p. C2.
- Foundations of Agricultural and Extension Education. (2006). *Federal legislation impacting agricultural education and extension era 2*. Retrieved August 1, 2006, from North Carolina State University College of Agriculture and Life Sciences Web site: <http://www.cals.ncsu.edu/agexed/aee501/1>
- Fraenkel, J., & Wallen, N. (1990). *How to design and evaluate research in education*. San Francisco: McGraw Hill.
- Fresno Bee. (2007). *On Labor Day, look to the future of valley jobs*. Retrieved September 3, 2007, from <http://www.fresnobee.com/opinion/story/128214.html>
- Gasbarre, A. D. (2006). *Vocational Education Forum*. Retrieved August 1, 2006, from Encyclopedia of Business Ed. 2 Web site: <http://www.referenceforbusiness.com/encyclopedia/Val-Z/Vocational-Education.html>
- Gordon, H. R. D. (1999). *The history & growth of vocational education in America*. Needham Heights, MA: Allyn & Bacon.
- Gulliksen, H. (1966). Intrinsic validity. In W. A. Mehrens & R. Ebel (Eds.), *Principles of education and psychological measurement*. Chicago: Rand McNally.
- Herrnstein, R. J., & Murray, C. (1995). *The bell curve, intelligence and class structure in American life* (1st ed.). New York: Free Press Paperbacks.
- Hoachlander, G. (2008, May). Bringing industry to the classroom. *Leadership*, 23-27.

- Hudson, L., & Shafer, L. (1999). *Vocational education offerings in rural high schools*. Retrieved August 1, 2006, from IES National Center for Statistics Web site:
http://nces.ed.gov/programs/quarterly/vol_4/4_3/3_2.asp
- Houston, A. (n.d.). *Survey handbook*. Retrieved Retrieved August 1, 2006, from <http://www.balancedscorecard.org/Portals/0/PDF/surveyhb.pdf>
- Kincheloe, J. L. (1999). *How do we tell the workers? The socioeconomic foundations of work and vocational education*. Boulder, CO: Westview Press.
- Lick-Wilmerding High School. (2003). *Early history of Lick, Wilmerding, and Lux*. Retrieved September 1, 2006, from Lick-Wilmerding High School Web site:
<http://www.lwhs.org/glance/history.html>
- Livingston, A., & Wirt, J. (2005). *The Condition of Education 2005 in Brief* [NCES 2005–095]. Washington, DC: U.S. Government Printing Office.
- Maitre, M. (2006, September 7). Report: College graduation rates slipping. *Oakland Tribune*. Retrieved April 20, 2008, from BNet.com
- National Center for Education Statistics. (n.d.). *Degrees and other awards conferred by title iv participating, degree-granting institutions*. Retrieved April 20, 2006, from <http://nces.ed.gov/>
- National Center for Education Statistics. (2004). *The condition of education 2004*. Retrieved October 1, 2008, from <http://nces.ed.gov/pubs2004/2004077.pdf>
- National Education Association. (2005). *Priorities for the 109th congress*. Washington, DC: Author.
- National Partnership for Reinventing Government. (1999). *Skills for a new century*. Retrieved May 2, 2008, from <http://govinfo.library.unt.edu/npr/library/papers/bkgrd/bluprint.html>

- NationMaster. (2007). *Education: Data search facts & statistics*. Retrieved January 21, 2007, from <http://www.nationmaster.com/education.php>
- Flynn, P. (1995a). Global Competition and Education: Another Sputnik? *Social Studies*, 86(2), 53-55.
- North Central Regional Educational Laboratory. (1999). *Goals 2000*. Retrieved August 1, 2006, from Learning Point Associates Web site: <http://www.learningpt.org/page.php?pageID=209>
- Office of Vocational and Adult Education. (2006a). *Overview of OVAE priorities*. Retrieved July 1, 2006, from United States Office of Education Web site: <http://www.ed.gov/about/offices/list/ovae/pi/hs/factsh/over.html>
- Office of Vocational and Adult Education. (2006b). *Office of Vocational and Adult Education Coordinating structure*. Retrieved July, 2006, from United States Office of Education Web site: <http://www.ed.gov/about/offices/or/index.html?src=ln>
- Office of Vocational and Adult Education. (2006c). *Office of Vocational and Adult Education Mission and Responsibilities*. Retrieved July 1, 2006, from <http://www.ed.gov/about/offices/list/ovae/index.html>
- Office of Vocational and Adult Education. (2006d). *Programs and initiatives*. Retrieved July 1, 2006, from United States Office of Education Web site: <http://www.ed.gov/about/offices/list/ovae/pi/proginit.html>
- Oklahoma Department of Career and Technology Education. (2006). *Major milestones of career and technology education in Oklahoma*. Retrieved July, 2006, from <http://www.okcareertech.org/history/discussionguide.pdf#search=%22George-Reed%20Act%20of%201929%20%22>

