1993

Employers' perceptions of regional occupational program graduates

Anton William Heil

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EMPLOYERS' PERCEPTIONS OF REGIONAL OCCUPATIONAL PROGRAM GRADUATES

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements of the Degree
Master of Arts
in
Education: Vocational

by
Anton William Heil
June 1993
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OCCUPATIONAL PROGRAM GRADUATES

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Approved by:

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Abstract

This study surveyed the employers of the 1992 ROP graduates. It determined the degree to which the ROP was meeting the needs of the county's businesses and industries and the relevance of ROP training.

Each employer was asked questions regarding the employee's personal qualities, skills, understanding of the job role and overall job performance. Employers were also requested to compare ROP-trained employees to non-ROP employees.

Findings indicated that employers were generally positive toward ROP vocational training. Personal qualities ranked highest while skills ranked lowest. Most employers indicated that ROP-trained employees had better skills than non-ROP employees, and that it took less time to train ROP employees on the job. It was concluded that ROP training made a positive difference in overall job performance.
ACKNOWLEDGEMENTS

I would like to express my appreciation to the following individuals without whose help this thesis would not have been possible:

To my advisor, Dr. Joseph English, who stretched me beyond what I ever thought possible. I am indebted to him for his advice, counsel, and help in the times of crisis.

To Dr. Dwight Sweeney who, on his own personal time, helped me with computerized statistics.

To Patrick Ainsworth, Richard Collins, and Dr. William Gonzalez, all from the Riverside County ROP Office, who listened patiently and advised me during the course of my studies.

To my father-in-law, Dr. Charles Asbell, retired Dean of Agriculture at Cal Poly Pomona, for his patient listening and understanding and other helps too numerous to mention.

To my mother-in-law, Marilyn Asbell, for her patience, understanding, and willingness to help care for my children during these last many months.

To my two sons, Brian and Scott, who haven’t been able see or do much with Dad lately. Thanks for your
patience. We are going to have a great summer!

Last, but not least, I would like to express my loving appreciation to my wife, Caryn. She has been my typist and editor, and without her help I would not have been able to even begin this project. Caryn has been very patient and understanding through these tough times of research.

This thesis is dedicated to my wife, Caryn, and our two sons, Brian and Scott. Nothing, except for the Lord my God, is as important to me as the love of my family.
CONTENTS

ABSTRACT ........................................... iii
ACKNOWLEDGEMENTS ................................. iv
LIST OF TABLES .................................... x
LIST OF FIGURES .................................. xii

Chapter

I. INTRODUCTION ..................................... 1
   Background ....................................... 2
   Nature of the Problem ............................ 5
   Significance of the Problem ..................... 6
   Statement of the Problem ......................... 7
   Purpose of the Study .............................. 7
   Scope of the Study ................................ 8
   Research Questions ................................ 8
   Limitations ....................................... 9
   Definitions ...................................... 9

II. REVIEW OF THE LITERATURE ..................... 13
   Historical Development of Vocational Education 13
   Development of Vocational Education in the United States 13
   Historical Development of Vocational Education in California 18
   The Early Years of California's Vocational Education 18

vi
California’s Vocational Education
at the Turn of the Century, 1900-1910. . . . 21
Vocational Education’s Real Beginning
in California, 1910-1920 . . . . . . . . . . . 22
California’s Vocational
Education in the 20s . . . . . . . . . . . . . . 24
The Effects of the Depression on
California’s Vocational Education,
1930-1940. . . . . . . . . . . . . . . . . . . . . 24
California’s Vocational Education
Through the War Years, 1940-1950 . . . . 26
Slower Years for California’s
Vocational Education, 1950-1960. . . . 27
The Growing Years for California’s
Vocational Education, 1960-1980. . . . 28
California’s Vocational Education
in the 90s . . . . . . . . . . . . . . . . . . . . . 33

Historical Development of the Riverside
County Regional Occupational Program. . . . 34
Origin of the Riverside County ROP . . . . 34
Riverside County Demographics. . . . . . . 36
The ROP Student - Ethnic Profile . . . . . 37

Employers Perceptions of Vocational Education . 42
LIST OF TABLES

Table 1
1992 Ethnic Profile of California's Population ..................................... 39

Table 2
1992 Ethnic Profile of Riverside County's Population .......................... 39

Table 3
1992 Ethnic Profile of ROP High School Age & Adult Student Population. 40

Table 4
1985 Ethnic Profile of ROP Student Population ...................................... 40

Table 5
Student Profile by ROP Vocational Training Area (given in %) .................. 41

Table 6
Company Size by Number of Employees ............................................. 60

Table 7
Survey Return .................................................................................. 67

Table 8
Research Question #1 (variables 5 - 18) ............................................. 70

Table 9
Research Question #1 (variable 24) .................................................. 71

x
LIST OF FIGURES

Figure 1
A Model of Job Performance
(Franchak, 1981) .......................... 50

Figure 2
Foundations of Job Performance
(SCANS, 1991) ............................ 51

Figure 3
Model of Job Performance and Promotability
(Study Model) ............................. 61
CHAPTER ONE
INTRODUCTION

Through the years, the purpose of American education has been to teach basic skills, present a cultural heritage, instill the essentials necessary for good citizenship, and prepare students for work. Educators across the nation argue which of these purposes should take priority and blame the shortcomings of our educational system on the establishment of wrong priorities.

The Secretary's Commission of Achieving Necessary Skills (SCANS) was asked to investigate our schools and workplaces to determine if our young people were achieving the necessary skills required by the new technical workplace competing in a world market. They noted:

Good jobs will increasingly depend on people who can put knowledge to work. What we found was disturbing: more than half our young people leave school without the knowledge or foundation required to find and hold a good job (1991, p. XV).

SCANS clearly showed that all of the stated purposes of
education were essential and must be mastered.

At the national level, Carl Perkins Legislation required the integration of vocational and academic education to help students realize an actual application and use of academic skills (American Vocational Association, 1991). Research has shown that applied learning is retained longer.

This study looked at employers' perceptions of Regional Occupational Programs to determine the degree of success of the ROP and local school districts in adequately preparing young people for entry level jobs.

Background

The major objective of vocational education has been to prepare students for employment in order to meet the needs of our nation's business and industry. The role of vocational education began to change in the 1960s with, "...increasing the employment options available to students, developing flexible occupational and decision-making skills in students, and motivating students to learn basic academic skills" (Kurtz, 1986, p. 2). In order to help students learn their academic subjects, federal legislation known as the Carl Perkins Act, began requiring the integration of vocational and
academic education. A well-trained student entering the job market must possess a solid foundation in basic and cognitive skills and have good personal qualities in order to succeed in a highly competitive world market (SCANS, 1991).

Because of the recent changes in vocational education, employers and other individuals felt that it was not providing employees with training relevant to the needs of local business and industry. They thought that vocational education was out of touch and unresponsive to the employment needs of business and industry (Kurtz, 1986).

The problem was not a simple one. Different employers required a variety of different things and schools got mixed messages which were hard to decode and sometimes impossible to deliver. SCANS (1991) stated:

Part of the difficulty is that employers and school personnel are passing each other like ships in the night: one speaks in Morse code, the other signals with flags. As a consequence of the miscommunication, secondary school students often see little connection between what they do in school and how they expect to make a living (p.
SCANS attributed "miscommunication" as a major reason for the lack of educational improvement. Miscommunication not only affected student interest and relevancy, but very few students believed that a high school diploma would get them a job. Most students believed that job skills were something that they would acquire as life went on.

National and state tax revenues are critically low and the government is looking for ways to cut expenses. Every aspect of government spending is being studied to find ways to trim expenditures. Fortunately, most legislators realize that cutting education will only hurt matters in the long run and they carefully analyze these cuts.

Education has been brought into a time of improving efficiency and general accountability. In California public schools there is periodic student testing in accordance with the California Assessment Program. There are no consequences for the results and teachers and schools are not paid on the basis of their accomplishments. In order to insure that vocational programs are sending out well trained graduates, we needed to ask the employers who hired our former
students for their perceptions and feedback.

Nature of the Problem

The California Legislature struggled over a system of vocational education in the 1960s. Finally, in 1965, the Legislature decided on a system of Regional Occupational Centers and Programs for the State. Riverside County formed its first Regional Occupational Program (ROP) in 1972.

Riverside's ROP is a division of the Riverside County Office of Education (RCOE). The purpose of the ROP is to provide job training for the residents of the county. The following is the ROP mission statement: "The mission of the Riverside County Office of Education Regional Occupational Program is to enable and enhance, through occupational training, human resources for economic benefit of the individual and the community" (RCOE, 1992, p. 12). It also states that ROP training is provided in four different categories with four different goals: entry level job training, preparation for immediate job placement and assistance in finding and maintaining work, upgrading current skills, and preparation for higher education.

In order to continue to provide the best training
possible, and keep communications open with business and industry and to correctly determine the kinds of training needed, this study surveyed employers of the 1992 ROP graduates.

Significance of the Problem

Our nation is in a time of financial crisis and it is important to develop a means of assessing and reporting program success. In a recession, states have less tax revenues to pay for their programs. This is especially true in California where tax revenues are critically low and where every dollar must be carefully spent. Since money for education is scarce, those programs which can clearly show success and evidence of potential economic improvement are the ones most likely to be funded.

This study addressed the problem by evaluating perceptions of employers who have hired graduates of the ROP. This information will be available for use by the ROP Administration and Management to review the program's strengths and weaknesses and make improvements which reflect employers needs. It will also be valuable information for the State Legislature and will enable them to make informed decisions.
Statement of the Problem

The problem addressed in this study was three-fold. First, as noted earlier, some employers interviewed by SCANS felt that vocational education was not relative to today's workplace. Secondly, it was not meeting the needs of our nation's business and industry. Lastly, was vocational education meeting the individual's needs for employment? A long-standing purpose and goal of vocational education has been to, "...train students to get and keep jobs in order to meet both the individual's employment needs and the labor market needs of the American economy" (Kurtz, 1986, p. 4).

To be sure the training of Riverside County ROP was relative to and meeting the needs of the county's business and industry, as well as the individual students, a study was needed to evaluate employers' perceptions and feedback.

Purpose of the Study

This study surveyed the employers of the 1992 ROP graduates who were employed through the ROP at the completion of their training. It showed employers' perceptions regarding the degree to which the ROP was
meeting the needs of the county’s businesses and industries, how relevant the ROP training was, and how ROP trained entry level employees compared to other entry level employees.

**Scope of the Study**

The study was conducted with employers who had hired ROP graduates in 1992. The study included all employers of ROP graduates (except for the armed service). Most of these employers were located in Riverside County with only a few located elsewhere.

**Research Questions**

Is the Riverside County Regional Occupational Program meeting the goals it has set for itself, and can their goals improved? Are they relevant and meeting the needs of all those whom the ROP serves? This study seeks the answers to these questions by posing the following specific research questions about ROP trained employees:

1. What are the employers’ perceptions of the overall job performance and potential advancement or promotability?

2. What are the employers’ perceptions of the overall
personal qualities?

3. What are the employers' perceptions of the overall skills?

4. What are the employers' perceptions of the overall understanding of the job role?

5. What are the employers' perceptions of the overall preparation of the ROP employee compared to other employees?

**Limitations**

Because the Regional Occupational Program and its use of community classrooms is unique to California, the data collected will only be valid in California's ROPs.

**Definitions**

The following terms were employed for the purpose of the study:

**Academic Education** - That part of the educational process which is primarily responsible for teaching reading, writing, mathematics, science and other basic skills.

**Basic Skills** - Those subjects commonly referred to as the Three Rs (reading, writing, and arithmetic). For
the purpose of this study, we will also include listening and speaking. These skills are needed to function in any aspect of life or work (SCANS, 1991).

**Business and Industry** - Refers to the companies and organizations throughout the nation (or in the case of this study, throughout the county) that manufacture or market a product or service. Some of these organizations are the employers of the county and hire ROP graduates.

**Completers** - Those students who have mastered the competencies of at least one ROP training area and have graduated (RCOE, 1992).

**Depression/Recession** - A slow-down and reduction in economic activity. A period of time when business and industry cut back, usually resulting in higher unemployment.

**Employers** - Those persons in charge of business and industry and (for the purpose of this study) have hired ROP graduates.

