

CAREER SERVICES
EMPLOYER SURVEY: INDUSTRY PERSPECTIVES
GRAPHIC COMMUNICATION 2008-09
QUALITY OF GRADUATES & STUDENT LEARNING OUTCOMES

PROJECT BACKGROUND

GRC ASSESSMENT PLAN

Career Services has collaborated with the Graphic Communication Department in assessing the academic program through employer surveying. Assessment areas included:

- Quality of GRC Graduates
- Industry Readiness
- Student Learning Outcomes
- Employer Values Related To:
 - Student Learning Outcomes
 - Personal Qualities
 - Educational Experiences
 - Diversity

The student learning outcomes were aligned with accreditation standards which will be used for upcoming program review.

OTHER UNIVERSITY ASSESSMENT EFFORTS

Career Services has also collaborated with the Colleges of Business, Engineering, Education and Architecture & Environmental Design in assessing the quality of Cal Poly graduates and student learning outcomes. These college-wide assessments have been aligned with accreditation standards and have been used to support program review. Career Services has recently expanded assessment to include a Pilot Program with the Natural Resource Management Department and Ag Graduate Programs within the College of Agriculture, Food and Environmental Sciences. In an effort to include the College of Liberal Arts, a Pilot Program was established through the Graphic Communication Department.

OBJECTIVES

The following objectives were established for this report:

1. Graduate Qualities
 - Measure the quality of GRC graduates.
 - Measure the industry readiness of GRC graduates.
2. Student Learning Outcomes
 - Measure skill attainment related to student learning outcomes established by the GRC department, in alignment with accreditation standards.
3. Employer Values
 - Measure the importance employers place on the student learning outcomes.
 - Measure the value employers place on the personal qualities of GRC graduates.
 - Measure the value employers place on the educational experiences of GRC graduates.
 - Measure the value employers place on diversity in the workplace.

PROGRAM DESIGN

The Graphic Communication Department and Career Services developed an employer survey that was tailored to meet the unique and specific needs of the academic programs. The survey was broken into three sections as indicated below:

Section 1: Graduate Quality

Overall Quality	Satisfied with the overall quality of GRC graduates
Industry Readiness	Able to make a positive contribution to the work place

Section 2: Student Learning Outcomes

Knowledge	Knowledge of graphic communication industry
Critical Thinking	Ability to think creatively and visually
Fundamentals	Understand digital creation, manipulation and management
Fundamentals	Understand printing and packaging technologies
Fundamentals	Understand business management and quality control practices
Communication	Demonstrate effective oral communication
Communication	Demonstrate effective written communication
Teamwork	Understand the value of cross-disciplinary knowledge
Diversity	Collaborate productively in diverse settings and with diverse others
Ethics	Make reasoned, ethical, socially and ecologically responsible decisions
Life-Long Learning	Engage in life-long learning through continuous education and keep current within the field

Section 3: Diversity Outcomes

Diverse Workforce	Meet the cultural diversity needs of your company compared to graduates from other universities
Diverse Backgrounds	Interact and communicate effectively with co-workers from culturally diverse backgrounds compared to graduates from other universities
Diverse Backgrounds	Interact and communicate effectively with clients from culturally diverse backgrounds compared to graduates from other universities

Refer to Employer Survey form at the end of the report.

STUDY PROFILE

Surveys were collected Winter and Spring quarters of 2009. Employers were members of the GRC Industrial Advisory Council, participants in the GRC Career Day events, and/or respondents to the Graduate Status Report. The surveys were completed by industry leaders, managers, and supervisors. Twenty-one (21) different employers participated in the employer surveying, as indicated below:

EMPLOYER SURVEYS	
1	AdMail Express, Inc.
2	Brown Printing Company
3	Consolidated Graphics
4	Creative Coatings
5	DeHart's Media Services
6	LEVEL Studios
7	Lithotype Inc.
8	Murray Brand Communications, Inc.
9	National Card, Label & Affixing, Inc.
10	Old Navy (Gap, Inc.)
11	Poor Richard's Press
12	Quad Graphics
13	Santa Cruz Biotechnology
14	R. R. Donnelley
15	Tapp Technologies, Inc.
16	The DG3 Group
17	The Ligature
18	UBuildABook, LLC
19	United States Government Printing
20	WS Packaging
21	XEROX Corporation

PROJECT FINDINGS

1. GRADUATE QUALITIES

OBJECTIVES: Measure the overall quality and industry readiness of GRC graduates. Measure the importance employers place on the student learning outcomes.