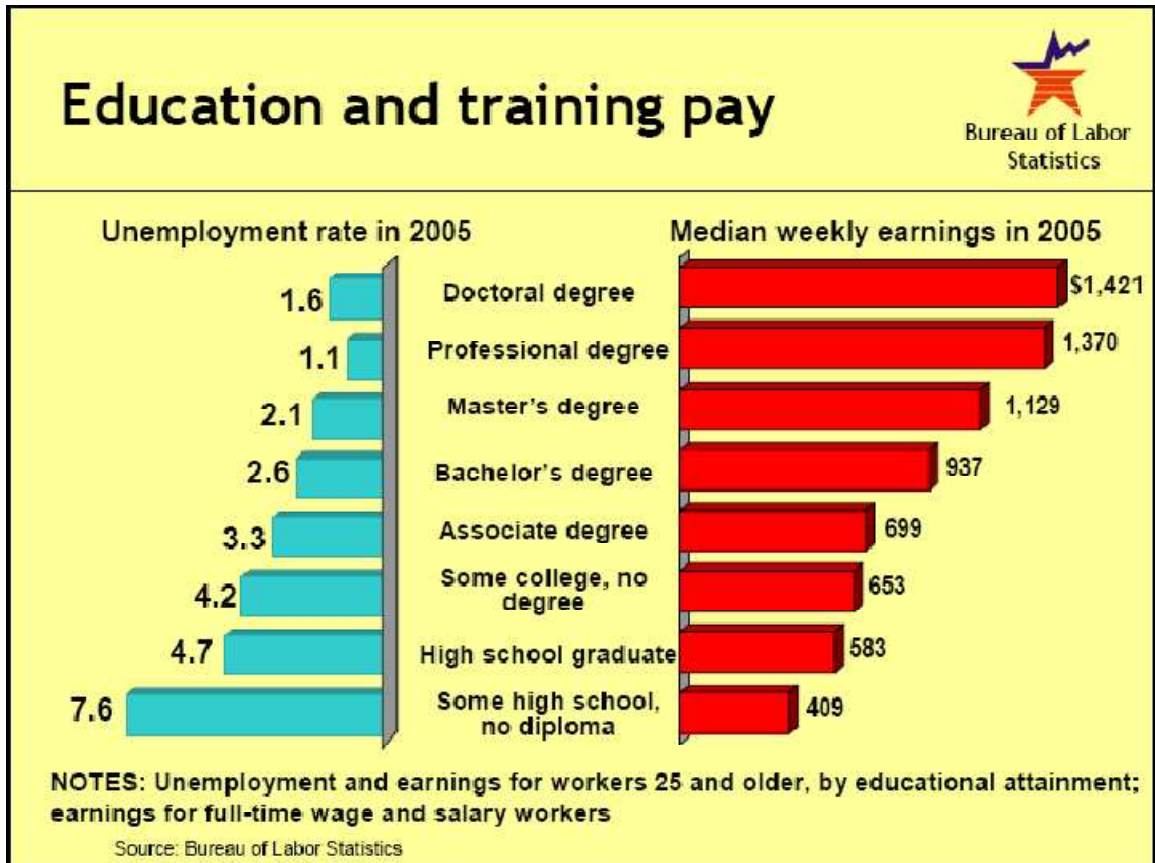
- Orrell, K. (2000). *Carl D. Perkins Vocational and Applied Technology Education Act (VATEA) of 1990*. Retrieved August 1, 2006, from the Business Education Resource Consortium Web site: <http://www.bused.org/vatea.html>
- Project California. (2006). *California's economic future*. Retrieved June 6, 2006, from <http://www.projectcalifornia.org/site/pp.asp?c=nmL9KgNYLyH&b=1029067>
- Post Secondary Education Commission. (2006). *Customized reports*. Retrieved August 11, 2006, from State of California Web site: <http://www.cpec.ca.gov/OnLineData/GenerateReport.ASP>
- Rose, M. (2008). Intelligence, knowledge, and the hand/brain divide. *Phi Delta Kappan International*, 89(9). Retrieved May 1, 2008, from http://www.pdkintl.org/kappan/k_v89/k0805ros.htm
- Rosenbaum, J. E. (2003). College for all. *Professional School Counseling*, 6(4), 252-260.
- Ryerson University. (n.d.a). *Descriptive research*. Retrieved April 1, 2007, from <http://www.htm.uoguelph.ca/MJResearch/ResearchProcess/DescriptiveResearch.htm>
- Ryerson University. (n.d.b). *Research design, data collection techniques and selection of subjects*. Retrieved April 1, 2007, from <http://www.ryerson.ca/~mjoppe/ResearchProcess/ResearchDesignDataCollectionTechniquesandSelectionofSubjects.htm>
- Sharkey, J. (1996, June 30). The school bell tolls for shop class. *Washington Post*. Retrieved April 20, 2008, from <http://query.nytimes.com/gst/fullpage.html?res=9C0CE0DB123FF933A05755C0A960958260>
- Silverberg, M., Warner, E., Fong, M., & Goodwin, D. (2004). *National assessment of vocational education: Final report to congress*. Jessup, MD: Educational Publication Center.

- South Carolina Department of Education. (2003). *Information and resources*. Retrieved June 1, 2006, from Greenville County Schools Web site: http://www.greenville.k12.sc.us/district/teachers/nclb/nclb_sc_faq.asp
- Statistics.com. (n.d.). *Survey design and sampling procedures*. Retrieved April 20, 2006, from <http://www.statistics.com/resources/glossary/r/reliabsa.php>
- Swortzel, K. A. (2006, March). *Federal legislation and vocational education*. Retrieved August 1, 2006, from University of Auburn Web site: <http://www.auburn.edu/academic/classes/voed/0346/Legislation/sld007.htm>
- Thornburgh, N. (2006, April 17). Dropout nation. *Time*, 30-40.
- Tirozzi, G. N. (2005, March). *Taking charge of high school reform: The breakthrough high schools project studied 30 high schools that are raising achievement, increasing graduation rates, and preparing students for college and work*. Retrieved April 28, 2008, from BNet.com
- University of California. (2006). *Brief history of the university*. Retrieved July 23, 2006, from <http://www.berkeley.edu/about/history>
- U.S. Army, Business Transformation Knowledge Center. (2008). *Transformation enablers: Change management*. Retrieved May 20, 2008, from http://www.army.mil/ArmyBTKC/enablers/cm/toolkit_05.html
- U.S. Bureau of Labor and Statistics. (1992). *Occupational projections and training data*. Washington, DC: Author.
- U.S. Department of Education. (2002). *The Carl D. Perkins Vocational and Technical Education Act, Public Law 105-332: What is vocational-technical education?* Retrieved October 1, 2008, from <http://www.ed.gov/offices/OVAE/CTE/perkins.html>