**Entry level** - Work which can be filled by a person with little or no work experience and no formal education beyond high school. Entry level positions may require some special skills which must be obtainable at the high school level and not require any extra training.
Job - Paid employment or work undertaken for a fee.

Job Motivation - Has to do with the amount of effort the employee puts into his or her work. Things that contribute to job motivation are attendance, punctuality, attitude, initiative, willingness to learn, promotability, etc. (Kurtz, 1986).

Job Skills - Refers to an employee's use of tools and equipment, basic skills in work-related problem solving, technical knowledge and others. Job skills deals with how well an employee uses these skills in the quality and quantity of his/her work (Kurtz, 1986).

Occupation - A chosen line of work. One specific type of work or profession for which a student may train and prepare.

Personal Qualities - For the purpose of this study, personal qualities will refer to those qualities applicable to the workplace. Components of these qualities include responsibility, self-esteem, sociability, self-management, integrity, and honesty (SCANS, 1991).

ROP - Regional Occupational Program. California's system of county vocational training. (Also includes ROCs - Regional Occupational Centers) (RCOE, 1992)
Thinking or Cognitive Skills – Those skills necessary to analyze and evaluate problems. Components of these skills include decision making, creative thinking, problem solving and reasoning (SCANS, 1991).

Training – Guided instruction and practice in a particular occupational field in order to gain proficiency in a skill or improve existing skills.

Understanding the Job Role – The employee’s perceptions of the job duties, what should be done on the job, and how the role should be played (Kurtz, 1986).

Vocational Education – A training process that prepares one for work. The education and training of students in the skills required by our constantly changing technical workplace.

Work – Includes paid and unpaid employment or other necessary activities.

Workplace – Where one is employed and goes to earn a living.
CHAPTER TWO
Review of the Literature

Historical Development of Vocational Education

Ancient nations depended upon industry and craftsmanship for their economic and civil survival. The process of teaching or transferring this knowledge was a family affair—a father/son or master/apprentice relationship. Not until the Renaissance did any type of formal industrial education begin.

In the sixteenth and seventeenth centuries, educational reform provided some industrial theory but little actual training. In the nineteenth century more positive gains were made throughout the world. Pestalozzian influenced the United States with his practical ideas about education. Apprenticeship systems, societies of craftsmen, and special technical skills sprang up out of this era, and a new system of education emerged.

Development of Vocational Education in the United States

The need for vocational education developed with the economy in the United States. As we moved into the
industrial era, industrial and vocational education became an issue and needed some attention. As the issues arose, two sides developed with one criticizing schools for not teaching and reflecting a true picture of life and the other arguing that a moral background was the best preparation for life. The debate continued with neither side admitting both were essential (Barlow, 1967).

The Morrill Act of 1862 (the establishment of the Agricultural and Mechanical colleges) played a large role in clarifying the image of vocational and industrial education in the United States. By the late 1800s, industrial and vocational training became a formal part of many schools across the nation. Schools began preparing students in occupational areas such as trade, business, and agriculture. The programs were similar to those of today.

There was still a great deal of resistance to incorporate manual or vocational training into the formal requirements of general education. E. White, the President of Purdue University, believed strongly that the trades should not be taught in the public schools and that technical education would be a threat to the intellect.
William T. Harris, the U.S. Commissioner of Education from 1889 to 1906, did not support the notion of technical education in public schools either. The debate continued into the 1900s and most schools began to include manual education in their curriculum. The public and government largely supported the movement toward technical education. The Davis Bill of 1907 and the Dolliver – Davis Bill of 1910 were both introduced into legislation but did not pass. Finally, an agricultural extension of these bills passed in 1914 (the Smith-Lever Act) and at the same time, a national commission was appointed to look into other legislation. As a result of the commission’s report, the Vocational Education Act of 1917 known as the Smith-Hughes Act, was signed into law on February 23, 1917, by President Woodrow Wilson.

The Smith-Hughes Act (and later legislation) had a great impact on vocational education and provided federal funding to cover teacher training and salaries. It could not in any way be used for academic education or by private schools. The Smith-Hughes Act required states to meet guidelines for vocational education quality.

For 46 years, the Smith-Hughes Act provided our
nation and its industry with the skilled work force that it needed. It took us through two World Wars and the Korean War. "The strength of the Smith-Hughes Act was that it fulfilled the need to provide American industry with complicated work skills required in technological society" (Kurtz, 1986, p. 23).

For 10 years prior to the election of President Kennedy, the White House had been urged to cut the level of funds provided through the Smith-Hughes Act. This Act had virtually gone unchanged and intact for 46 years. By that time, it had obvious shortcomings.

In the early 1960s, President Kennedy appointed a panel of consultants to take another look at vocational education. The panel brought vocational education into national view and issued a report titled "Education for a Changing World of Work" which prompted various new legislative bills and the passage of the Vocational Education Act of 1963 known as the Morse - Perkins Act (PL88-210).

Prior to the Vocational Act of 1963, vocational education had concentrated its effort in supplying the skilled labor needed by the nation's industry, and largely ignored other needs of society. With the passage of this bill and its amendments in 1968,
vocational education set out to expand its offerings by increasing the size, number and types of offerings. Vocational education expanded into areas of helping students with special needs.

New legislation once again changed vocational education in 1984. With the passage of the Carl Perkins Act, it would expand its borders to serve special populations and students with special needs. "The wisdom of Congress deemed that previously unserved audiences would become beneficiaries of federal dollars for vocational education....to hold the needs of various special populations as a national priority" (Miller, 1990, p. 30).

In 1990, the Carl Perkins Act was amended and is the most current legislation concerning vocational education. The New Perkins Act provided vocational education with a new dimension and challenge. In light of a downward trend in academics, Congress decided to incorporate the hands-on manual learning of vocational education into academic education (American Vocational Association, 1990). Incorporating these two will help students learn the academic subjects faster, more easily, and greatly increase their retention.

Vocational education has come a long way from the
early days of father/son and master/apprentice relationships. It is truly the "Classroom of the Future". (Classroom of the Future - was the 1992 slogan of the American Vocational Association)

Historical Development of Vocational Education in California

The Early Years of California's Vocational Education

Vocational education has not endured through the years by accident. It began, and has progressed, out of choice; economic and social necessity has proven the need for it.

California first recognized its need for occupational competence and training shortly after becoming a state. As early as 1854 in San Francisco, mechanics, seeing the need for preparation and self-improvement, developed the Mechanics Institute. At this time, California public schools had nearly 6,000 students enrolled. These were primary and grammar school grades which left vocational education out of the public school arena. At that time the public schools did not consider vocational education as their responsibility.
Recognizing the need for vocational education, the California Legislature in 1863-64 accepted the provisions of the Federal Land Grant College Act, which was signed into law by President Lincoln on July 2, 1862. This act made federal land available for the building of Agricultural and Mechanics Colleges. As these Land Grant Colleges began to appear, the California Superintendent of Public Instruction, Henry N. Bolander, saw the need for vocational education and the lack of it in public schools. In his Annual Report for 1870-71, he points out the need for industrial and vocational education in the public schools and said, "We shall be a poor and dependent people so long as we import from abroad all those articles of consumption which require the highest order of skilled labor in their manufacture..." (Smith, 1979, p.2).

In the Superintendent's report for 1874-75, Bolander continued his concern for industrial and vocational education in California's public schools. He cited the progress of many other states and countries in this field. He firmly believed that public schools needed to incorporate a system of vocational education.

For the next 20 years, California made little
progress implementing vocational education in the public school system. In 1875, James Lick, a California mechanic and businessman, set aside $540,000 for a new California School of Mechanical Arts which opened in 1895. It was the first real comprehensive school in the state. The curriculum included fourteen mechanical and industrial arts, English, mathematics, and science. Another endowment for a vocational school was given in 1887 when Henry Cogswell set aside $1,000,000 to build the Cogswell Polytechnical College.

Mr. Cogswell was impatient with education that did not prepare persons to conduct their labor intelligently, feeling that youths were leaving school without being prepared for an occupation and incapable for learning one. He observed that they have a certain kind of learning (Smith, 1979, p. 3).

The developments in California's early years were shaped primarily by interest in getting the new state running and in having a self-sufficient economy. Although there was a great deal of interest in vocational education, little was done about it, and California entered the 20th century almost totally lacking any kind of vocational education in public
schools. Later, as vocational education developed, the privately sponsored vocational schools around San Francisco served as models for the rest of the state.

California's Vocational Education at the Turn of the Century, 1900-1910

At the turn of the century, Thomas J. Kirk, the Superintendent of Public Instruction, saw the need for industrial and vocational education. In his annual report of 1900, he suggested a manual training site in each county of California:

Industrial education in some form is now the great need: the use of tools, acquaintance with various kinds of wood and iron work, a study of the materials, and the construction of machinery and manufactured products. He went so far as to suggest that the establishment of a manual training school in connection with a good-sized farm in each county would be a wise and profitable educational adventure (Smith, 1979, p. 5).

After much controversy, the California Legislature passed a special state school tax in 1902, to support high school and technical schools. California, as well as other states, began lobbying for federal monies to
support public education.

Vocational Education’s Real Beginning
in California, 1910-1920

Two important events in vocational education occurred between 1910 and 1920. First, in 1912, the State Board of Education was reorganized and new commissioners were created to provide better state-level leadership. One of these positions was the Commissioner of Industrial and Vocational Education. It was filled in 1913 by Edwin R. Snyder, who went right to work, and in his first report to the State Board of Education he noted five problem areas.

1. Vocational education was largely unorganized and had no uniform pattern of objectives or outcomes.

2. A need existed to advertise the program, to preach the gospel of vocational education.

3. A philosophical problem existed of differentiating between cultural education and vocational education.

4. Economic conditions made it imperative for youth to go to work early, but too little was being done to fit youth for work.
5. A general attitude existed that vocational education was both narrowing and limiting opportunities (Smith, 1979).

Under Dr. Snyder's leadership, vocational education became a solid part of California public education.

Another significant event occurred in 1917. By now, interest in vocational education was gaining ground at the national level and it was viewed as an important part of our nation's capability for national defense. In 1917, Congress passed the Smith-Hughes Act which was the first legislation to allow federal monies to be used in the nation's public schools. The federal government's interest was in the national welfare, and it felt the country would benefit by promoting vocational education. The Legislature targeted three specific areas: agriculture, trade and industry, and home economics. It also provided for teacher training in these areas. Only two weeks after the Congress passed the Smith-Hughes Act, the California Legislature quickly passed legislation to accept it.

The period from 1910 to 1920 was the real beginning of vocational education in California. The prior 50 years of anxiety, and the realization of the need for it, had all finally come together in a
definite form.

**California's Vocational Education in the 20s**

In the 1920s, vocational education in California followed the industrial boom going on throughout the rest of the nation, and permanent state-level positions were created to accommodate different segments of this field.

Enrollment in vocational education increased seven-fold during this period (from 10,810 students in 1920 to 70,464 in 1930).

The American Vocational Association held its first national convention in California in 1927.

**The Effects of the Depression on California's Vocational Education, 1930-1940**

Vocational education has always been at the mercy of external influences. Social change, economic problems, and world conflict have all had their influence, and as we entered the 1930s, economic problems and world issues had both good and bad effects on it.

The Depression of the 1930s all but halted our nation's industry, and in so doing, somewhat thwarted
the progress of vocational education. It continued to grow in California at a somewhat slower rate and the weaker economic times of the 1930s prompted Kersey (the Superintendent of Public Instruction) to issue a "Code of Essential Purposes in California Public School Education". Some of the items included: vocational guidance, professional training, and occupational information.

The Great Depression had created many funding problems for state and federal programs. In California it was proposed to cut education expenditures 25 percent while the National U.S. Budget Bureau director proposed cutting all federal assistance to education. As we have seen in economic hard times since the Depression, government monies become scarce, yet enrollments in vocational education increase. Laid-off workers went back to school to retrain, and graduating students chose to stay in school because of the lack of jobs.

Thousands of youth who in normal times would be seeking employment are now continuing their education due to the lack of employment opportunities. And even greater numbers of youth and adults who have lost employment are now
enrolled in school to improve their opportunity for gainful employment. The demand must be met by upward extension of secondary education into a broadened program of adult, continuation, and junior college education (Smith, 1979, p. 20).

