

**Palomar College
1999-2000 Vocational Education Employer Study**

July 2002

**Study Two in Series Two of the Vocational Education
Employer Study of Palomar Graduates**

Completed for:

**Division of Vocational Technology
Palomar College**

Prepared by:

**Pamela L. Brown
Research Analyst**

**Michelle Barton
Director of Institutional Research and Planning**

**The Office of Institutional Research and Planning
Palomar College**

EXECUTIVE SUMMARY

Introduction

The Office of Institutional Research and Planning (IR&P) in collaboration with the Division of Vocational Technology is currently implementing a continuous follow-up process of vocational education students and their employers. The purpose of this process is to provide feedback about the impact of vocational programs and college support services on vocational education students. The Division plans to use this feedback to improve its programs and services.

As part of our on-going follow-up process of vocational education students, this report summarizes the findings from study two in the second series of studies. In this study, employers of graduates who completed an Associate of Arts degree or a Certificate of Achievement from a vocational education program during the 1999-2000 academic year from Palomar College were contacted concerning their attitudes toward Palomar graduates—that is, the survey includes questions regarding the knowledge and skill level of job-related qualities and behaviors of employees who graduated from Palomar College.

The study was performed through an interviewing technique, in which the employers of former graduates were contacted. The surveying was conducted by the Social & Behavioral Research Institute (SBRI). During the telephone interviews, researchers addressed employer attitudes regarding the knowledge and skill level of job-related qualities and behaviors of the former students from the vocational education program at Palomar.

Overall Observations

The results of this study offer a detailed description of employer attitudes toward Palomar graduates. Some of the findings are listed below:

- Almost half of employers indicated that the company they represent has been in business for 10 to 24 years.
- Close to half of employers felt that Palomar graduates were very prepared for their positions when hired.
- Employers rated Palomar graduates high in the areas of reading, writing, speaking, listening, and math. While still strong communication and management skills received slightly lower ratings.
- Quality of work and quality of education as it relates to job requirements also received high ratings. Critical thinking and problem solving skills received slightly lower ratings.
- A large majority of employers indicated Palomar College is very successful in preparing graduates for employment.

We recommend using caution when interpreting and generalizing the results presented in this study. The employers interviewed are not representative of all Palomar employers.

Having expressed this concern, we do believe that the results of this study identify potential areas for improving the college's programs and services. Further, the results indicate that Palomar graduates have some very real strengths in their contributions to employers.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	i
INTRODUCTION	1
PROCEDURES	1
Survey Employers.....	1
Survey Methodology	2
SUMMARY OF MAJOR FINDINGS	3
General Survey Results by Topic Area.....	3
General Information	3
Palomar Graduate Employees	4
Competency Ratings of Palomar Graduates.....	4
Technical Education Ratings of Palomar Graduates.....	5
Behavior Quality Ratings of Palomar Graduate.....	6
General assessment of Educational Services.....	6
SUMMARY AND CONCLUSIONS	7
APPENDIX A: Palomar College Employer Survey	A-0
APPENDIX B: Palomar College Employer Open Ended Responses	B-0

List of Figures

	Page
1. Full-Time Employment Status.....	3
2. Preparedness of Palomar Graduates When Hired.....	4
3. Preparedness of Palomar Graduates With Other Employees.....	7

List of Tables

	Page
1. Competency Ratings on Job-Related Skills for Palomar Graduates	5
2. Technical Education Ratings on Job-Related Skills for Palomar Graduates.....	5
3. Behavior Quality Ratings for Job-Related Skills for Palomar Graduates	6

INTRODUCTION

The Office of Institutional Research and Planning (IR&P) in collaboration with the Division of Vocational Technology is currently implementing a continuous follow-up process of vocational education students and their employers. The purpose of this process is to provide feedback about the impact of vocational programs and college support services on vocational education students. The Division plans to use this feedback to improve its programs and services.