- U.S. Department of Education. (2003a). *Fact sheet on the major provisions of the conference report to H.R. 1, the No Child Left Behind Act*. Retrieved July 23, 2006, from <http://www.ed.gov/nclb/overview/intro/factsheet.htm>
- U.S. Department of Education. (2003b). *Title I schools identified for improvement for the 2003-2004 school year*. Retrieved July 23, 2006, from <http://www.ed.gov/about/reports/annual/nclb/appendixb.xls>
- U.S. Department of Education. (2003c). *Education in the United States*. Jessup, MD: Edpubs.
- U.S. Department of Education. (2007). Carl D. Perkins Career and Technical Education Act of 2006 Retrieved October 1, 2008, from <http://www.ed.gov/policy/sectech/leg/perkins/index.html>
- U.S. Information Agency. (2006). *Basic readings in U.S. democracy*. Retrieved July 23, 2006, from <http://usinfo.state.gov/usa/infousa/facts/democrac/demo.htm>
- Wenrich, R. C., & Crowley, R. J. (1964). *Vocational education as perceived by different segments of the population*. Ann Arbor, MI: University Press.
- Wikipedia. (2006). *National Defense Education Act*. Retrieved July 23, 2006, from http://en.wikipedia.org/wiki/National_Defense_Education_Act
- Winters, R. (2006, April 17). Arnold sells his road to success. *Time*, p. 37.

APPENDIX A

Education and Training Pay

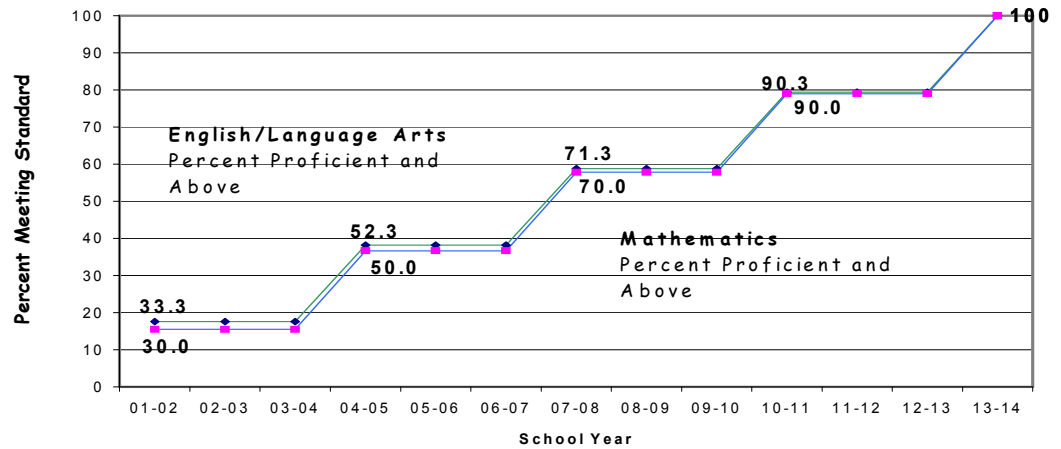


Note. From “Education and Training Pay,” by Bureau of Labor Statistics, n.d. From http://www.collegezone.com/media/Education_Training_Pay.pdf. Reprinted with permission as material in public domain.

APPENDIX B

AYP High School Objectives

ADEQUATE YEARLY PROGRESS OBJECTIVES HIGH SCHOOLS



Note. From “Adequate Yearly Progress Objectives,” by South Carolina Department of Education. From <http://dorchester.schoolfusion.us/modules/groups/>. Reprinted with permission as material in public domain.

APPENDIX C

IVE Scale

Number _____

Attitudes Toward Vocational Education

Purpose: The purpose of this survey is to identify key respondent attitudes regarding high school vocational education in the Central San Joaquin Valley.

Directions: You are to bubble in the response which corresponds most closely to your professional opinion about each of the following 28 questions.

Example:

Some high school students are too undisciplined to employ.

SA A U D SD

SA = Strongly Agree U = Uncertain or Don't Know D = Disagree

A = Agree SD = Strongly Disagree

This person disagrees with the item to some extent and has indicated so by bubbling in the value of D (Disagree).

Do not spend too much time on any particular item. There are no right or wrong answers. When your feeling falls between two choices, select the one that best reflects your professional opinion. Do what you can and please answer every item. The number on this form is to help this student researcher in record keeping. The researcher will combine all results into statistical tables and analysis. Individual replies are all confidential.

Begin Here:

Bubble in one

1. It is more important to provide many students with
a sound basic education than to use the time for
vocational education. SA A U D SD

2. A high school graduate of a vocational
education program impresses me a great deal. SA A U D SD

3. Those high school students who would want
to take vocational education are not mature enough
to profit from it. SA A U D SD

4. High schools should encourage bright
students to enter a vocational education program. SA A U D SD

5. Vocational education does not make enough
students useful members of society to justify its cost. SA A U D SD

6. I would favor expanding vocational education
programs even if available funds remain the same. SA A U D SD

7. Most vocational education courses, in my
opinion, lead to nowhere. SA A U D SD

8. In my opinion, there are not enough students
in vocational education at the high school level. SA A U D SD
9. I should like to see the values of vocational
education made known to more parents than is
now the case. SA A U D SD
10. I am opposed to expanding vocational
education programs in high school when so many
students need the basic subjects. SA A U D SD
11. For many students in high school there should be
greater emphasis on earning a living through a vocational
education program. SA A U D SD
12. Vocational education programs cannot possibly
prepare high school students for the range of job
opportunities available to them. SA A U D SD
13. In my opinion, taking vocational education hinders
students from further education after high school. SA A U D SD