Enrollment in California's vocational education programs started out at 70,464 in 1930 and climbed to 206,526 by 1940.

California's Vocational Education Through the War Years, 1940-1950

The close of the 1930s brought an end to the greatest economic depression in the history of the United States. It also brought us into the greatest war the world had ever seen - World War II. Surviving the 30s, vocational education was thrust into the 1940s having to prepare and train a nation for a World War. A few years later, vocational education had to retool and train the nation for a peacetime economy. In these few short years, vocational education had gone through three major transitions, and California had taken the lead. Class enrollments were the highest in the nation, and California had the widest array of vocational options. Enrollment in California
vocational education programs reached a new record in the 40s, starting at 206,526 in 1940 and climbing to 446,174 by 1950.

**Slower Years for California’s Vocational Education, 1950-1960**

Vocational education enrollments had peaked in 1950, and for the next ten years vocational education struggled to maintain its enrollment in California. In 1950, enrollments were at their highest peak with 446,174 students. By 1952, enrollments had dropped to 259,726 and after a slow climb, the decade closed with an enrollment of 410,050 students. According to Kurtz (1986):

Some of the reasons for this lull in the growth of vocational education included a reduction in the need for specialized training as a requisite for employment, changes in job specifications, and performance skills that were not quickly integrated into existing vocational programs. Some of the pioneering spirit and enthusiasm was lost because of an increased acceptance of vocational education in secondary schools (p. 29).
The Growing Years for California's Vocational Education, 1960-1980


The 1960s were the most eventful years in the history of vocational education in California. Future decades may never match the excitement, profound change, material progress, vigorous growth, and external support that characterized the program during this ten-year span (p. 45).

This new era in vocational education saw many changes and improvements in California: enrollments more than doubled, federal monies for vocational education increased tenfold, occupations for trained students increased fourfold, special attention was given to handicapped and disadvantaged youth, and a statewide system of regional occupational centers was developed. No ten year period before or since has matched the legislative activity dealing with vocational education.

In 1963, the California Legislature passed the "Countywide Vocational High Schools" law which opened
the doors for separate county trade schools. The author of this bill realized that youths in correctional centers were receiving better vocational training than those in high schools.

Two years passed, and no progress was made with the countywide trade schools. Virtually, none of the school districts in California were in favor of separate county trade schools. The concept behind this law was not accepted by county superintendents. There was great resistance to the idea of separate trade schools. Districts would lose students and ADA funds to county run trade schools.

At the request of California’s vocational education leadership, the Legislature revised and amended the "Countywide Vocational High Schools" law in 1965. The amendment removed the reference to separate trade schools in favor of the concept of Regional Occupational Centers which would serve students from several school districts part-time. The first Regional Occupational Center was set up in 1968, and by 1970 there were 24 of them. In 1968, the bill was again amended to allow adults to participate. It also created Regional Occupational Programs which were held at different sites throughout the county.
Smith (1986) noted that typically, these multi-district cooperative programs had the following characteristics:

1. Students were transported between their regular home high school and a vocational center by means of a bus shuttle system.
2. Class or laboratory work at the center involved two or three periods or hours per day.
3. All general education courses were offered at the home high schools, with the curriculum at the center limited to vocational instruction.
4. The center was in no manner considered to be a school. Instead, it was considered to be an off-campus laboratory.
5. The students were most often juniors and seniors and adults enrolled in advanced extensions of basic programs provided by the home high schools or in unique programs not feasible for inclusion in the offerings of a single high school.
6. The center did not replace, supplant, or duplicate vocational education programs in the home high schools (Smith, 1979, p. 55).
finally broken a barrier that narrowed vocational education choices offered at local district schools because of limited resources.

For the past 70 years or more, the philosophical acceptance of vocational education as a necessary part of the public school curriculum has been one of resistance and skepticism. The California Legislature put this to an end in 1971 with the enactment of the Education Code Section 51004:

The Legislature hereby recognizes that it is the policy of the people of the State 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... (California Education Code, Section 51004).

Another 1971 revision to the Education Code included the mandating of certain courses in all
secondary schools.

h.) Applied arts, including instruction in the areas of consumer and homemaking education, industrial arts, general business education, or general agriculture.

i.) Vocational-technical education designed and conducted for the purpose of preparing youth for gainful employment in such occupations and in such numbers as appropriate to the manpower needs of the state and the community served and relevant to the career desires and needs of the student (Smith, 1979, p. 72).

As expected, with the new legislation and new ROC/ROP programs beginning throughout the state, enrollments increased. It almost doubled in less than six years (from 900,000 in 1970 to nearly 1,800,000 in 1975).

Between 1965 and 1975, the California Legislature had revised more than 60 statutes that had limited growth in the past, and for the first time students were eligible for more than a single A.D.A. (Average Daily Attendance figures are used to determine funding for public schools).

The huge growth of the ROC/ROP system had put a
tremendous strain on the state's revenues for education. This attracted the attention of the Governor, the Department of Finance, and the State Legislature. In late 1975, the Legislature imposed an enrollment cap on ROC/ROP programs. The cap resulted in confusion and apprehension.

...the action taken by the Legislature was not to be construed as refutation of either the concept of regional occupational centers or programs or dissatisfaction with their achievements. Instead, the action constituted an attempt to control the mushrooming growth of state-level funding (Smith, 1979, p. 78).

California's Vocational Education in the 90s

Although slowed by the cap on enrollments, the ROC/ROP system continued to grow and improve through the 1980s and into the 1990s. The nation began to slip into another major economic recession in the 90s, which left the national and state governments scrambling for ways to pay for established programs. In the summer of 1992, the California Legislature went through a major debate to balance the budget and pay for programs. In the process, a proposal was raised to cut the ROC/ROP
budget by 50%. It was defeated, but all aspects of education suffered major budget cuts. If economic conditions do not improve, more budget cuts are expected in 1993.

Historical Development of the Riverside County Regional Occupational Program

Origin of the Riverside County ROP

In 1971, Hemet, San Jacinto, and Moreno Valley School Districts banded together to form a joint powers agreement for the first Regional Occupational Programs in the county. This agreement was dissolved a year later in order to participate in a countywide Regional Occupational Program formed in 1972 by Don F. Kennedy, the Riverside County Superintendent. The program had the support of all the school districts in the county.

The purpose of the Riverside County ROP as stated by Thomas A. Kurtz, the Director of ROP in 1986, is:

...to extend and augment the vocational educational opportunities of the youth of age 16 and older and adults in the county in order to prepare the students for an increasingly technological society in which generalized
training and skills were insufficient to prepare the students for the many employment opportunities which required special or technical training and skills (1986, p. 35).

The county ROP intended to train students and provide them with marketable skills for employment in the area in which they were trained or upgrade their skills to a level necessary to enter more advanced training (Kurtz, 1986). According to the State Education Code Section 52302.5 enacted in 1983, the Regional Occupational Program will:

1. provide individual counseling and guidance in vocational matters.
2. provide a curriculum which includes skill training in occupational fields having current and future need for such training.
3. provide an opportunity for students to acquire entry-level vocational skills which may lead to a combination work-study schedule.
4. provide for the upgrading of the vocational skills of students and for retraining where necessary.
5. maintain a pupil-teacher ratio which will enable students to achieve optimum benefits
from the instructional program.

6. assign the highest priority in services to youth from the age of 16 to 18 years, inclusive (California Education Code, Section 52303.5).

In its 20 year history, Riverside County’s ROP has grown to over 50 types of courses and over 600 separate classes. It currently has over 9,230 students enrolled. It underwent a regional accreditation review in 1985 and became fully accredited by the Western Association of Schools and Colleges. In 1992, the ROP was evaluated again by the Regional Accreditation Agency and received some of the highest marks in the state (Western Association of Schools & Colleges, 1991).

Riverside County Demographics

Riverside County begins with the western reaches of Corona, stretches east to the Colorado River, and is California’s fourth largest county. The western portion is home to two thirds of the population. Agriculture (mainly fruit crops) accounts for the bulk of the county’s economy.

Because of its closeness to Orange County and Los Angeles, and the lower cost of land and housing, the
western portions of the county have become bedroom communities for L.A. and Orange County business people. In the past decade, the city of Riverside and its surrounding communities have grown at a tremendous rate. Moreno Valley is ranked as one of the fastest growing areas in the United States.

Riverside, with its many suburbs and communities is the county’s urban center with the highest percentage of the population. This area also accounts for the largest number of ROP enrollments.

The ROP Student - Ethnic Profile

There is a significantly higher number of minority students enrolled in the ROP than in the overall minority population of Riverside County. Riverside County (and the State of California in general) show between a 50% and 60% white population, but the ROP only shows a 42% white enrollment (see Tables 1, 2, and 3).

Compared to Kurtz’ study in 1986, the 1990 Census Summary and the 1992 ROP attendance information shows an increase in the minority populations and ROP enrollments (see Tables 3, 4, and 5). The Hispanic enrollment in 1985 was 28%. This number increased to
40.6% in 1992, while the Riverside County population only showed a 26% Hispanic population.

Black enrollments remained at 10% in 1992, still double the black population of the county. Other minorities almost doubled their enrollment in the ROP when compared to their population in the county. Kurtz (1986) concluded that one of the reasons for this difference in the enrollments and the county population was that, "...ROP students come from a slightly lower socio-economic group" (p. 44).
### Table 1

1992 Ethnic Profile of California's Population

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>15,229,000</td>
<td>51.2</td>
</tr>
<tr>
<td>Hispanic / Latin American</td>
<td>7,677,000</td>
<td>25.8</td>
</tr>
<tr>
<td>Black / Afro American</td>
<td>1,639,000</td>
<td>5.5</td>
</tr>
<tr>
<td>Asian / Pacific Islander</td>
<td>2,112,000</td>
<td>7.1</td>
</tr>
<tr>
<td>American Indian / Eskimo / Aleut</td>
<td>180,000</td>
<td>.6</td>
</tr>
<tr>
<td>Other</td>
<td>2,923,000</td>
<td>9.8</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>29,760,000</strong></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on 1992 Census Summary Report  
State Census Data Center

### Table 2

1992 Ethnic Profile of Riverside County's Population

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>754,140</td>
<td>64.4</td>
</tr>
<tr>
<td>Hispanic / Latin American</td>
<td>307,514</td>
<td>26.3</td>
</tr>
<tr>
<td>Black / Afro American</td>
<td>59,966</td>
<td>5.1</td>
</tr>
<tr>
<td>Asian / Pacific Islander</td>
<td>38,349</td>
<td>3.3</td>
</tr>
<tr>
<td>American Indian / Eskimo / Aleut</td>
<td>8,393</td>
<td>.7</td>
</tr>
<tr>
<td>Other</td>
<td>2,051</td>
<td>.2</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>1,170,413</strong></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on 1992 Census Summary Report  
State Census Data Center
### Table 3

1992 Ethnic Profile of ROP High School Age & Adult Student Population

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>6,153</td>
<td>42.0</td>
</tr>
<tr>
<td>Hispanic / Latin American</td>
<td>5,948</td>
<td>40.6</td>
</tr>
<tr>
<td>Black / Afro American</td>
<td>1,538</td>
<td>10.5</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>132</td>
<td>.9</td>
</tr>
<tr>
<td>Asian</td>
<td>395</td>
<td>2.7</td>
</tr>
<tr>
<td>Filipino</td>
<td>264</td>
<td>1.8</td>
</tr>
<tr>
<td>American Indian / Eskimo / Aleut</td>
<td>220</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Student Population</strong></td>
<td>14,650</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on Riverside County ROP Final Attendance Figures for 1992

### Table 4

1985 Ethnic Profile of ROP Student Population

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3,824</td>
<td>55.0</td>
</tr>
<tr>
<td>Hispanic / Latin American</td>
<td>1,946</td>
<td>28.0</td>
</tr>
<tr>
<td>Black / Afro American</td>
<td>658</td>
<td>10.0</td>
</tr>
<tr>
<td>Asian / Pacific Islander</td>
<td>245</td>
<td>4.0</td>
</tr>
<tr>
<td>American Indian / Eskimo / Aleut</td>
<td>189</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Student Population</strong></td>
<td>6,862</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(Kurtz, 1986, p. 42)
Table 5

Student Profile by ROP Vocational Training Area (given in %)