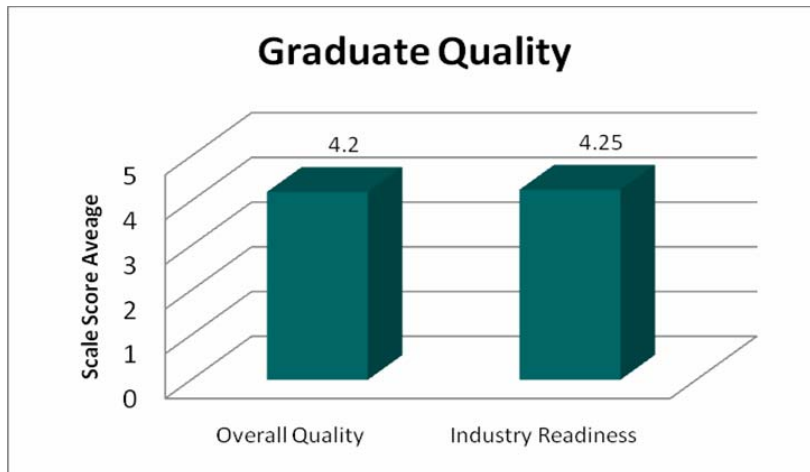
METHODOLOGY: Surveys were completed by employers to evaluate GRC graduates using a 5-point scale (*1 = lowest; 2 = low; 3 = medium; 4 = high; 5 = highest*).

FINDINGS: Employers reported the following findings:

The survey assessed the overall quality and industry readiness of GRC graduates. These being defined as:

Overall Quality - *My company is satisfied with the quality of GRC graduates*
 Industry Readiness - *Able to make a positive contribution to the work place*

The chart below is a graphical presentation of scale score averages for the two categories.



Employers were satisfied with the quality of GRC graduates, with an overall scale score average of 4.20. Employers also indicated that GRC graduates are industry ready with a scale score average of 4.25.

The following chart reports the same data, but it has been formatted differently, reporting numerically on each of the scale score categories. This provides a breakdown of responses and is particularly helpful in analyzing the data.

QUALITY	Survey Responses	Lowest	Low	Medium	High	Highest	Scale Scores
<i>Scale Scores</i>		1	2	3	4	5	<i>Average</i>
Overall Quality	20	0	1	2	9	8	4.20
Industry Readiness	20	0	0	3	9	8	4.25

2. STUDENT LEARNING OUTCOMES

OBJECTIVE: Measure skill attainment related to student learning outcomes established by the department, in alignment with accreditation standards.

STANDARDS: The GRC Department identified the student learning outcomes that are aligned with their accreditation standards. Each student learning outcome is fully defined within the survey instrument to assist employers in the scoring process.

METHODOLOGY: Surveys were completed by employers to measure the success of business graduates based on student learning outcomes, using a 5-point scale (1 = lowest; 2 = low; 3 = medium; 4 = high; 5 = highest).

FINDINGS: The following charts indicate the scale score averages and the numeric value for each of the student learning outcomes.

Employers reported the following findings:

GRAPHIC COMMUNICATION		Low	Med	High	Highest	Total	Scale
LEARNING OUTCOMES		2	3	4	5	Surveys	Average
1	Knowledge	1	5	10	4	20	3.85
2	Critical Thinking	1	4	10	4	19	3.89
3	Fundamental – Digital	0	6	9	5	20	3.95
4	Fundamental – Print/Package	0	4	8	7	19	4.16
5	Fundamental – Bus Mgmt/QC	1	10	7	2	20	3.45
6	Communication - Oral	1	6	7	6	20	3.90
7	Communication - Written	3	4	7	6	20	3.80
8	Teamwork	0	6	9	5	20	3.95
9	Diversity	4	4	8	4	20	3.60
10	Ethics	1	1	10	7	19	4.21
11	Life-Long Learning	3	4	6	6	19	3.79

Employers reported the highest scale scores for ethics, fundamentals (print/packaging technologies), teamwork and fundamentals (digital creation, manipulation and management). The lowest areas reported were fundamentals (business management and quality control), diversity, and life-long learning.

Although the scale score averages are between medium and high in all learning outcome areas, it is important to note the breakdown of responses, specifically in the low and medium areas where there is less agreement. The purpose of the assessment process is to provide useful information from an industry perspective in order to evaluate the academic program, strengthen the curriculum, support program review/accreditation.

3. EMPLOYER VALUES

IMPORTANCE PLACED ON STUDENT LEARNING OUTCOMES

Employers assessed the importance placed on each of the learning outcome areas. Note the relationship between the importance employers place on the learning outcome and the skill attainment level for GRC graduates. The learning outcomes are ranked in order of importance from an employer perspective.

GRC EMPLOYER SURVEYING		Overall	Importance
SURVEY STANDARDS			
1	Ethics	4.21	4.60
2	Communication - Oral	3.90	4.57
3	Critical Thinking	3.89	4.55
4	Communication - Written	3.80	4.43
5	Teamwork	3.95	4.38
6	Life-Long Learning	3.79	4.24
7	Fundamentals - Digital Creation, Manip & Mgmt	3.95	4.05
8	Diversity	3.60	4.00
9	Knowledge	3.85	3.90
10	Fundamentals - Business Mgmt & QC	3.45	3.85
11	Fundamentals - Printing & Packaging Tech	4.16	3.80

The student learning outcomes employers valued the most were ethics, communication (oral and written), critical thinking, and teamwork. Note there is a greater importance placed on these types of skills as compared to the fundamental or technical skills. This can be explained in that the industry requirements for the technical skills vary dramatically among employers. The graduate can be taught the specific technical skills as long as they have a strong fundamental base of knowledge.