14. I do not think vocational education in high school is as necessary for most students as are other worthwhile programs. SA A U D SD
15. In my opinion, a graduate of a high school vocational education program is suited only for unskilled work. SA A U D SD
16. There should be more money set aside in the school budget for vocational education. SA A U D SD
17. Most students who take vocational education in high school, in my opinion, lack too many other scholastic skills. SA A U D SD
18. I should like to see vocational education encouraged more among high school students. SA A U D SD
19. In my opinion, vocational education in the high school is highly overrated. SA A U D SD
20. I believe good vocational education programs in public schools attract new industries to a community. SA A U D SD

21. It seems to me that vocational education in high school does not prepare a student for advancement in an occupation. SA A U D SD
22. A more considerable portion of the high school curriculum than at present, should be devoted to vocational education. SA A U D SD
23. I am of the opinion that vocational education is too costly in proportion to its worth to the community. SA A U D SD
24. In my opinion, most public schools do not provide vocational education programs early enough. SA A U D SD
25. I would cooperate with others in order to develop the best vocational education program for the community. SA A U D SD
26. I favor reducing vocational education programs when available school funds are in short supply. SA A U D SD
27. The community should provide a wide variety of vocational programs to fit the abilities of most students not going to college. SA A U D SD

28. I am thoroughly sold on offering vocational education SA A U D SD

in high school.

Please return survey to presenter at the end of the response session. If survey is to be mailed please return to:

Bard M. De Vore



APPENDIX D

Program Characteristics Scale

Number _____

Evaluation of Successful Program Characteristics

Purpose: This survey is designed to measure stakeholder importance ratings of program characteristics. Read each item carefully.

Directions: You are to bubble in the response which best represents your professional opinion regarding the following program characteristics. For example, if you feel a particular characteristic is strongly needed in the design of a high school vocational education program you would fill in the bubble with the numeric value of 5. See the following example.

Example:

Job shadowing is a vital component of a vocational education program designed to meet the needs of students in California's Central Valley. 1 3 5

1 = Not needed 3 = Uncertain or Don't Know 5 = Needed

This person feels the characteristic is needed in the design of a high school vocational education program and has indicated this by bubbling in the numeric value of 5 (Needed).

Do not spend too much time on any particular item. There are no right or wrong answers. Merely bubble in the numeric value which best indicates your true feeling. When your feeling falls between two choices, select the closer one. Do what you can and please answer every item.

The number on this form is to help this student researcher in record keeping. The researcher will combine all results into statistical tables and analysis. Individual replies are all confidential.

Begin Here:

Bubble in one

- | | | | |
|--|----|----|----|
| 1. Access to further education and training is vital in the design
of a vocational education program designed to meet the needs of
students in California's Central Valley. | O1 | O3 | O5 |
| 2. Offering students access to advisory groups is vital in the design
of a vocational education program designed to meet the needs of
students in California's Central Valley. | O1 | O3 | O5 |
| 3. Timely assessment and feedback is vital in the design of a
vocational education program designed to meet the needs of
students in California's Central Valley. | O1 | O3 | O5 |

Bubble in one

- | | | | |
|---|----|----|----|
| 4. Comprehensive/holistic service provision is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. | O1 | O3 | O5 |
| 5. Cross-training is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. | O1 | O3 | O5 |
| 6. Curriculum that is aligned with community and economic development initiatives is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. | O1 | O3 | O5 |
| 7. Curriculum that is aligned with the local labor market/needs of area employers is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. | O1 | O3 | O5 |
| 8. Employer involvement is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. | O1 | O3 | O5 |

Bubble in one

9. Instructional strategies that promote program retention is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
10. Integrated instruction is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
11. Intersector partnerships with postsecondary institutions is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
12. Intersector partnerships with social service agencies is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
13. Joint assessment and intake procedures are vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
14. Participant support services in post-employment are vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5

Bubble in one

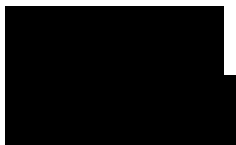
15. Participant support services in pre-employment are vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
16. Political attention is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
17. Resource blending is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
18. Tailoring programs to meet TANF (Temporary Assistance to Needy Families) constraints by developing short-term skills training programs is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5
19. Tailoring programs to meet TANF (Temporary Assistance to Needy Families) constraints by offering training in conjunction with employment is vital in the design of a vocational education program designed to meet the needs of students in California's Central Valley. O1 O3 O5

20. Tailoring programs to meet TANF (Temporary Assistance to
Bubble in one
O1 O3 O5
Needy Families) constraints by using state maintenance of
effort funds is vital in the design of a vocational education
program designed to meet the needs of students in California's
Central Valley.

21. Targeting harder to serve TANF (Temporary Assistance to
O1 O3 O5
Needy Families) clients is vital in the design of a vocational
education program designed to meet the needs of students in
California's Central Valley.

Please return survey to presenter at the end of the response session. If survey is to be
mailed please return to:

Bard M. De Vore



APPENDIX E

Introduction Letter to Counselors

January 18, 2008

Dear Sir/Madame,

My name is Bard M. De Vore, and I am a doctoral student in the Educational Leadership, Administration and Policy program at Pepperdine University's Graduate School of Education and Psychology, who is currently in the process of recruiting individuals for my study entitled, "An In-Depth Look at the Attitudes and Perceptions of Vocational Education in California's Central Valley." The professor supervising my work is Dr. Linda Purrington. This part of the study is designed to investigate attitude and perceptions of school-to-work/career counselors regarding vocational education, so I am inviting school-to-work/career counselors to participate in my study. Please understand that your involvement in my study is strictly voluntary. The following is a description of what your study participation entails, the terms for participating in the study, and a discussion of your rights as a study participant. Please read this information carefully before deciding whether or not you wish to participate.

If you should decide to participate in the study, you will be asked to complete a survey regarding your feelings about the current state of vocational education and program characteristics you feel are important in the design of a vocational education program. It should take approximately 30 – 45 minutes of total participation time. Please complete the survey questionnaires alone and in a single setting.