<table>
<thead>
<tr>
<th>ROP Vocational Training Area</th>
<th>Ind-Alsk</th>
<th>Asian</th>
<th>Pac Isl</th>
<th>Flip</th>
<th>Black</th>
<th>Spanish</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>1.8</td>
<td>2.6</td>
<td>1.2</td>
<td>1.8</td>
<td>7.6</td>
<td>39.8</td>
<td>45.2</td>
</tr>
<tr>
<td>Ag mech. Floral Landscape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>2.0</td>
<td>1.0</td>
<td>.5</td>
<td>2.0</td>
<td>4.5</td>
<td>46.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Auto body Auto tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Service</td>
<td>1.2</td>
<td>3.2</td>
<td>.7</td>
<td>1.1</td>
<td>10.7</td>
<td>46.3</td>
<td>36.8</td>
</tr>
<tr>
<td>Banking Child care Cosmetology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inst Asst.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality &amp; Rec.</td>
<td>1.1</td>
<td>3.0</td>
<td>.8</td>
<td>.3</td>
<td>12.8</td>
<td>41.8</td>
<td>40.2</td>
</tr>
<tr>
<td>Hotel Restaurant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2.8</td>
<td>2.8</td>
<td>1.1</td>
<td>1.2</td>
<td>11.6</td>
<td>38.1</td>
<td>42.4</td>
</tr>
<tr>
<td>Construction Graphic Arts Misc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>1.3</td>
<td>3.0</td>
<td>.5</td>
<td>3.9</td>
<td>12.5</td>
<td>34.6</td>
<td>44.2</td>
</tr>
<tr>
<td>others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing &amp; Office.</td>
<td>1.0</td>
<td>2.8</td>
<td>1.2</td>
<td>.9</td>
<td>9.0</td>
<td>42.1</td>
<td>43.0</td>
</tr>
<tr>
<td>Retail Ticketing Travel Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total ROP %</td>
<td>1.5</td>
<td>2.7</td>
<td>.9</td>
<td>1.8</td>
<td>10.5</td>
<td>40.6</td>
<td>42.0</td>
</tr>
<tr>
<td>Total ROP</td>
<td>220</td>
<td>395</td>
<td>132</td>
<td>264</td>
<td>1,538</td>
<td>5,948</td>
<td>6,153</td>
</tr>
</tbody>
</table>

Based on Riverside County ROP Final Attendance Figures for 1992.
Employers' Perceptions of Vocational Education

According to Doeringer and Vermeulen (1981), vocational education has two basic purposes: first, to increase economic efficiency and growth by meeting the nation's need for a skilled work force and, secondly, to improve the employability, promotability, earning capacity, job satisfaction, and the career process of individual workers.

Our nation's businesses and industries spend substantial amounts of money on their employees. The process of hiring and getting new employees functioning at maximum capacity can be a large investment. Some of these costs include: "...recruitment, screening, testing, interviewing, entering employees on payroll and fringe benefit rolls, direct and indirect costs of training" (Kurtz, 1986, p. 46).

Because of the large cost involved in hiring new employees, employers will seek the best returns for their investment. They look for highly motivated, highly trained, and highly skilled employees in order to reduce the cost of employer training and reduce the time necessary to reach peak performance. Employers also attempt to determine the lowest possibility for turnover in someone they are hiring. According to
Doeringer and Vermeulen (1981), employers seek new employees with the following characteristics:

They can be taught their particular job at the least cost and show the greatest promise for promotability; they embody the best work attitudes and habits and 'ascriptive' qualities that assure good relations with other employees and good work performance; they have the lowest probability of turnover (p. 5).

The Panel on Secondary School Education for the Changing Work Place from the National Academy of Science (1984) in its publication, "High Schools and the Changing Workplace: The Employers' View", presented the thoughts of private businesses and industries who hire high school graduates. The panel's purpose was to identify the competencies needed by high school graduates who would directly enter the workplace. It represented a wide variety of employers, who studied the future employment opportunities for graduating high school students and requirements to fill those jobs. They found that large numbers of students were graduating from high school without the necessary basic skills to enter the workplace. The Council on California Competitiveness (1992) in a report entitled,
"California's Jobs and Future", stated that, "Among the largest firms in California, 63 percent report that new applicants for entry-level positions lack a satisfactory education. Overall, only an estimated 46 percent of new job applicants demonstrate adequate basic math and verbal skills on written examinations" (p. 67). The Panel on Secondary School Education looked only at the competencies a graduating high school student would need upon entering the work force directly after graduation. They determined that high school students not continuing their education needed the same competencies as those students who were. After all, those students going on to college would get more reading, writing and practice with basic skills. In their findings, the panel listed these as some of the core competencies high school students needed to enter the work force:

The ability to learn and to adapt to changes in the work place. The core competencies including the ability to read, write, reason, and compute; an understanding of American social and economic life; a knowledge of the basic principles of the physical and biological sciences, experience with cooperation and conflict resolution in groups, and
possession of attitudes and personal habits that make for a dependable, responsible, adaptable, and informed worker and citizen, and a positive attitude and sound work habits (Panel on Secondary School Education, 1984, p. 19).

The panel discovered that most people average ten jobs in their lifetime and that the military was the single largest employer of young people. Over half of those obtaining employment directly from high school worked in the retail or service trades for their first job. It suggested that improving the quality of high school graduates and sending better equipped young people out into the job market would help them overcome the difficulties of finding their first crucial jobs.

Employers were asked what they needed and looked for in future employees. The single most frequent answer was, "...a person who is able and willing to learn throughout a working lifetime" (Kurtz, 1986, p. 49). The panel then concluded that high school graduates needed a solid foundation in basic skills, fundamental knowledge, good attitudes and understanding, and interpersonal skills that would relate to work habits. A further conclusion was made that public schools could not train students for
specific jobs and that some employer training would be necessary.

Miscommunication: Employers, Teachers, and Students

Several years later, a report from the Secretary’s Commission on Achieving the Necessary Skills ("SCANS" as designated by the President of the United States) titled, "Learning A Living; A Blueprint For High Performance", found the same basic conclusions as the 1984 panel on Secondary Education had found. "A high-performance workplace demands workers who have a solid foundation in the traditional basic academic skills, in the thinking skills necessary to put knowledge to work, and in the personal characteristics that make a worker confident, trustworthy, and responsible" (SCANS, 1992, p. 5).

It is obvious that we have studied the problem and know what it is, or do we really? "Despite the widespread agreement among employers and educators that too many young people complete school unequipped for the workplace, there has been no clear communication about what the schools should do" (SCANS, 1992, p. 5).

The SCANS report titled, "What Work Requires of Schools", indicates what schools should be doing is
very confusing and complex. Some of the reasons for the lack of improvement in education is confusing signals and miscommunication between business and education. Some employers are asking for employees with a solid background in the basics and yet others want their new hires trained completely in every detail to assume the job.

The American workplace is changing and in the next ten years, the workplace will look as different from today's, as today's looks from the Henry Ford production years.

Workplaces today are characterized by routinized and repetitive tasks, and workers are not expected to think. As SCANS put it, the high performance workplaces of the future will be characterized by customized production, flexible automation, and decentralized control. Workers will have to make correct decisions, and they will have to think.

Workplaces organized along the lines of the traditional mass production model can no longer prosper. Like the dinosaur with its limited intelligence, doomed to extinction at the hands of smaller but craftier animals, the traditional model cannot survive the competition from high-
performance organizations that depend on the intelligence and ingenuity of their managers and employees. High-performance organizations are relentlessly committed to excellence, to produce quality, and to customer service. These are the organizations that have revived American manufacturing competitiveness and compete for the nation's mark of business distinction... (1991, p. 4).

Work and the world are changing, but schools are very slow in keeping up with change. There is a story that says if Rip Van Winkle woke up today, he would be very lost and confused until he found his old schoolhouse because it had not changed much in the past 100 years. For the past decade, educational reform has been a highly discussed subject in businesses, industries, and schools. Hundreds of recommendations have been made, educators have responded, yet little has changed. Confusing and contradictory reports from employers and research that spell out everything from very general to very specific concerns that all contribute to the problem.

The level of detail communicated varies from the very general (ability to solve problems) to the
very specific (perform a tack weld on sheet metal). As a result, the operational implications and meaning of these lists are frequently difficult to determine. They do not provide direct links to the "stuff" of schools or a sense of the work enabled by the skills identified. (SCANS, 1991, p. 5)

Job Performance: A Measure of Employer Satisfaction

To determine employer satisfaction, one must have a good understanding of the concept of overall job performance. According to Franchak (1981), job performance is determined by three basic variables: motivation, skills, and role conception (see Figure 1). Motivation (job motivation) has to do with how hard an employee works, his desire to learn, dedication to the job, cooperation with others, the value placed on intrinsic outcomes, and the setting of performance goals. Skills (job skills) involve one's aptitude or basic abilities, training in basic academic and technical skills, and job experience. Role Conception (an understanding of the job) refers to the employees' idea about what the job involves.

These three variables, either together or
separately, directly affect job performance. A highly skilled and motivated employee will not likely rate very well on job performance if he has a wrong conception of the job. He may work very hard, and do so very skillfully, but if he is not doing the right job, it can be meaningless.

Figure 1 - A Model of Job Performance
(Franchak, 1981, p. 23)

It is a bit more obvious that an employee with low skills will rate low on job performance. He may be highly motivated and understand the job well, but lack
the necessary skills to carry out the job. Likewise, an employee who lacks motivation is not apt to do well in job performance. With low motivation, the employee is not likely to put his skills or understanding of the job to work.

Ten years later, in the 1991 report from SCANS, a similar model was presented to show the three foundations of job performance in today’s workplace (see Figure 2).

Figure 2 - Foundations of Job Performance
(SCANS, 1991)
The first foundation is Basic Skills. Studies show our schools are graduating students who lack basic skills. These skills are a bare minimum and an essential requirement for successful employment.

The second foundation is Thinking Skills. Most of today's work requires more than Basic Skills. It requires problem solving skills, the ability to think, analyze, and evaluate.

Lastly, and maybe most importantly, are personal qualities. In a 1986 study, Bill Stevenson noted that 70% of the employers he surveyed indicated that a positive attitude was the most important factor that they considered when hiring someone. All the skills in the world would be useless without good personal qualities. They are of such vital importance that they can disqualify an employee at any level.

Franchak (1981) points out that many factors affect these three variables of job performance. Good or bad, vocational education is only one factor. He says:

If all the extraneous factors could be controlled (e.g., individual motives, job characteristics, organizational reward systems, underlying aptitudes, job experience, other training), then
the effects of vocational education could be easily and unambiguously determined. In any real-life study, these uncontrolled factors have such a large influence that effects from the factors being investigated cannot be accurately measured. (p. 25)

Franchak (1981) gives two suggestions to help tease out subtle effects. First, use large numbers of subjects. Secondly, whenever possible, measure and control the factors. "For example, comparing vocational education graduates with nonvocational graduates within the same job classification, organization, and length of service would control many factors" (p. 25).

Co-op Education (On The Job Training)

While studying the ROP placement records for 1992, it was noted that those areas of study utilizing the "Community Classroom" (Co-op Method) had significantly higher job placements. In a 1985 study of Co-op vs. in-school-laboratory type vocational education, Ken Hogue determined that a combination of both types was most successful. He found that 84% of the employers surveyed would try to keep the student as a regular
employee after graduation. Kane (1985) noted that related work reinforces and motivates students in the educational process. In a 1989 study of vocational Co-op agricultural programs, Pals noted five program benefits: acceptance of responsibility, self-confidence, learning on their own, independence, and working with others.

Summary

In this Review of Literature, the first three sections explore a brief history of vocational education in the United States and California. Section Three discusses the development and history of California's Regional Occupational Programs, and points out key legislation that brought the ROC/ROPs into existence.

Section Four reviews the development of the Riverside County Regional Occupational system. It briefly examines Riverside's demographics, population, and, more specifically, the ROP's student population.

Section Five investigates employers' perceptions of Vocational Education. It also probes into some of the problems with Vocational Education and education in general.

Section Six ends with hints for better control of research findings when surveying for employer perceptions.

Section Seven concludes the review of literature with a brief look at Co-op versus in-school-laboratory type vocational education.
CHAPTER THREE

Research Design and Procedures

Introduction

This study examined employers' perceptions of ROP trained employees who graduated and were employed during 1992. The main focus of this study was to investigate the effects of ROP training on overall job performance and promotability.