As part of our on-going follow-up process of vocational education students, this report summarizes the findings from study two in the second series of studies. In this study, employers of graduates who completed an Associate of Arts degree or a Certificate of Achievement from a vocational education program during the 1999-2000 academic year from Palomar College were contacted concerning their attitudes toward Palomar graduates—that is, the survey includes questions regarding the knowledge and skill level of job-related qualities and behaviors of employees who graduated from Palomar College.

The study was performed through an interviewing technique, in which the employers of former graduates were contacted. The surveying was conducted by the Social & Behavioral Research Institute (SBRI). During the telephone interviews, researchers addressed employer attitudes regarding the knowledge and skill level of job-related qualities and behaviors of the former students from the vocational education program at Palomar.

PROCEDURES

Survey Employers

The surveying was conducted by the Social & Behavioral Research Institute (SBRI). Employers of Palomar graduates were identified as possible participants in this survey through responses from the 1999-2000 Vocational Education Impact Study (VEIS) of Palomar graduates. The VEIS investigated the attitudes of students who had earned either an Associate of Arts degree or a Certificate of Achievement from a vocational education program during the 1999-2000 academic year. These students participated in an interview process that allowed us to assess their experiences as a Palomar student and how their education relates to their current job. All participants from the Vocational Education Impact Study, who agreed to have their employers contacted, gave SBRI permission to do so.

The SBRI identified and completed 64 telephone interviews with “eligible” employers for this study. Of these 64 employers 51 interviews were with employers of Palomar College alumni and 13 interviews were with comparable businesses located in San Diego’s North County. Phone numbers were classified as “not eligible” if the respondent was never available, the number was disconnected, a cell phone was reached, a personal residence was reached, or no one at the employer had knowledge of the graduate.

Although 64 telephone interviews were conducted, this report only focuses on the 51 interviews with employers of Palomar Graduates. Justification for dropping 13 interviews from our analysis

of the results is based on the fact that the sample is too small to include in our study. However, complete quantitative and qualitative results of the 13 additional interviews can be obtained in the Office of Institutional Research and Planning.

Survey Methodology

Faculty, program administrators and Institutional Research and Planning identified and established the content of the survey. The survey development process is described in length in the December 1999 report titled “The First of Three Vocational Education Student Impact Studies”. As previously mentioned, Palomar College contracted with SBRI, a California State University San Marcos research organization, to conduct the survey. The survey addresses four general topic areas listed below:

- **Overall Preparedness**
- **General Competency**
- **Technical Education**
- **Behavior Quality**

As described earlier, the survey addressed employer attitudes regarding their experience with Palomar graduates. The survey included many types of items ranging from open-ended questions to requests for agreement with a particular statement. The survey also included scale items of three general topic areas. For example, employers were asked to rate the competency of skills ranging from reading skills to math skills, of Palomar graduates on a scale of 0 to 10, with 0 being the lowest possible skill level and 10 being the highest possible skill level. Employers were also asked to rate the technical knowledge of their employees, on the same 10-point scale, ranging from job-related conceptual knowledge to quality of work. The third topic area focused on the behavior of the employee. Employers were asked to rate, on a 10-point scale, the behavior of their employees ranging from self-confidence to work attitude. Appendix A contains the survey instrument used in the study.

Telephone interviewing commenced on October 3, 2001 and ended on January 25, 2002. During the data collection, SBRI conducted 51 interviews with employers of Palomar College alumni. Interviewers made all telephone calls from the SBRI Survey Lab, located in Suite 140 of the San Marcos City Hall, near the CSUSM campus. Generally, interviewers placed telephone calls from 8:00 am to 5:00 pm Monday through Friday. Interviewers placed all telephone calls under the guidance of SBRI supervisory staff. SBRI's supervisory staff conducted on-line monitoring of survey calls throughout the project, both to verify the validity of the calls and for quality control purposes. SBRI made 1,810 telephone calls during the process of the project. The average length of the interviews was 20.23 minutes. All data from the interviews were stored in a survey software and database system. The actual comments and responses provided by employers are included in Appendix B. (Extreme caution should be used when reviewing and interpreting the qualitative results presented in Appendix B).