There are no foreseeable physical, psychological or social risks involved with your participation in this research study. The surveys are anonymous. Although it would be preferable that you answer all of the survey questions, you may refuse to answer any question. The questions asked are not of a sensitive nature. It is anticipated that they will not cause you any harm, stress or discomfort.

If you should decide to participate and find that you are not interested in completing the survey in its entirety, you have the right to discontinue at any point without being questioned about your decision. You also do not have to answer any of the questions on the survey that you prefer not to answer – simply leave such items blank. When you have completed the survey please return to the appropriate representative or return it in the prepaid envelope provided.

If the findings of the study are presented to professional audiences or published, no information will be able to identify you personally.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number or e-mail provided below. If you have any further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone [REDACTED]. If you have any questions about your rights as a research participant contact [REDACTED].

Dr. Stephanie Woo the Chairperson, GPS IRB her contact information is

████████████████████ or by phone ████████████████████.

By signing the informed letter of consent and returning it to me, you acknowledge that you have read and understand what your study participation entails, and are consenting to participate in the study.

Thank you for taking the time to read this information, I hope you decide to complete the survey questionnaires. You are welcome to a brief summary of the study findings in about 1 year. If you decide you are interested in receiving the summary, please indicate on your demographic sheet and one will be made available to your institution.

Sincerely,

Bard M. De Vore

APPENDIX F

Letter of Permission Superintendents/Administrators

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area. I request permission to visit and administer in person the enclosed survey questionnaires to school-to-work counselors in your local area high schools.

Printed name of researcher Signature of researcher Date

Statement of _____ Superintendent/Administrator of
_____ Unified School District

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to school-to-work counselors working at our school sites.

Printed name of Supt/Admin. Signature of Supt/Admin. Date

APPENDIX G

Introduction Letter to Superintendents/Administrators

January 18, 2008

[Name]

[Address]

Dear [Name]:

I am a doctoral student in the Graduate School of Education and Psychology at Pepperdine University and am conducting a research study to fulfill the dissertation requirements for the Ed.D in Educational Leadership, Administration and Policy Program. I am asking permission to come to your high school for the purpose of collecting information from your school-to-work/career counselors.

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

If you give your permission, the school-to-work/career counselors at your school will be asked to participate in two survey questionnaires. The paper survey questionnaires (enclosed) will be utilized to collect information. The questions are not of a sensitive nature. It is not anticipated that the questions asked will cause the participants any harm

or discomfort. Participants will be advised that they can refuse to answer any questions. In addition, participants will not have to identify their name on the survey questionnaire. All information provided by the participants in anonymous and will be treated in the strictest confidence. No information will be available to anyone other than myself. The information provided by the participants will be used in analysis and to gain insight into the attitudes and perceptions of school-to-work/career counselors regarding vocational education/career-tech. By participating in this survey questionnaire, the participants will help generate information that hopefully will lend needed insight into attitudes and perceptions of school-to-work/career counselors regarding vocational education/career-tech in the Central San Joaquin Valley and assist in identifying program characteristics needed in the design of a vocation education/career tech program that will meet the needs of students in our Valley.

The participation of you counselors is entirely voluntary. At any time, they can to decide to withdraw or refuse to participate without any penalty. A consent form will be given to the selected counselor participants regarding the nature of the study and their voluntary participation. Please understand that I can begin collecting data only after the Institutional Review Board at Pepperdine University has given its approval. The function of this board is to protect the rights and welfare of human subjects who are recruited to participate in research activities.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number or e-mail provided below. If you have any

further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone [REDACTED]

I will contact you within a week to inquire about your decision. If you are willing to grant me permission to have access to your high school for the purpose of administering the survey questionnaires to the selected counselors, I would appreciate it if you would so indicate by signing and returning the enclosed copy of the Letter of Permission. A self-addressed school mail envelope is provided in order to communicate the letter with me. Please do not hesitate to contact me if you have any questions. My contact information is as follows:

Cell: [REDACTED] Home: [REDACTED] E-mail: barddoc@pacbell.net

I am deeply grateful to you for your consideration of my request.

Sincerely,

Bard M. De Vore

Enclosures: Letter of Permission
Survey Questionnaires

APPENDIX H

Letter of Permission Chancellor

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area. I request permission to visit and administer in person the enclosed survey questionnaires to individuals associated with Community College Leadership.

Printed name of researcher Signature of researcher Date

Statement of _____ Chancellor of State Center Community College District

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected sites for the purpose of administering the survey questionnaires to individuals associated with Community College Leadership.

Printed name of Chancellor Signature of Chancellor Date

APPENDIX I

Letter of Introduction SCCCDC Chancellor

January 18, 2008

[Name]

[Address]

Dear [Name]:

I am a doctoral student in the Graduate School of Education and Psychology at Pepperdine University and am conducting a research study to fulfill the dissertation requirements for the Ed.D in Educational Leadership, Administration and Policy Program. I am asking permission to come to your high school for the purpose of collecting information individuals associated with community college leadership.

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

If you give your permission, the individuals at your site(s) will be asked to participate in two survey questionnaires. The paper survey questionnaires (enclosed) will be utilized to collect information. The questions are not of a sensitive nature. It is not anticipated that the questions asked will cause the participants any harm or discomfort. Participants will be advised that they

can refuse to answer any questions. In addition, participants will not have to identify their name on the survey questionnaire. All information provided by the participants is anonymous and will be treated in the strictest confidence. No information will be available to anyone other than myself. The information provided by the participants will be used in analysis and to gain insight into the attitudes and perceptions of community college leadership regarding vocational education/career-tech. By participating in this survey questionnaire, the participants will help generate information that hopefully will lend needed insight into attitudes and perceptions of community college leadership regarding vocational education/career-tech in the Central San Joaquin Valley and assist in identifying program characteristics needed in the design of a vocation education/career tech program that will meet the needs of students in our Valley.