Theoretical Constructs

Employers spend large amounts of money hiring and processing new employees. "Costs include recruitment, screening, testing, interviewing, entering employees on payroll and fringe benefit rolls, and direct and indirect costs of training new employees" (Kurtz, 1986, p. 6). Employers want to get the most for their money, and look for the best quality and lowest employee turnover. Doeringer and Vermeulen (1985) found that employers look for new employees who:

...can be taught their particular job at the least cost and show the greatest promise for promotability; ...embody the best work attitudes
and habits and 'ascriptive' qualities that assure good relations with other employees and good work performance; ... have the lowest probability of turnover (p. 5).

Most jobs have a certain uniqueness about them and require some on-the-job training, and by hiring employees with more training and skills, costs of this training would be lowered.

Personal Qualities - was a measure of motivation, responsibility, self-management, honesty and others. Skills - has to do with the employee’s basic, thinking, and job skills. Understanding the job role - related to work ethic, understanding the rules, and what the job involves. The employee may have good personal qualities and be highly skilled, but if he does not understand what should be done and is doing it wrong, all the effort would be wasted.

Overall job performance, according to Franchak (1981), can be broken down into the following areas: level of skills, quality of work, quantity of work, technical knowledge, attendance, punctuality, ability to work independently, cooperation with co-workers and superiors, communication skills, problem-solving skills, interpersonal skills, safety, initiative, and
attitudes. O’Reilly and Asche (1979) added these areas in overall job performance: operation of tools and equipment, basic academic skills, overall satisfactoriness, acceptance of responsibility, job skills, supervision required, compliance with rules and policies, work habits, and promotability.

The purpose of the ROP was to provide training to high school students to those no longer in school. This training was provided in four different categories with four different goals: entry level job training, preparation for immediate job placement and assistance in finding and maintaining work, upgrading current skills, and preparation for higher education.

Research Design

This research was designed to measure the effectiveness of ROP training in Riverside County, and was accomplished by surveying the employers of the 1992 ROP graduates. A questionnaire was mailed to each employer in March 1993.

The employers were requested to supply their company name, employers’ title, number of employees, and major product or service. The information was then used to determine the overall characteristics of the
employers and companies surveyed.

The study sought answers to the following research questions concerning former ROP students:

1. What are the employers' perceptions of the overall job performance and potential advancement or promotability?
2. What are the employers' perceptions of the overall personal qualities?
3. What are the employers' perceptions of the overall skills?
4. What are the employers' perceptions of the overall understanding of the job role?
5. What are the employers' perceptions of the overall preparation of the ROP employee compared to other employees?

Employer Demographics

The participants in this study were all employers of 1992 Riverside County Regional Occupational Program graduates. The employers were mainly from Riverside County with a few from neighboring counties. Most of these participants have been in business for less than ten years. The sizes of their businesses varied from small shops to large corporations (see Table 6).
<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Number of Companies</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>32</td>
<td>17%</td>
</tr>
<tr>
<td>6 - 10</td>
<td>26</td>
<td>14%</td>
</tr>
<tr>
<td>11 - 15</td>
<td>32</td>
<td>17%</td>
</tr>
<tr>
<td>16 - 20</td>
<td>7</td>
<td>4%</td>
</tr>
<tr>
<td>21 - 25</td>
<td>12</td>
<td>6%</td>
</tr>
<tr>
<td>26 - 30</td>
<td>11</td>
<td>6%</td>
</tr>
<tr>
<td>31 - 35</td>
<td>15</td>
<td>8%</td>
</tr>
<tr>
<td>36 - 40</td>
<td>7</td>
<td>4%</td>
</tr>
<tr>
<td>41 - 50</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>51 - 60</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>61 - 70</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>71 - 100</td>
<td>12</td>
<td>6%</td>
</tr>
<tr>
<td>Over 100</td>
<td>16</td>
<td>9%</td>
</tr>
</tbody>
</table>

The list of employers was compiled from the 1992 ROP placement records. ROP instructors are required to generate placement files for each student completing a program and finding employment. There were 439 placements in 1992, but because of incomplete addresses and lack of other pertinent information on the placement records, only 400 surveys were useable and mailed to employers. According to the guidelines for vocational education research, a sample return of 196 surveys was required to complete this study (Consortium
After research of the literature it was determined that a model combining Franchak's 1981 Model of Job Performance and the Three Foundations of Job Performance given by SCANS (1991) (see Figures 1 and 2), would best describe the overall job performance and promotability.

There were 14 response items addressing personal qualities (variables 5, 6, 9, 10, 12, 13, 14, 17, 24D, E, & G, and 25D, E, & G), eleven dealing with skills (variables 5, 7, 8, 15, 18, 24A, B, & C, and 25A, B, & C), and ten for understanding the job role (variables 5, 9, 10, 11, 24C, F, & G, and 25C, F, & G). Four questions on the instrument asked for comparison of ROP trained entry level employees with non-ROP entry level employees.

To maximize the returns of the survey, the instrument was designed to be short, easily read and understood, and quickly answered. It was not expected to take more than 10 minutes to complete.

Reliability and Validity
A sample instrument was submitted to two Regional Occupational Program Principals and the ROP Director who suggested several changes. The revision was resubmitted, and after some additional changes, was approved.

The questionnaire was field-tested with 10 employers familiar with the ROP who were not part of the study sample. Based on the response of all previously mentioned, it was determined that the instrument was adequate to measure the variables of overall job performance and promotability.

Methods and Procedures

The 1992 Regional Occupational Program placement files were obtained from the ROP office in Riverside. A total of 439 records were found, but because of incomplete and missing information, only 400 were useable.

The Employer Survey Instrument consisted of a two-page questionnaire (see Appendix C) which was addressed to the supervisor of the former ROP student. The
student’s name was placed on an accompanying letter of instruction (see Appendix A) which was not to be returned with the survey (in order to protect the privacy of the student). The occupational training area was included on the instrument so that the surveys could be sorted by training areas. Instructions on the letter accompanying the survey explained that the information would be used to determine the effectiveness of the ROP and indicate areas for potential improvement.

Before the survey was mailed, an application for permission to do research within the Riverside County Office of Education was submitted to the Office’s Deputy Superintendent and permission was granted. The first employer letters (see Appendix A) and questionnaires (see Appendix C) were mailed in March 1993. The employers were asked to return the survey in a self-addressed, stamped envelope after completion. Two weeks after the first letters were mailed (in order to assure a high return rate), a second letter (see Appendix B) and questionnaire was sent out to those who
had not yet returned the first.

**Data Analysis**

The data were analyzed to determine the effectiveness of ROP training in personal qualities, skills, understanding the job role, overall job performance and promotability, and how ROP entry level employees compared to other entry level employees.

The data were tabulated and analyzed (see Tables 8 - 20) by the seven occupational areas: Agricultural, Transportation, Personal Service, Hospitality and Recreation, Manufacturing, Medical, and Marketing Occupations (shown in Table 5). The Data were then analyzed for significant differences and trends.
Chapter IV
Findings and Discussion

Findings

The data from the survey which was sent to employers of the 1992 graduates of the ROP program is shown in three sections. The first section was covered by variables 5 through 18 (see Appendix C) and requested employers to rate the level of performance for the employee (ROP student). The second section addressed variable 24 A-H (see Appendix C) and inquired of employers in what areas they felt the employees were best prepared by their ROP training. The third section (variable 25 A-H – see Appendix C) asked employers what additional preparation or training would be helpful to them. The analyzed data indicated that there was a consistency through the three sections.

Variables 20 through 23 addressed research question five and requested employers to compare ROP-trained employees with non-ROP employees.

Survey Return

In 1992, 439 graduates were employed through the Riverside County ROP Office. Due to incomplete or missing information, only 400 of these placement files
were useable.

Four hundred questionnaires were mailed to qualified individuals who either employed or managed graduates of the ROP. Of these 400 sent, only 199 were returned and this represented a 50% return rate. According to the Consortium for the Development of Professional Materials for Vocational Education (1983), this was an adequate sample size for a grouping of 400 questionnaires.

Table 7 indicates the surveyed occupational areas and the responses from those areas. It is noteworthy that the Medical training areas showed the highest return rate (60%) and the Transportation return rate ranked lowest (29%).

TABLE 7
SURVEY RETURN

<table>
<thead>
<tr>
<th>ROP Vocational Training Area</th>
<th>Number of Surveys Mailed</th>
<th>Number of Surveys Returned</th>
<th>Percentage of Surveys Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>13</td>
<td>5</td>
<td>38%</td>
</tr>
<tr>
<td>Transportation</td>
<td>7</td>
<td>2</td>
<td>29%</td>
</tr>
<tr>
<td>Personal Service</td>
<td>116</td>
<td>61</td>
<td>53%</td>
</tr>
<tr>
<td>Hospitality &amp; Recreation</td>
<td>64</td>
<td>32</td>
<td>50%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>Medical</td>
<td>92</td>
<td>55</td>
<td>60%</td>
</tr>
<tr>
<td>Marketing</td>
<td>97</td>
<td>40</td>
<td>41%</td>
</tr>
<tr>
<td>ROP TOTAL</td>
<td>400</td>
<td>199</td>
<td>50%</td>
</tr>
</tbody>
</table>
Research Question #1

"What are the employers' perceptions of the overall job performance and potential advancement or promotability?"

Figure 3 indicates that job performance (for the purpose of this study) is made up of three variables: personal quality, skills, and understanding of the job role. These variables were analyzed separately in Research Questions 2, 3, and 4.

Table 8 reflects the mean scores for variables 5-18 (ranked by level of performance) by each ROP vocational training area. A Likert Rating Scale was used (with 1 being outstanding and 5 unsatisfactory) for these variables.

An analysis of the data indicated that nearly all of the mean scores were between 2 and 3 on the Likert Scale and that there was no significant statistical difference between the ROP vocational training areas. Data from the Transportation training area had the highest overall mean score (2.0). Manufacturing had the lowest (2.8). The total overall ROP mean score was 2.4.

Table 9 indicates how employers felt the employees were best prepared by the ROP (variable 24). Those
responding from the Medical training area ranked highest (50.5%). Response for the Manufacturing area ranked lowest (28.1%). The total overall ROP response was 37%.

How employers responded to variable 25 is presented in Table 10. The overall response to this category was 16.4%. Responses from the Manufacturing area ranked the highest (28.1%). Representatives from the Agriculture area placed lowest (10%).