Faculty can utilize these findings to determine to what degree employer values are incorporated within the curriculum.

VALUE PLACED ON PERSONAL QUALITIES

Employers rated the personal qualities valued in GRC graduates. The following chart reflects these findings. The list is placed in numeric order:

	PERSONAL QUALITIES	
1	Problem Solving Skills	16
2	Critical Thinking	12
3	Communication Skills	12
4	Attitude	11
5	Technical Skills/Knowledge	10
6	Leadership Skill/Potential	9
7	Motivation/Drive	8
8	Adaptability	8
9	Team Player/Team Work	8
10	Work Ethics	7
11	Analytical	6
12	Commitment	6
13	Creative/Innovative	6
14	Enthusiasm/Energy	6
15	Interpersonal/Social Skills	6
16	Confidence	5
17	Independent Worker	5
18	Honesty/Integrity	5
19	Work Collaboratively	3
20	Public Speaking	0

The personal qualities employers valued the most were problem solving skills, critical thinking skills, communication skills, and attitude. It would be beneficial for GRC students to be aware of the personal qualities employers seek in graduates.

VALUE PLACED ON EDUCATION EXPERIENCES

Employers rated the educational experiences valued in GRC graduates. The following chart reflects these findings. The list is placed in numeric order:

	EDUCATIONAL EXPERIENCES	TOTAL
1	Internship/Co-op	19
2	Team Projects	12
3	Leadership Experience	12
4	Class Project	7
5	Club/Organization Involvement	7
6	Inter-Disciplinary Project	5
7	Community Service Project	4
8	Senior Project	4
9	Volunteer Work	3
10	Travel Experience	1
11	Study Abroad	1

The educational experiences employers valued the most were internship/Co-op, team projects and leadership experience. Students need to be advised of the educational experiences employers seek in graduates. It would be beneficial for GRC student to be aware of the types of educational experiences employers value in graduates so that students may integrate them into their undergraduate education. This would strengthen their ability in securing competitive employment after graduation.

DIVERSITY

Employers were asked to indicate the value they place on diversity:

- Ability to meet the cultural diversity needs of employers
- Ability to interact and communicate effectively with co-workers and clients from culturally diverse backgrounds

The data secured will be part of a larger university-wide assessment on diversity. GRC diversity data will be consolidated with survey findings from business and engineering surveys. The data will be compiled and reported to the Academic Senate and university community in Fall Quarter 2009.

SUMMARY

REPORT SUMMARY

The College of Liberal Arts established a Pilot Program to survey employers. The Graphic Communication Department was selected to collaborate with Career Services to design an Employer Survey instrument to assess the quality and industry readiness of GRC graduates. The survey instrument was also designed to assess the student learning outcomes that aligned with GRC accreditation standards. In addition, employers were asked to assess the importance or value they place on the student learning outcomes, personal qualities and educational experiences of GRC graduates. Employers reported the following:

- **GRADUATE QUALITY**
Employers reported they were satisfied with the quality of GRC graduates with a scale score average range of 4.20 using a 5-point scale. Employers also reported that GRC graduates were industry ready with a 4.25 scale score average.
- **STUDENT LEARNING OUTCOMES**
Employers reported scale score averages between medium and high for GRC graduates. Employers reported the higher student learning outcome areas were

ethics, fundamentals (print/packaging technologies), teamwork and fundamentals (digital creation, manipulation and management).

- EMPLOYER VALUES

The student learning outcomes employers valued the most were ethics, communication (oral and written), critical thinking, and teamwork.

The personal qualities employers valued the most were problem solving skills, critical thinking, communication skills, and attitude.

The educational experiences employers valued the most were internship/co-op, team projects and leadership experience.

The assessment process reflects a GRC commitment towards program evaluation and program review. The data secured through this Pilot Program will be used in the program review process and assist in establishing accreditation standards for the GRC Department and industry. These efforts will generate discussion with administration, faculty and university constituents to enhance and strengthen the curriculum, and better prepare GRC graduates for success in industry.

FUTURE PLANS

There are several future plans associated with this assessment effort.

- The GRC department may expand the scope of the assessment to include a larger employer base and response. A two-year longitudinal study may be established to strengthen the findings.
- The survey results will be used as part of the program review process, using employer information in assessing the quality of the academic program.
- The survey results will be shared with the GRC Industrial Advisory Board as a basis for discussion in evaluating and strengthening the curriculum.
- The survey results will be shared with the GRC faculty to assist with curriculum review and program evaluation.
- The survey results will be shared with the Dean's Office and used to promote other department initiatives to measure the quality of liberal arts graduates and learning outcomes.