The participation of you members is entirely voluntary. At any time, they can decide to withdraw or refuse to participate without any penalty. A consent form will be given to the selected participants regarding the nature of the study and their voluntary participation. Please understand that I can begin collecting data only after the Institutional Review Board at Pepperdine University has given its approval. The function of this board is to protect the rights and welfare of human subjects who are recruited to participate in research activities.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number or e-mail provided below. If you have any further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone @ [REDACTED]

[REDACTED].

I will contact you within a week to inquire about your decision. If you are willing to grant me permission to have access to your site(s) for the purpose of administering the survey questionnaires to the selected participants, I would appreciate it if you would so indicate by signing and returning the enclosed copy of the Letter of Permission. A self-addressed envelope is provided in order to communicate the letter with me. Please do not hesitate to contact me if you have any questions. My contact information is as follows:

Cell: [REDACTED] Home: [REDACTED] E-mail: barddoc@pacbell.net

I am deeply grateful to you for your consideration of my request.

Sincerely,

Bard M. De Vore

Enclosures: Letter of Permission
Survey Questionnaires

APPENDIX J

Letter of Introduction to SCCC respondents

January 18, 2008

Dear Sir/Madame,

My name is Bard M. De Vore, and I am a doctoral student in the Educational Leadership, Administration and Policy program at Pepperdine University's Graduate School of Education and Psychology, who is currently in the process of recruiting individuals for my study entitled, "An In-Depth Look at the Attitudes and Perceptions of Vocational Education in California's Central Valley." The professor supervising my work is Dr. Linda Purrington. This part of the study is designed to investigate attitude and perceptions of community college leadership regarding vocational education, so I am inviting members of the SCCD to participate in my study. Please understand that your involvement in my study is strictly voluntary. The following is a description of what your study participation entails, the terms for participating in the study, and a discussion of your rights as a study participant. Please read this information carefully before deciding whether or not you wish to participate.

If you should decide to participate in the study, you will be asked to complete a survey regarding your feelings about the current state of vocational education and program characteristics you feel are important in the design of a vocational education program. It should take approximately 20 – 25 minutes of total participation time. Please complete the survey questionnaires alone and in a single setting.

There are no foreseeable physical, psychological or social risks involved with your participation in this research study. The surveys are anonymous. Although it would be preferable that you answer all of the survey questions, you may refuse to answer any question. The questions asked are not of a sensitive nature. It is anticipated that they will not cause you any harm, stress or discomfort.

If you should decide to participate and find that you are not interested in completing the survey in its entirety, you have the right to discontinue at any point without being questioned about your decision. You also do not have to answer any of the questions on the survey that you prefer not to answer – simply leave such items blank. When you have completed the survey please return to the appropriate representative or return it in the prepaid envelope provided.

If the findings of the study are presented to professional audiences or published, no information will be able to identify you personally.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number or e-mail provided below. If you have any further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone [REDACTED].

If you have any questions about your rights as a research participant contact Dr. Stephanie Woo the Chairperson, GPS IRB her contact information is [REDACTED] or by phone [REDACTED].

By signing the informed letter of consent and returning it to me, you acknowledge that you have read and understand what your study participation entails, and are consenting to participate in the study.

Thank you for taking the time to read this information, I hope you decide to complete the survey questionnaires. You are welcome to a brief summary of the study findings in about 1 year. If you decide you are interested in receiving the summary, please indicate on your demographic sheet and one will be made available to your institution.

Sincerely,

Bard M. De Vore

barddoc@pacbell.net

[REDACTED]

[REDACTED]

[REDACTED]

APPENDIX K

Letter of Permission Union Directors

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area. I request permission to visit and administer in person the enclosed survey questionnaires to union officials associated with Central Labor Council of Fresno, Madera, Tulare & Kings County AFL-CIO.

Printed name of researcher Signature of researcher Date

Statement of _____ Director of Central Labor Council of Fresno, Madera, Tulare & Kings County AFL-CIO.

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected sites for the purpose of administering the survey questionnaires to individuals associated with Central Labor Council of Fresno, Madera, Tulare & Kings County AFL-CIO.

Printed name of Director Signature of Director Date

APPENDIX L

Letter of Introduction to Unions

January 18, 2008

Sir/Madame,

My name is Bard M. De Vore, and I am a doctoral student in the Educational Leadership, Administration and Policy program at Pepperdine University's Graduate School of Education and Psychology, who is currently in the process of recruiting individuals for my study entitled, "An In-Depth Look at the Attitudes and Perceptions of Vocational Education in California's Central Valley." The professor supervising my work is Dr. Linda Purrington. This part of the study is designed to investigate attitude and perceptions of individuals associated with labor union leadership regarding vocational education, so I am inviting members of union leadership to participate in my study. Please understand that your involvement in my study is strictly voluntary. The following is a description of what your study participation entails, the terms for participating in the study, and a discussion of your rights as a study participant. Please read this information carefully before deciding whether or not you wish to participate.

If you should decide to participate in the study, you will be asked to complete a survey regarding your feelings about the current state of vocational education and program characteristics you feel are important in the design of a vocational education program. It should take approximately 20 – 25 minutes of total participation time. Please complete the survey questionnaires alone and in a single setting.

There are no foreseeable physical, psychological or social risks involved with your participation in this research study. The surveys are anonymous. Although it would be preferable that you answer all of the survey questions, you may refuse to answer any question. The questions asked are not of a sensitive nature. It is anticipated that they will not cause you any harm, stress or discomfort.

If you should decide to participate and find that you are not interested in completing the survey in its entirety, you have the right to discontinue at any point without being questioned about your decision. You also do not have to answer any of the questions on the survey that you prefer not to answer – simply leave such items blank. When you have completed the survey please return to the appropriate representative or return it in the prepaid envelope provided.