Although there was no significant statistical difference between the areas, and all the mean scores were positive, certain trends were observed between the groups. The Transportation, Agriculture, and Medical training areas consistently responded more positively than the other areas. Manufacturing scored least positive on all three tables.
### TABLE 8

Research Question #1

EMPLOYERS PERCEPTIONS OF OVERALL JOB PERFORMANCE

Mean Score by Occupational Group (Var 5 - 18)

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Outstanding</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
<td>2.8</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
<td>10</td>
</tr>
<tr>
<td>2 = Above Expected</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.7</td>
<td>2.6</td>
<td>12</td>
</tr>
<tr>
<td>3 = Meets Expected</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>2.3</td>
<td>2.7</td>
<td>2.6</td>
<td>11</td>
</tr>
<tr>
<td>4 = Below Expected</td>
<td>2.6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.9</td>
<td>3.0</td>
<td>2.3</td>
<td>2.8</td>
<td>2.6</td>
<td>13</td>
</tr>
<tr>
<td>5 = Unsatisfactory</td>
<td>2.4</td>
<td>1.0</td>
<td>2.2</td>
<td>2.6</td>
<td>3.0</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>4</td>
</tr>
<tr>
<td>5. Employees Work</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.8</td>
<td>2.4</td>
<td>8</td>
</tr>
<tr>
<td>6. Attn. to Detail</td>
<td>2.2</td>
<td>2.5</td>
<td>2.2</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
<td>5</td>
</tr>
<tr>
<td>7. Job Skills</td>
<td>2.0</td>
<td>2.0</td>
<td>2.4</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.7</td>
<td>2.5</td>
<td>9</td>
</tr>
<tr>
<td>8. Tech. Knowledge</td>
<td>2.0</td>
<td>2.0</td>
<td>2.3</td>
<td>2.8</td>
<td>3.5</td>
<td>2.3</td>
<td>2.6</td>
<td>2.4</td>
<td>7</td>
</tr>
<tr>
<td>9. Attn. &amp; Punct.</td>
<td>2.0</td>
<td>1.0</td>
<td>1.9</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.1</td>
<td>2.1</td>
<td>1</td>
</tr>
<tr>
<td>10. Use of Time</td>
<td>2.0</td>
<td>1.5</td>
<td>2.2</td>
<td>2.7</td>
<td>2.0</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>3</td>
</tr>
<tr>
<td>11. Compliance / Rules</td>
<td>2.5</td>
<td>1.5</td>
<td>2.5</td>
<td>2.9</td>
<td>2.3</td>
<td>2.8</td>
<td>2.9</td>
<td>2.7</td>
<td>14</td>
</tr>
<tr>
<td>12. Accept Respons.</td>
<td>2.0</td>
<td>1.5</td>
<td>2.2</td>
<td>2.5</td>
<td>3.0</td>
<td>2.1</td>
<td>2.4</td>
<td>2.3</td>
<td>2</td>
</tr>
<tr>
<td>13. Min. Supervision</td>
<td>2.4</td>
<td>2.0</td>
<td>2.3</td>
<td>2.7</td>
<td>2.8</td>
<td>2.3</td>
<td>2.6</td>
<td>2.4</td>
<td>6</td>
</tr>
<tr>
<td>14. Gets Along</td>
<td>2.4</td>
<td>2.0</td>
<td>2.5</td>
<td>2.6</td>
<td>3.0</td>
<td>2.1</td>
<td>2.6</td>
<td>2.4</td>
<td>199</td>
</tr>
</tbody>
</table>

Group Mean Total: 2.4

Group Rank: 6

Total Respon: 199

70
TABLE 9

Research Question #1

EMPLOYERS PERCEPTIONS OF OVERALL JOB PERFORMANCE

(Var 24) How are employees from ROP best prepared?

Figures indicate the percent selected in each category

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Job Skills</td>
<td>40</td>
<td>0</td>
<td>6.7</td>
<td>25</td>
<td>0</td>
<td>65.5</td>
<td>22.5</td>
<td>29.7</td>
<td>6</td>
</tr>
<tr>
<td>B. Tech. Knowledge</td>
<td>40</td>
<td>0</td>
<td>21.3</td>
<td>25</td>
<td>0</td>
<td>54.6</td>
<td>20</td>
<td>30.7</td>
<td>5</td>
</tr>
<tr>
<td>C. Safety</td>
<td>40</td>
<td>0</td>
<td>13.1</td>
<td>15.6</td>
<td>75</td>
<td>43.6</td>
<td>7.5</td>
<td>22.6</td>
<td>7</td>
</tr>
<tr>
<td>D. Coop. with Others</td>
<td>80</td>
<td>100</td>
<td>72.1</td>
<td>56.3</td>
<td>100</td>
<td>63.6</td>
<td>60</td>
<td>65.8</td>
<td>2</td>
</tr>
<tr>
<td>E. Willing to Learn</td>
<td>40</td>
<td>50</td>
<td>85.3</td>
<td>75</td>
<td>25</td>
<td>60</td>
<td>62.5</td>
<td>69.4</td>
<td>1</td>
</tr>
<tr>
<td>F. Work Ethic</td>
<td>0</td>
<td>100</td>
<td>29.5</td>
<td>31.3</td>
<td>0</td>
<td>52.7</td>
<td>40</td>
<td>37.7</td>
<td>4</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>0</td>
<td>100</td>
<td>49.2</td>
<td>15.6</td>
<td>25</td>
<td>54.6</td>
<td>55</td>
<td>45.2</td>
<td>3</td>
</tr>
<tr>
<td>H. Other</td>
<td>0</td>
<td>0</td>
<td>13.1</td>
<td>0</td>
<td>0</td>
<td>9.1</td>
<td>5</td>
<td>7.5</td>
<td>8</td>
</tr>
</tbody>
</table>

Group Total 30 43.8 36.3 30.5 28.1 50.5 34.1 37
Group Rank 6 2 3 5 7 1 4
Total responses 5 2 61 32 4 55 40 199
TABLE 10

Research Question #1

EMPLOYERS PERCEPTIONS OF OVERALL JOB PERFORMANCE

(Var 25) What additional preparation would be helpful?

Figures indicate the percent selected in each category

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Job Skills</td>
<td>20</td>
<td>0</td>
<td>37.7</td>
<td>40.6</td>
<td>75</td>
<td>14.6</td>
<td>25</td>
<td>29.2</td>
<td>2</td>
</tr>
<tr>
<td>B. Tech. Knowledge</td>
<td>20</td>
<td>50</td>
<td>34.4</td>
<td>15.6</td>
<td>75</td>
<td>29.1</td>
<td>42.5</td>
<td>32.2</td>
<td>1</td>
</tr>
<tr>
<td>C. Safety</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.3</td>
<td>0</td>
<td>20</td>
<td>10</td>
<td>8.5</td>
<td>7</td>
</tr>
<tr>
<td>D. Coop. with Others</td>
<td>0</td>
<td>0</td>
<td>6.6</td>
<td>6.3</td>
<td>0</td>
<td>9.1</td>
<td>5</td>
<td>6.5</td>
<td>8</td>
</tr>
<tr>
<td>E. Willing to Learn</td>
<td>20</td>
<td>0</td>
<td>4.9</td>
<td>0</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>11.1</td>
<td>5</td>
</tr>
<tr>
<td>F. Work Ethic</td>
<td>0</td>
<td>0</td>
<td>8.2</td>
<td>25</td>
<td>25</td>
<td>10.9</td>
<td>22.5</td>
<td>14.6</td>
<td>4</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>20</td>
<td>0</td>
<td>16.4</td>
<td>6.3</td>
<td>25</td>
<td>25.5</td>
<td>22.5</td>
<td>18.6</td>
<td>3</td>
</tr>
<tr>
<td>H. Other</td>
<td>0</td>
<td>50</td>
<td>13.1</td>
<td>9.4</td>
<td>0</td>
<td>7.3</td>
<td>7.5</td>
<td>9.5</td>
<td>6</td>
</tr>
</tbody>
</table>

Group Total 10 12.5 15.2 13.7 28.1 17.1 18.8 **16.4**

Group Rank 7 6 4 5 1 3 2

Total responses 5 2 61 32 4 55 40 199
Research Question #2

"What are the employer’s perceptions of the overall personal qualities?"

Table 11 presents those variables addressing personal qualities (5,6,9,10,12,13,14,17). The mean score from the Manufacturing training area’s respondents was 3.0 (meets expected). All other training area responders scored more positively. Transportation scored highest at 1.9. The mean score for all ROP participants was 2.4.

Table 12 shows the percent of responses to variable 24 D, E, and G. Responses from the Transportation area scored highest (83.3%). Those who participated from the Agricultural area scored lowest (40%). The overall ROP score was 60.1%.

Table 13 shows the percentage of responses to variable 25 D, E, and G. Medical ranked the highest (18.2%) and Transportation scored lowest (0%). The overall ROP score was 10.8%.

When personal qualities were separated and compared to overall job performance, there was no difference in the first set of variables (Tables 8 and 11), but variables 24 and 25 showed a significant difference. When employers were asked in what areas
ROP employees were best trained (variable 24), personal qualities ranked significantly higher (60% vs. 37%). Personal qualities also ranked lower concerning the need for extra training (10.8% vs. 16.4%) (variable 25).

**TABLE 11**

Research Question #2

EMPLOYERS PERCEPTIONS OF PERSONAL QUALITIES

Mean Score by Occupational Group (Var 5, 6, 9, 10, 12, 13, 14, 17)

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Outstanding</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
<td>2.8</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
<td>7</td>
</tr>
<tr>
<td>2 = Above Expected</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.7</td>
<td>2.6</td>
<td>8</td>
</tr>
<tr>
<td>3 = Meets Expected</td>
<td>2.4</td>
<td>1.0</td>
<td>2.2</td>
<td>2.6</td>
<td>3.0</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>3</td>
</tr>
<tr>
<td>4 = Below Expected</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.8</td>
<td>2.4</td>
<td>5</td>
</tr>
<tr>
<td>5 = Unsatisfactory</td>
<td>2.0</td>
<td>2.0</td>
<td>2.4</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.5</td>
<td>2.6</td>
<td>6</td>
</tr>
<tr>
<td>13. Min. Supervision</td>
<td>2.0</td>
<td>2.0</td>
<td>2.3</td>
<td>2.8</td>
<td>3.5</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
<td>4</td>
</tr>
<tr>
<td>14. Gets Along</td>
<td>2.0</td>
<td>1.0</td>
<td>1.9</td>
<td>2.6</td>
<td>2.3</td>
<td>2.3</td>
<td>2.1</td>
<td>2.1</td>
<td>1</td>
</tr>
<tr>
<td>17. Willing to Learn</td>
<td>2.0</td>
<td>1.5</td>
<td>2.2</td>
<td>2.5</td>
<td>3.0</td>
<td>2.1</td>
<td>2.4</td>
<td>2.3</td>
<td>2</td>
</tr>
</tbody>
</table>

Group Mean Total 2.2 1.9 2.3 2.7 3.0 2.3 2.5 **2.4**

Group Rank 2 1 3 6 7 4 5

Total Responses 5 2 61 32 4 55 40 199
### TABLE 12

Research Question #2

EMPLOYERS PERCEPTIONS OF PERSONAL QUALITIES
(Var 24) How are employees from ROP best prepared?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Coop. with Others</td>
<td>80</td>
<td>100</td>
<td>72.1</td>
<td>56.3</td>
<td>100</td>
<td>63.6</td>
<td>60</td>
<td>65.8</td>
<td>2</td>
</tr>
<tr>
<td>E. Willing to Learn</td>
<td>40</td>
<td>50</td>
<td>85.3</td>
<td>75</td>
<td>25</td>
<td>60</td>
<td>62.5</td>
<td>69.4</td>
<td>1</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>0</td>
<td>100</td>
<td>49.2</td>
<td>15.6</td>
<td>25</td>
<td>54.6</td>
<td>55</td>
<td>45.2</td>
<td>3</td>
</tr>
<tr>
<td>Group Total</td>
<td>40</td>
<td>83.3</td>
<td>68.9</td>
<td>54.2</td>
<td>50</td>
<td>59.4</td>
<td>59.2</td>
<td>60.1</td>
<td></td>
</tr>
<tr>
<td>Group Rank</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses</td>
<td>5</td>
<td>2</td>
<td>61</td>
<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 13

Research Question #2

EMPLOYERS PERCEPTIONS OF PERSONAL QUALITIES
(Var 25) What additional preparation would be helpful?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Coop. with Others</td>
<td>0</td>
<td>0</td>
<td>6.6</td>
<td>6.3</td>
<td>0</td>
<td>9.1</td>
<td>5</td>
<td>6.5</td>
<td>3</td>
</tr>
<tr>
<td>E. Willing to Learn</td>
<td>20</td>
<td>0</td>
<td>4.9</td>
<td>0</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>11.1</td>
<td>2</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>20</td>
<td>0</td>
<td>16.4</td>
<td>6.3</td>
<td>25</td>
<td>25.5</td>
<td>22.5</td>
<td>18.6</td>
<td>1</td>
</tr>
<tr>
<td>Group Total</td>
<td>13.3</td>
<td>0</td>
<td>9.3</td>
<td>4.2</td>
<td>16.7</td>
<td>18.2</td>
<td>14.2</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>Group Rank</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses</td>
<td>5</td>
<td>2</td>
<td>61</td>
<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>
Research Question #3

"What are the employers’ perceptions of overall skills?"

Table 14 shows only those variables that pertain to skills (5, 7, 8, 15, and 18). The overall ROP mean score for skills was 2.5. Transportation scored best (2.2) and Hospitality and Recreation was last (2.7).

Table 15 shows how employers responded to variable 24. The overall ROP response rate was 25% with the Medical area leading at 54.6% and Transportation not receiving any responses.

Table 16 shows how employers responded to variable 25. The overall ROP response rate was 24.4%. Manufacturing placed highest (50%) and Agriculture placed last (13.3%).