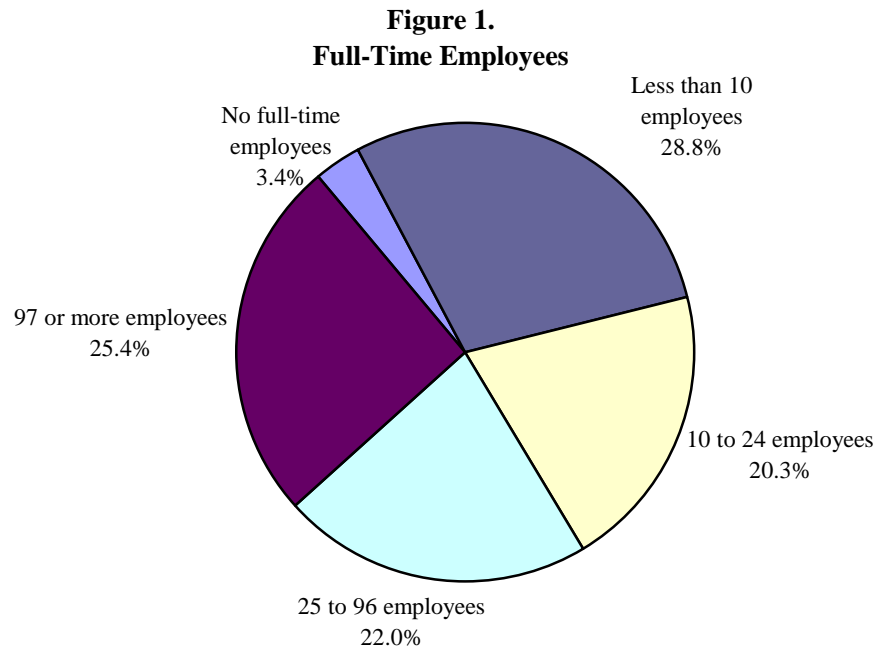
SUMMARY OF MAJOR FINDINGS

A brief list of survey results organized by topic area is provided in addition to figures and tables.

Survey Results by Topic Area

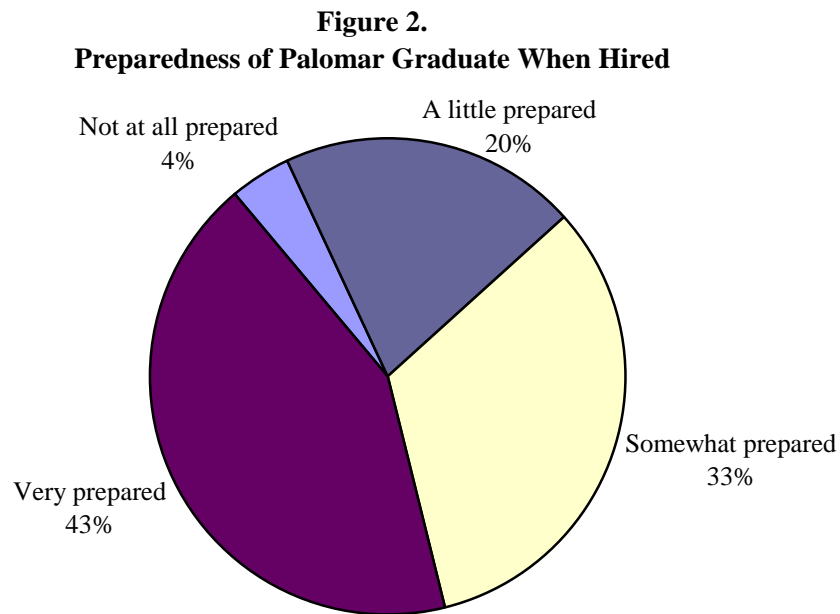
General Information

- 50% of the employers surveyed were female and 50% male.
- 12.7% of employers indicated that the company they represent has been in business for less than 10 years. 42.9% of employers indicated that the company they represent has been in business for 10 to 24 years. 20.6% of employers indicated that their company has been in business for 25 to 49 years and 23.8% indicated that their company has been in business for 50 or more years.
- Using the number of full-time employees as an indicator of the size of the organization, Figure 1 shows that the businesses surveyed were evenly distributed by size ranging from small to medium and possible large.