If the findings of the study are presented to professional audiences or published, no information will be able to identify you personally.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number or e-mail provided below. If you have any further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone [REDACTED].

If you have any questions about your rights as a research participant contact Dr. Stephanie Woo the Chairperson, GPS IRB her contact information is [REDACTED] or by phone [REDACTED].

By completing the informed letter of consent and returning it to me, you acknowledge that you have read and understand what your study participation entails, and are consenting to participate in the study.

Thank you for taking the time to read this information, I hope you decide to complete the survey questionnaires. You are welcome to a brief summary of the study findings in about 1 year. If you decide you are interested in receiving the summary, please indicate on your demographic sheet and one will be made available to your institution.

Sincerely,

Bard M. De Vore

barddoc@pacbell.net

[REDACTED]

[REDACTED]

[REDACTED]

APPENDIX M

Letter of Introduction to Union Directors

January 18, 2008

[Name]

[Address]

Dear [Name]:

I am a doctoral student in the Graduate School of Education and Psychology at Pepperdine University and am conducting a research study to fulfill the dissertation requirements for the Ed.D in Educational Leadership, Administration and Policy Program. I am asking permission to come to your high school for the purpose of collecting information from your members involved in leadership.

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

If you give your permission, the members at your site(s) will be asked to participate in two survey questionnaires. The paper survey questionnaires (enclosed) will be utilized to collect information. The questions are not of a sensitive nature. It is not anticipated that the questions asked will cause the participants any harm or discomfort. Participants will be advised that they

can refuse to answer any questions. In addition, participants will not have to identify their name on the survey questionnaire. All information provided by the participants in anonymous and will be treated in the strictest confidence. No information will be available to anyone other than myself. The information provided by the participants will be used in analysis and to gain insight into the attitudes and perceptions of union leadership regarding vocational education/career-tech. By participating in this survey questionnaire, the participants will help generate information that hopefully will lend needed insight into attitudes and perceptions of union leadership regarding vocational education/career-tech in the Central San Joaquin Valley and assist in identifying program characteristics needed in the design of a vocation education/career tech program that will meet the needs of students in our Valley.

The participation of your members is entirely voluntary. At any time, they can to decide to withdraw or refuse to participate without any penalty. A consent form will be given to the selected participants regarding the nature of the study and their voluntary participation. Please understand that I can begin collecting data only after the Institutional Review Board at Pepperdine University has given its approval. The function of this board is to protect the rights and welfare of human subjects who are recruited to participate in research activities.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the phone number of e-mail provided below. If you have any further questions or do not feel I have adequately addressed your concerns, please contact my supervising faculty Dr. Linda Purrington [REDACTED] or by phone [REDACTED].

I will contact you within a week to inquire about your decision. If you are willing to grant me permission to have access to your site(s) for the purpose of administering the survey questionnaires to the selected members, I would appreciate it if you would so indicate by signing and returning the enclosed copy of the Letter of Permission. A self-addressed envelope is provided in order to communicate the letter with me. Please do not hesitate to contact me if you have any questions. My contact information is as follows:

Cell: [REDACTED] Home: [REDACTED] E-mail: barddoc@pacbell.net

I am deeply grateful to you for your consideration of my request.

Sincerely,

Bard M. De Vore

Enclosures: Letter of Permission
Survey Questionnaires

APPENDIX N

Letter of Informed Consent

Pepperdine University GSEP

Research Participant Information and Consent Form

Title of the Study: AN IN-DEPTH LOOK AT THE ATTITUDES AND PERCEPTIONS OF HIGH SCHOOL CAREER AND TECHNICAL EDUCATION IN CALIFORNIA'S CENTRAL VALLEY

Principal Investigator: Student Researcher: [REDACTED]

DESCRIPTION OF THE RESEARCH

You are invited to participate in a research study about Attitudes and perceptions regarding high school vocational education in California's Central Valley.

The purpose of the research is to investigate attitudes and perceptions regarding vocational education and to determine what program characteristics stakeholders feel are necessary in the development and planning of a high school vocational education program for the area being studied.

The proposed respondent population will consist of State Center Community College District Campus Presidents and their Leadership teams, executive board representatives of the Central Labor Council of Fresno, Madera, Tulare & Kings County, the Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties, and school counselors from the California Department of Education identified ROP/ROTC programs.

Only subjects present at designated meetings and employed by identified schools will be participating in the study.

WHAT WILL MY PARTICIPATION INVOLVE?

If you decide to participate in this research you will be asked to complete two questionnaires regarding vocational education and program design elements.

You will be asked to complete 2 surveys.

Your participation will last approximately 45 minutes.

ARE THERE ANY RISKS TO ME?

We don't anticipate any risks to you from participation in this study.

ARE THERE ANY BENEFITS TO ME?

There will be no direct benefits to the individual respondents; however, this study has the promise of benefiting the region of the Central San Joaquin Valley. The results of the study could directly affect the current educational situation of the region and in turn be of benefit to the respondents.

HOW WILL MY CONFIDENTIALITY BE PROTECTED?

This study is anonymous. Neither your name nor any other identifiable information will be recorded.

WHOM SHOULD I CONTACT IF I HAVE QUESTIONS?

You may ask any questions about the research at any time. If you have questions about the research after you leave today you should contact the Principal Investigator Bard M. De Vore at [REDACTED]. You may also call the supervising faculty, Linda Purrington at [REDACTED].

Your participation is completely voluntary. If you begin participation and change your mind you may end your participation at any time without penalty.

Your signature indicates that you have read this consent form, had an opportunity to ask any questions about your participation in this research and voluntarily consent to participate.

Name of Participant (please print): _____

Signature

Date

APPENDIX O

Tom Crow LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to individuals associated with State Center Community College District.

BARD M DEVORE  1/7/08
Printed name of researcher Signature of researcher Date

Statement of Thomas Crow Chancellor of State Center Community College District

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected sites for the purpose of administering the survey questionnaires to individuals associated with State Center Community College District.