Although all the responses are in the positive range, all three tables show employers are less satisfied with skills when compared to overall job performance. Tables 8 and 14 showed that the skills mean score is higher (2.5 vs. 2.4 with 1 being the best). Tables 9 and 15 show (with the exception of the Medical area) less employer satisfaction in the area of training and skills (37% vs. 25%). Tables 10 and 16 support this by showing that more employers felt
additional training is needed in the area of skills (24.4% vs. 16.4%).

### TABLE 14
Research Question #3
EMPLOYERS PERCEPTIONS OF SKILLS
Mean Score by Occupational Group (Var 5, 7, 8, 15, 18)

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Outstanding</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
<td>2.8</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>2 = Above Expected</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>4</td>
</tr>
<tr>
<td>3 = Meets Expected</td>
<td>2.6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.9</td>
<td>3.0</td>
<td>2.3</td>
<td>2.8</td>
<td>2.6</td>
<td>5</td>
</tr>
<tr>
<td>4 = Below Expected</td>
<td>2.0</td>
<td>1.5</td>
<td>2.2</td>
<td>2.7</td>
<td>2.0</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>1</td>
</tr>
<tr>
<td>5 = Unsatisfactory</td>
<td>2.4</td>
<td>2.0</td>
<td>2.5</td>
<td>2.6</td>
<td>3.0</td>
<td>2.1</td>
<td>2.6</td>
<td>2.4</td>
<td>2</td>
</tr>
</tbody>
</table>

| Group Mean Total  | 2.4         | 2.2            | 2.4              | 2.7         | 2.6          | 2.3     | 2.6       | 2.5            |               |
| Group Rank        | 3           | 1              | 4                | 7           | 5            | 2       | 6         |                |               |
| Total Responses   | 5           | 2              | 61               | 32          | 4            | 55      | 40        | 199            |               |

77
### TABLE 15

Research Question #3

EMPLOYERS PERCEPTIONS OF SKILLS
(Var 24) How are employees from ROP best prepared?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Job Skills</td>
<td>40</td>
<td>0</td>
<td>6.7</td>
<td>25</td>
<td>0</td>
<td>65.5</td>
<td>22.5</td>
<td>29.7</td>
<td>2</td>
</tr>
<tr>
<td>B. Tech. Knowledge</td>
<td>40</td>
<td>0</td>
<td>21.3</td>
<td>25</td>
<td>0</td>
<td>54.6</td>
<td>20</td>
<td>30.7</td>
<td>1</td>
</tr>
<tr>
<td>C. Safety</td>
<td>40</td>
<td>0</td>
<td>13.1</td>
<td>15.6</td>
<td>75</td>
<td>43.6</td>
<td>7.5</td>
<td>22.6</td>
<td>3</td>
</tr>
<tr>
<td>Group Total</td>
<td>40</td>
<td>0</td>
<td>13.7</td>
<td>21.9</td>
<td>25</td>
<td>54.6</td>
<td>16.7</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Group Rank</td>
<td>2</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>5</td>
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</tr>
<tr>
<td>Total responses</td>
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<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
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</tr>
</tbody>
</table>

### TABLE 16

Research Question #3

EMPLOYERS PERCEPTIONS OF SKILLS
(Var 25) What additional preparation would be helpful?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Job Skills</td>
<td>20</td>
<td>0</td>
<td>37.7</td>
<td>40.6</td>
<td>75</td>
<td>14.6</td>
<td>25</td>
<td>29.2</td>
<td>2</td>
</tr>
<tr>
<td>B. Tech. Knowledge</td>
<td>20</td>
<td>0</td>
<td>34.4</td>
<td>15.6</td>
<td>75</td>
<td>29.1</td>
<td>42.5</td>
<td>32.2</td>
<td>1</td>
</tr>
<tr>
<td>C. Safety</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.3</td>
<td>0</td>
<td>20</td>
<td>10</td>
<td>8.5</td>
<td>3</td>
</tr>
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<td>Group Total</td>
<td>13.3</td>
<td>16.7</td>
<td>24</td>
<td>20.1</td>
<td>50</td>
<td>21.2</td>
<td>25.8</td>
<td>24.4</td>
<td></td>
</tr>
<tr>
<td>Group Rank</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses</td>
<td>5</td>
<td>2</td>
<td>61</td>
<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>

78
Research Question #4

"What are the employers' perceptions of the overall understanding of the job role?"

Table 17 shows variables that address understanding the job role (5, 9, 10, and 11). The overall ROP mean score was 2.5. Transportation had the highest mean score (2.1) and Manufacturing scored least positive (2.9).

Table 18 shows how employers responded to variable 24. The overall ROP response rate was 35.6%. Transportation had the best response rate (66.7%) and Agriculture had the lowest (13.3%).

Table 19 shows how employers responded to variable 25. The overall ROP response rate was 12%. Marketing was highest (19.3%). Transportation did not receive any responses.

When all of these tables were analyzed, there was no significant statistical difference between understanding the job role and overall job performance.
### TABLE 17

Research Question #4

**EMPLOYERS PERCEPTIONS OF UNDERSTANDING THE JOB ROLE**

Mean Score by Occupational Group (Var 5, 9, 10, 11)

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Outstanding</td>
<td>2.4</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
<td>2.8</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>2 = Above Expected</td>
<td>2.4</td>
<td>1.0</td>
<td>2.2</td>
<td>2.6</td>
<td>3.0</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>1</td>
</tr>
<tr>
<td>3 = Meets Expected</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>2.7</td>
<td>3.3</td>
<td>2.3</td>
<td>2.8</td>
<td>2.4</td>
<td>3</td>
</tr>
<tr>
<td>4 = Below Expected</td>
<td>2.2</td>
<td>2.5</td>
<td>2.2</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
<td>2</td>
</tr>
<tr>
<td>5 = Unsatisfactory</td>
<td>2.2</td>
<td>2.5</td>
<td>2.2</td>
<td>2.6</td>
<td>2.8</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
<td>2</td>
</tr>
</tbody>
</table>

| 5. Employees Work    | 2.3         | 2.1            | 2.3              | 2.7         | 2.9           | 2.3     | 2.6       | **2.5**        |               |
| 9. Attn. & Punct.    | 3           | 1              | 2                | 6           | 7             | 4       | 5         |                |               |
| 10. Use of Time      | 5           | 2              | 61               | 32          | 4             | 55      | 40        | 199            |               |

80
TABLE 18

Research Question #4
EMPLOYERS PERCEPTIONS OF UNDERSTANDING THE JOB ROLE
(Var 24) How are employees from ROP best prepared?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Safety</td>
<td>40</td>
<td>0</td>
<td>13.1</td>
<td>15.6</td>
<td>75</td>
<td>43.6</td>
<td>7.5</td>
<td>22.6</td>
<td>3</td>
</tr>
<tr>
<td>F. Work Ethic</td>
<td>0</td>
<td>100</td>
<td>29.5</td>
<td>31.3</td>
<td>0</td>
<td>52.7</td>
<td>40</td>
<td>37.7</td>
<td>2</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>0</td>
<td>100</td>
<td>49.2</td>
<td>15.6</td>
<td>25</td>
<td>54.6</td>
<td>55</td>
<td>45.2</td>
<td>1</td>
</tr>
<tr>
<td>Group Total</td>
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<td>66.7</td>
<td>30.6</td>
<td>20.8</td>
<td>33.3</td>
<td>50.3</td>
<td>34.2</td>
<td>35.6</td>
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</tr>
<tr>
<td>Group Rank</td>
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<td>1</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses</td>
<td>5</td>
<td>2</td>
<td>61</td>
<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 19

Research Question #4
EMPLOYERS PERCEPTIONS OF UNDERSTANDING THE JOB ROLE
(Var 25) What additional preparation would be helpful?

<table>
<thead>
<tr>
<th>Figures indicate the percent selected in each category</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Safety</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6.3</td>
<td>0</td>
<td>20</td>
<td>10</td>
<td>8.5</td>
<td>3</td>
</tr>
<tr>
<td>F. Work Ethic</td>
<td>0</td>
<td>0</td>
<td>8.2</td>
<td>25</td>
<td>25</td>
<td>10.9</td>
<td>22.5</td>
<td>14.6</td>
<td>2</td>
</tr>
<tr>
<td>G. Attendance &amp; Punct.</td>
<td>20</td>
<td>0</td>
<td>16.4</td>
<td>6.3</td>
<td>25</td>
<td>25.5</td>
<td>22.5</td>
<td>18.6</td>
<td>1</td>
</tr>
<tr>
<td>Group Total</td>
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<td>8.2</td>
<td>12.5</td>
<td>16.7</td>
<td>18.8</td>
<td>19.3</td>
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<td></td>
</tr>
<tr>
<td>Group Rank</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total responses</td>
<td>5</td>
<td>2</td>
<td>61</td>
<td>32</td>
<td>4</td>
<td>55</td>
<td>40</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>
Research Question #5

"What are the employers' perceptions of the overall preparation of ROP employees compared to other employees?"

When asked if ROP-trained entry level employees differed from other entry level employees (variable 20 and 21), 46% indicated that they felt there was no difference. Fifty percent said that the ROP-trained entry level employee had better skills.

Variables 22 and 23 asked how long it would take an ROP vs. non-ROP new hire to become productive. Table 20 shows this response in days and by the ROP vocational training area. On the average, employers said it took 21.5 days for a non-ROP new hire, and 15.2 days for an ROP new hire to become productive.
TABLE 20

Research Question #5
EMPLOYERS PERCEPTIONS OF ROP VERSUS OTHER EMPLOYEES

Variables 22 & 23 show the indicated days it takes to train ROP versus other employees

<table>
<thead>
<tr>
<th>Variables</th>
<th>Agriculture</th>
<th>Transportation</th>
<th>Personal Service</th>
<th>Hos. &amp; Rec.</th>
<th>Manufacturing</th>
<th>Medical</th>
<th>Marketing</th>
<th>Variable Total</th>
<th>Variable Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days to train non</td>
<td>17</td>
<td>15</td>
<td>28.3</td>
<td>15.9</td>
<td>17.5</td>
<td>32.4</td>
<td>24.3</td>
<td>21.5</td>
<td>2</td>
</tr>
<tr>
<td>ROP employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days to train</td>
<td>13</td>
<td>11.5</td>
<td>24.5</td>
<td>10.8</td>
<td>10</td>
<td>17.7</td>
<td>18.8</td>
<td>15.2</td>
<td>1</td>
</tr>
<tr>
<td>ROP employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variable 21 -
46% Said no difference in skill level
50% Said ROP had better skills
Summary of Findings

There were no significant statistical differences between the ROP vocational training areas. All the responses were positive toward ROP training and after studying the tables, there appeared to be some trends in several vocational areas.

Table 12 indicates that there was a greater response (higher percentages) for the several variables that pertain to personal qualities. Employers indicated that the ROP-trained employees were characterized as being more punctual and conscientious about their attendance. They reflected a more cooperative attitude with others than non-ROP students, and in addition, they showed a willingness to learn.

The data (Tables 14 and 15) indicated that there was a slightly lower response rate for those variables that address skills, thus indicating lower satisfaction with training in this area. This is supported by an increase in the response rate as seen in Table 16, where employers have indicated that additional preparation in the area of skills would be helpful.

Overall, there are certain trends that can be observed between the ROP vocational training areas.
consistently share the higher mean scores while Manufacturing received lower ones. It must be noted, however, that all mean scores for all ROP vocational training areas were in the positive range.

Discussion of Findings

1. Employers in this study perceived ROP training as positive. Only four mean scores (which came from the Manufacturing training area) out of 98 fell in the slightly negative range (see Table 8). This data may be weak due to the fact that only four surveys were returned from the Manufacturing area, and the sample size was not large enough to be conclusive.

Kurtz (1986) lists several factors which may contribute to the positive perception of ROP training. ROP instructors have actual work experience and have come out of the work environment in which they are training students. ROP instructors are also credentialed by the state and are required to complete teaching methodology courses in order to keep their credential. Many ROP classes are held in "community classrooms" where students actually learn on the job. Classes held on high school campuses are set up and operated like a real business as much as possible.
All ROP classes are required to have advisory committees made up of business owners and managers in the same field. These committees meet several times a year to help keep ROP training current, relative, and on track.

2. Employers perceived the personal qualities of ROP-trained employees higher than the other variables in this study. This response may be due to the efforts of counselors, ROP instructors and personnel in guiding and encouraging students in their career decisions.