Palomar Graduate Employees

- Employers indicated that 94.1% of the graduates still held the same position as when interviewed in summer 2001.
- 47.7% of employers indicated that graduates applied for their positions based on job announcements; 11.4% of graduate employees were obtained through employment agencies; 9% were referred; 4.5% of these by the Palomar College job placement; and 31.8% listed that the graduates applied for their positions in some other way.
- 35.3% of employers hired graduates based on their experience. Another 25.5% indicated they hired employees based on their personality or fit with the company.
- Figure 2 shows that most of the employer's surveyed perceived Palomar graduates as somewhat prepared or very prepared for their position.



Competency Ratings of Palomar Graduates

Employers were asked to rate the competency level of a Palomar graduate employee on a variety of job-related skills. Using a scale of 0 to 10 with 0 being the lowest possible skill level and 10 being the highest possible skill level employers rated the graduate on 7 different skills: reading, writing, oral communication, listening abilities, basic knowledge of math, management skills, and communication and interpersonal skills. Results of the survey suggest that a majority of Palomar graduates have a high level of competency in

the various job-related skills. Management and communication/interpersonal skills had the lowest means across the competencies. One reason that management skills received a low rating could be because the job duties of incoming or new graduates do not include management tasks. While still high communication/interpersonal skills within the curriculum may be examined as an area for improvement. A table of the results follows:

Table 1.					
Ratings on Job-Related Skills for Palomar Graduates					
Skill	Number	Min	Max	Mean	Standard Deviation
Reading Skill	49	3	10	8.61	1.6
Demonstrated Writing Skills	47	1	10	8.11	1.9
Speaking	51	1	10	8.24	1.7
Listening	50	1	10	8.34	1.75
Knowledge of Math	37	4	10	8.24	1.46
Management	42	0	10	6.83	2.04
Communication and Interpersonal	50	0	10	7.76	1.96

Technical Education Ratings of Palomar Graduates

Employers were asked to rate the technical education of a Palomar graduate employee on their knowledge of job-related skills. Using a scale of 0 to 10 with 0 being not at all knowledgeable and 10 being very knowledgeable employers rated the graduate on their knowledge of 6 different technical skills: job-related conceptual knowledge, job-related technical knowledge, problem solving, critical thinking, quality of work, and overall quality of education as it pertains to the job requirements. Results represent employer's assessment that overall Palomar graduates as employees have high levels of technical education in the various job-related skills. Two potential areas for growth are problem solving skills and critical thinking skills. A table of results follows:

Table 2.					
Technical Education Ratings on Job-Related Skills for Palomar Graduates					
Skill	Number	Min	Max	Mean	Standard Deviation
Job-related Conceptual Knowledge	50	4	10	7.94	1.56
Job-related Technical Knowledge	50	5	10	8.00	1.43
Problem Solving Skills	49	2	10	7.67	1.80
Critical Thinking Skills	49	1	10	7.69	1.72
Quality of Work	50	3	10	8.44	1.45
Quality of Education As It Relates to Job Req.	44	5	10	8.50	1.41

Behavior Quality Ratings of Palomar Graduates

Employers were asked to rate the job-related behavior of Palomar graduates. Using a scale of 0 to 10 with 0 being the lowest possible rating and 10 being the highest possible rating, employers rated the graduate on 7 behavior qualities: professional attitude and self confidence, attendance and dependability, ability to learn new skills and concepts, ability to work with others, ability to initiate projects, work attitude and overall job performance. Results show that most of Palomar graduates rate high on the various behavior qualities. For example, the mean rating for attendance and dependability equaled 9.08 out of a maximum of 10. Although, two of the behavior qualities that did not rate as high were: Professional attitude & self-confidence and ability to initiate projects as required. A table of results follows:

Table 3.					
Behavior Ratings for Job-Related Skills for Palomar Graduates					
Skill	Number	Min	Max	Mean	Standard Deviation
Professional Attitude and Self-confidence	49	0	10	7.96	1.78
Attendance and Dependability	51	5	10	9.08	1.35
Ability to Learn New Skills and Concepts	50	4	10	8.64	1.27
Ability to Work With Others	49	4	10	8.63	1.38
Ability to Initiate Projects As Required	48	2	10	7.83	1.85
Work Attitude	50	0	10	8.66	1.72
Overall Job Performance	50	3	10	8.42	1.43

General Assessment of Educational Services

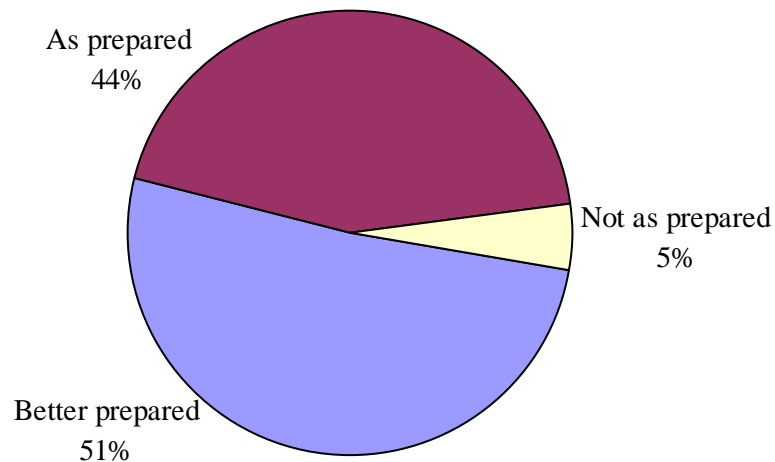
- 60.7% of employers indicated that Palomar College is very successful in preparing graduates for employment.
- 93.4% of employers stated that they planned to use Palomar graduates for future hiring needs.
- 81.3% of employers indicated that having an AA degree or certificate, increased employees' chances for advancement within their organization.

In addition, employers were asked to compare the graduates' preparedness in the technical education with other employees in the same workgroup who did not receive an education or training from Palomar College.

- 51.2% of employers stated that Palomar graduates were better prepared than their non-Palomar graduate counterpart. 44.2% of employers stated that the graduates were

as prepared and 4.7% stated that Palomar graduates were not as prepared (see Figure 3. below).

Figure 3.
Preparedness of Palomar Graduates With Other Employees



SUMMARY AND CONCLUSIONS

The follow-up study described in this report is part of a second series of follow-up studies the IR&P office is conducting for Vocational Technology. The results of this study provide a description of targeted employers' attitudes about Palomar graduates who earned an Associate of Arts degree or a Certificate of Achievement in the 1999-2000 academic year from a vocational education program. Some of the overall findings are listed below:

- Almost half of employers felt that the graduate they hired was very prepared for the position.
- Half of the employers stated that Palomar graduates were better prepared for their jobs, than their non-Palomar graduate counterparts.
- Employers rated the majority of Palomar graduates as having high behavioral qualities.
- More than half of the employers indicated that Palomar College is very successful in preparing graduates for employment.
- Overall, Palomar graduates received high general competency ratings.

- Nearly all of the employers indicated that an employee's chances for advancement within their organization greatly increases if the employee possesses an AA degree or certificate.

We recommend using caution when interpreting and generalizing the results presented in this study. The employers interviewed are not representative of all Palomar graduate employers.

Having expressed this concern, we do believe that the results of this study identify potential areas for improving the college's programs and services. Further, the results indicate that Palomar graduates have some very real strengths in their contributions to employers.