Thomas Crow  12-10-07
Printed name of Chancellor Signature of Chancellor Date

APPENDIX P

John Hutson LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to union officials associated with Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties.

BARD M DEVORE  1/2/08
Printed name of researcher Signature of researcher Date

Statement of John Hutson, Director of the Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties.

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected sites for the purpose of administering the survey questionnaires to individuals associated with Building and Construction Trades Council of Fresno, Madera, Kings & Tulare Counties.

John Hutson  12-12-07
Printed name of Director Signature of Director Date

APPENDIX Q

Holly Newlon LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M. DEVORE [Signature] 1/7/08
Printed name of researcher Signature of researcher Date

Statement of Holly Newlon Principal/Administrator of Merced County ROP

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Holly Newlon Holly Newlon 12/12/07
Printed name of Principal/Administrator Signature of Principal/Administrator Date

APPENDIX R

Sandra Banducci LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M. DEVORE [Signature] 1/7/07
Printed name of researcher Signature of researcher Date

Statement of Sandra Banducci Principal/Administrator of Regional Occupational Center

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Sandra M. Banducci Sandra M. Banducci 12-19-2007
Printed name of Principal/Administrator Signature of Principal/Administrator Date

APPENDIX S

Doug Martin LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M. DEVORE
Printed name of researcher

[Signature]
Signature of researcher

1/2/08
Date

Statement of Doug Martin Principal/Administrator of _____

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Doug Martin
Printed name of Principal/Administrator

[Signature]
Signature of Principal/Administrator

12/6/07
Date

APPENDIX T

Armando Vasquez LOC

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARO. M. DEVORE [Signature] 1/2/08
Printed name of researcher Signature of researcher Date

Statement of Armando J. Vasquez Principal/Administrator of Team C. Regional Occupational Program

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites. (Rop sites)

(Suzi Clapperton - ROP Career Advisor)

Armando J. Vasquez [Signature] 12-6-07
Printed name of Principal/Administrator Signature of Principal/Administrator Date

APPENDIX U

Rhea Kirby LOC

Fax sent by : 7609341443

MCOE-

12-06-07 11:02

Pg: 1/1

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M. DEVORE
Printed name of researcher

[Signature]
Signature of researcher

4/2/08
Date

Statement of Rhea Kirby Principal/Administrator of Mono County Office of Ed

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Rhea Kirby
Printed name of Principal/Administrator

Rhea Kirby
Signature of Principal/Administrator

12-10-07
Date

APPENDIX V

Cynthia Young LOC

DEC-6-2007 01:39P FROM: CAREER/ALT ED (209)525-5108 TO: 915594572742 P.2/2

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M. DEVORE [Signature] 1/7/08
Printed name of researcher Signature of researcher Date

Statement of Cynthia Young, Director of Yosemite ROP

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Cynthia Young [Signature] 12/6/07
Printed name of Director Signature of Director Date

Note: My signature signifies I am comfortable with the intent of the study. Mr. De Vore must contact each district separately to obtain appropriate permissions to contact district staff to discuss the study.

APPENDIX W

Tim Bowers LOC

NOV-30-2007 09:36 From:KCOE

559 589 7007

To:5594572742

P.2/2

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

BARD M DE VORE [Signature] 11/7/07
Printed name of researcher Signature of researcher Date

Statement of Tim Bowers Principal/Administrator of Kings ROP

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Tim Bowers [Signature] 11/30/07
Printed name of Principal/Administrator Signature of Principal/Administrator Date

APPENDIX X

Valerie Vuicich LOC

11/29/2007 14:32 FAX 5594973806

FRESNOROP

001/001

Letter of Permission

Statement of the Researcher

The purpose of this study is to investigate attitudes of community college leadership, union officials and high school school-to-work counselors regarding vocational education in the California's Central Valley. Furthermore, this study seeks to determine program characteristics most suitable for a program designed to meet the needs of the students in the aforementioned area.

I request permission to visit and administer in person the enclosed survey questionnaires to high school school-to-work counselors in your local area high schools.

Bard M. De Vore [Signature] 1/7/08
Printed name of researcher Signature of researcher Date

Statement of Valerie Vuicich Principal/Administrator of Fresno ROP

I have had an opportunity to review the survey questionnaires referenced above. I give my permission to the researcher, Mr. Bard M. De Vore, to visit the selected schools for the purpose of administering the survey questionnaires to high school school-to-work counselors working at our school sites.

Valerie Vuicich [Signature] 11/29/07
Printed name of Principal/Administrator Signature of Principal/Administrator Date

APPENDIX Y

Permission to use IVE Scale

Bard: It was good to talk with you on the telephone this afternoon. You have our permission to use any of the material from the paper: "Vocational Education as Perceived by Different Segments of the Population" (1964) by Ralph Wenrich and Robert Crowley in your doctoral dissertation.

While my father died three years ago, I know he would be pleased that something he wrote is still useful to another scholar.

I wish you all the best in completing the doctorate at Pepperdine and in your future career. Let me know if I can do anything else to help.

Bill

Bill Wenrich
Chancellor Emeritus
Dallas County Community College District



APPENDIX Z

Human Subjects Protection Online Education Tutorial



Human Participant Protections Education for Research Teams

Completion Certificate

This is to certify that

Bard De Vore

has completed the Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 12/28/2007.

This course included the following:

- key historical events and current issues that impact guidelines and legislation on human participant protection in research.
- ethical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.
- the use of key ethical principles and federal regulations to protect human participants at various stages in the research process.
- a description of guidelines for the protection of special populations in research.
- a definition of informed consent and components necessary for a valid consent.
- a description of the role of the IRB in the research process.
- the roles, responsibilities, and interactions of federal agencies, institutions, and researchers in conducting research with human participants.