Another possible reason for the positive response is the enthusiasm and well-motivated outlook of ROP instructors and staff. In 1985 and 1991, the Western Association of Schools and Colleges Accreditation Committee commended the Riverside County ROP for this same enthusiasm and motivation (Western Association of Schools and Colleges, 1991).

3. With the exception of the Medical training area, employers' responses to the variables dealing with skills were consistently lower than the other variables. According to Kurtz (1986), many Riverside County ROP students came from slightly lower socio-economic groups and were deficient in basic academic skills. The 1991 SCANS report supported this and
indicated a nationwide problem in this area.

Schools are more likely to send students with various academic problems to vocational education classes rather than to college prep programs which may be another cause of lowered skill levels.

With regard to the exceptionally high scores in the Medical training area, some of these occupations require a state exam and certificate. These students have to prove their skills to the state before they can seek employment in this field.

4. There was no significant difference between ROP vocational training areas concerning their understanding of the job role and other job performance variables.

Employers felt that the employees had been best trained by the ROP in the area of attendance and punctuality, but they also felt that this was an area where more training would be helpful. The employers did not elaborate on this, however.

5. Employers were requested to compare ROP-trained employees with non-ROP employees, and 46% indicated that there was no difference in skills. Conversely, 50% indicated that they felt ROP-trained employees did have better skills.
Employers were asked how many days it took to train an ROP employee compared to a non-ROP employee. Findings showed an average of 15.2 days for ROP-trained employees compared to 21.5 days for the others.

While neither of these questions are significantly different, they do continue to support the trend that employers overall are positive toward ROP training.

6. It should be noted that only a few surveys were returned in three ROP training areas. Five were returned by employers in the Agricultural area. Their overall mean scores and percentages were average. Only two surveys were returned in the Transportation area. Although overall mean scores and percentages were high, they should be considered suspect or weak. Four surveys were returned in the Manufacturing area, and they scored consistently lower. This data should also be considered suspect or weak.
Chapter V

Summary, Conclusions, and Recommendations

Summary

The major purpose of this study was to survey the employers who hired 1992 graduates of the Riverside County ROP in order to determine their overall satisfaction with ROP vocational training. This information was needed to determine if ROP training was relative to and meeting the demands of the county’s businesses and industries as well as those needs of the individual ROP students.

The Problem

A review of literature indicated that perhaps vocational education may not be relative to and meeting the needs of business and industry. The study evaluated the perceptions of employers who owned or managed Riverside County’s businesses and industries.

The Population

The study included all of the useable placement records of the 1992 graduates of the ROP program. This
included businesses and industries from all parts of Riverside County and several nearby businesses outside of the county.

**Procedures**

Riverside County’s ROP placement records provided the names and addresses for all of the businesses and industries that hired ROP graduates in 1992. Surveys were mailed to all of the employers, and short and simple questions were asked in order to obtain their perceptions of the ROP-trained employee’s job performance. This survey was comprised of questions dealing with personal qualities, skills (academic, technical & job skills), and understanding of the job role. Employers were also requested to compare ROP-trained employees to non-ROP employees.

**Findings**

Findings related to the research questions revealed an overall positive response toward ROP training. Employers showed a more positive response toward personal qualities and a less positive response toward skills.
Conclusions

The results of this study supported the following conclusions:

1. Employers perceived the overall job performance of the ROP-trained employee as positive with a rating of 2.4 on a Likert scale of 1 (outstanding) to 5 (unsatisfactory). Based on this information, it was concluded that Riverside County's businesses and industries were generally satisfied with ROP training, and that it was relative to and meeting their needs, as well as the needs of the individual students.

2. Employers' ratings of variables addressing personal qualities were significantly more positive overall than other variables. It was therefore concluded that ROP vocational training had its greatest impact and success in the areas of: how former ROP students got along with others, their willingness to learn, their attendance and punctuality, their ability to work with minimal supervision, their use of time, and their acceptance of responsibility.

3. While slightly positive, employers' ratings of overall skills were consistently lower than other variables with the exception of the Medical training area where the ratings were high. It was assumed that
these high ratings in the Medical field were due to the fact that each student was required to pass an exam for state certification. The study was unable to determine the cause of the lowered skill ratings, but this was consistent with the rest of the nation as previously noted in the Review of Literature. Further studies of technical and basic academic skills were needed.

4. Employers did not perceive any significant differences concerning the understanding of the job role and other variables. It was concluded that employers had no significant problems with how well ROP-trained employees understood their job roles, and they were generally satisfied with ROP training in this area.

5. Forty six percent of the employers surveyed indicated that they felt there was no difference in the skill level of ROP-trained entry level employees when compared to non-ROP-trained individuals, and 50% of the employers felt that ROP-trained employees had better skills. Although they rated skills lower (as indicated previously), ROP-trained employees were entering the work force with better skills than employees with no ROP training. It was therefore concluded that ROP training did make a positive difference in the area of
overall skills. This was also supported by the findings of variables 22 and 23 (see Table 20) which addressed the issue of how much time it took for various employees to become productive. Although 46% of the employers perceived no skill differences in ROP employees, nearly all of the employers indicated that it took less time for a new ROP-trained employee to become productive.

Recommendations

As noted previously, employers were less satisfied in the area of basic academics, technical knowledge, and job skills. The Review of Literature indicated that employers were not satisfied with skills nationwide (SCANS, 1991).

It was therefore recommended that:

1. The ROP Administration examine curriculum in each vocational training area and integrate Math, English, Science, Writing, and other academics with the vocational curricula.

2. During vocational training, instructors should stress the importance of the related academic skills and continually integrate and demonstrate their use in the training.
3. Because of unusually high employer ratings of skills in the Medical training area, it was recommended that a final competency exam with both practical & written questions be initiated for each vocational area. The exam should also serve to keep classes in all training areas more consistent and should be required in order to receive a certificate of completion.

4. Steps should be taken at the state level to integrate academic and vocational education curricula as recommended by the National Carl Perkins Legislation.

Recommendations For Further Study

1. Two factors that were not considered in this study and may have an impact on lowered skill ratings include: the number of atypical and special education students enrolled in ROP classes (it is estimated that 25% - 50% of those enrolled in vocational classes are considered atypical or special education students), and the number of students "dumped" into ROP classes due to academic and disciplinary problems. Further study was needed in this area to determine if these factors have impacted the skill ratings of ROP training.
2. Data collected from the Agricultural, Transportation, and Manufacturing areas may be suspect and weak because too few surveys were returned. This may be due to the fact that there was a small number of recorded placements which meant a small number of surveys were sent. Further study is suggested in this area to identify the placement percentages of each training area and to determine and examine the reasons for differences among the training areas.
References


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Kane, S. (1985). The Development and Utilization of an Instrument Designed to Measure Employer Satisfaction and Receptivity Towards the Concept of Cooperative Education. *Journal of Cooperative Education*


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Secretary’s Commission on Achieving Necessary Skills.
Secretary’s Commission on Achieving Necessary Skills.
Washington State Board for Community College Education.

APPENDICES
Appendix A

First Cover Letter Sent to Employers
Dear Employer:

As part of upgrading our program offerings, the Riverside County Office of Education is conducting a survey of business and industry employers who employ or have employed Regional Occupational Program graduates. With your input into the quality of the employee we provide to you, the ROP can better assess if it is meeting its goal of entry-level job preparation.

Attention: Supervisor of __________________________

The enclosed questionnaire should be completed by the person within your organization who has had the best opportunity to observe the employee listed above. The questionnaire seeks your opinion as to the work-related characteristics of those employees who received ROP training. It is not an attempt to evaluate individual workers. In order to assure confidentiality, please return only the questionnaire which does not contain the name of the employee. A postage-paid envelope has been enclosed for your convenience.

Your responses will be combined with those of several hundred other employers in summary reports. The reports will not identify an individual worker or employer. The results will be grouped according to the type of Regional Occupational Program. For this reason it is important that the returns be as complete as possible.

This survey will help strengthen the Regional Occupational Program in Riverside County and is a potential benefit to all employers as well as the county's economic health. Your cooperation is important and will be greatly appreciated.

Thank you in advance for your help.

Sincerely yours,

Anton W. Heil

Richard Collins
Director, Regional Occupational Program
Appendix B

Second Cover Letter Sent to Employers
Dear Employer:

Some time ago we sent you a questionnaire seeking your opinions of the training received by one of your employees, __________________________. We are asking your opinions so that we can better determine how we are meeting the program goals of the Regional Occupational Programs offered by the Riverside County Office of Education. Your opinions will help us assess how well these programs are meeting their objectives in preparing students for employment.

Since your employee was one of the selected sample, to be truly representative, it is important that everyone selectively participate in this study. As of today, we have not received your response. We are enclosing a replacement questionnaire and a postage-paid mailer in case the original one has been misplaced. We would appreciate your taking a few minutes to participate in this important study.

Sincerely yours,

Anton W. Heil
Richard Collins
Director, Regional
Occupational Program
Appendix C

Data Gathering Survey
EMPLOYER'S PERCEPTIONS OF REGIONAL OCCUPATIONAL PROGRAM GRADUATES
WORK RELATED CHARACTERISTICS

The Riverside County Regional Occupational Program is conducting a follow-up study into the quality of the program graduates we provide to business and industry. This questionnaire seeks input as to the work related characteristics of those employee's who received ROP occupational training. Please ask a supervisor familiar with the work of the employee identified in the cover letter to complete and return this survey in the envelope provided as soon as possible. All responses will be kept strictly confidential. Thank you.

1. Company name: ____________________________________________________________

2. Your job title: ____________________________________________________________

3. Total number of employees: ______________________________________________

4. What major product or service do you provide? ________________________________

Circle one letter on each line to indicate the level of performance the individual exhibits for the respective competency required by the job.

<table>
<thead>
<tr>
<th>Competency</th>
<th>Outstanding</th>
<th>Above Expected</th>
<th>Generally Meets Expected</th>
<th>Below Expected</th>
<th>Unsatisfactory</th>
<th>Does Not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Employee's work compared to industry standards.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>6. Employee's attention to detail.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>7. Job skills - what worker must do (involves producing, servicing or repairing activities).</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>8. Technical knowledge - what worker must know (information necessary to form judgments in doing the work).</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>9. Work attendance &amp; punctuality.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>10. Efficient use of time.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>11. Compliance with company policies, rules and practices.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>12. Willingness to accept responsibility.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>13. Ability to work with minimal supervision.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>14. Gets along with management and co-workers.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>15. Safe and proper use of tools and equipment.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>16. Employee's promotability.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>17. Willingness to learn.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td>18. Overall job preparation.</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
</tbody>
</table>
R.O.P. Employer's Perception Survey (page 2)

19. Circle the sources of recruitment you use to fill entry level positions.

A. Job Service  D. Signs  G. Union
B. School(s)  E. Encourage employees to refer  H. Don't actively recruit; get enough
C. Newspaper or other media  individuals  walk-ins
F. Private employment agencies  I. Other______________________________

20. Have you recently employed high school graduates who have not participated in the Regional Occupational Program?

A. Yes  B. No

21. If yes, how did their entry level skills compare with students who did participate in the Regional Occupational program?

A. Skill levels of both were the same  C. ROP students had better skills
B. Non-ROP students had better skills  D. Other______________________________

22. How long would you estimate it takes for a average new employee to become productive?

______________days / _____________weeks

23. How long would you say it would take to train a Regional Occupational Program graduate in that same job?

______________days / _____________weeks

24. In what areas do you feel employees from this Regional Occupational Program are best prepared? (may circle more than one)

A. Job skills  E. Willingness to learn
B. Technical knowledge  F. Work ethic
C. Safety  G. Punctuality and attendance
D. Cooperation with others  H. Other______________________________

25. In which areas do you feel additional preparation would be helpful? (may circle more than one)

A. Job skills  E. Willingness to learn
B. Technical knowledge  F. Work ethic
C. Safety  G. Punctuality and attendance
D. Cooperation with others  H. Other______________________________

Thank you for your cooperation. Please return the completed survey in the envelope provided. Questions or comments about this study may be directed to:

Riverside County Office of Education
Regional Occupational Program - Attn: Anton Heil
3939 Thirteenth Street, Riverside, California, 92502-0868
(909) 788-6589

110