

Institutional Research, Assessment, & Policy Studies: Supporting Faculty With In-Depth Analysis of Direct and Indirect Evidence

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SUPPORTING FACULTY THROUGH THE ASSESSMENT PROCESS

IRAPS:

- Explaining the UCSC Guidelines and analytical framework for PLO assessment
- Assisting with designing PLO studies and rubrics
- Assisting with analysis of data collected by faculty
- Providing analysis of indirect evidence (survey data)
- Supporting online collection (e-rubric) of direct evidence
- Designing new questions to collect indirect evidence via campus surveys
- Assisting with preparation of annual PLO reports

DIRECT EVIDENCE

Sources of Direct Evidence collected by instructors using an analytic rubric:

- Embedded class assignments in senior seminars
- Student portfolios
- Capstone experiences
 - Senior theses
 - Exhibitions and recitals
 - QE and Dissertation Defense for Graduate Program assessment

DIRECT EVIDENCE FROM ACADEMIC PROGRAMS

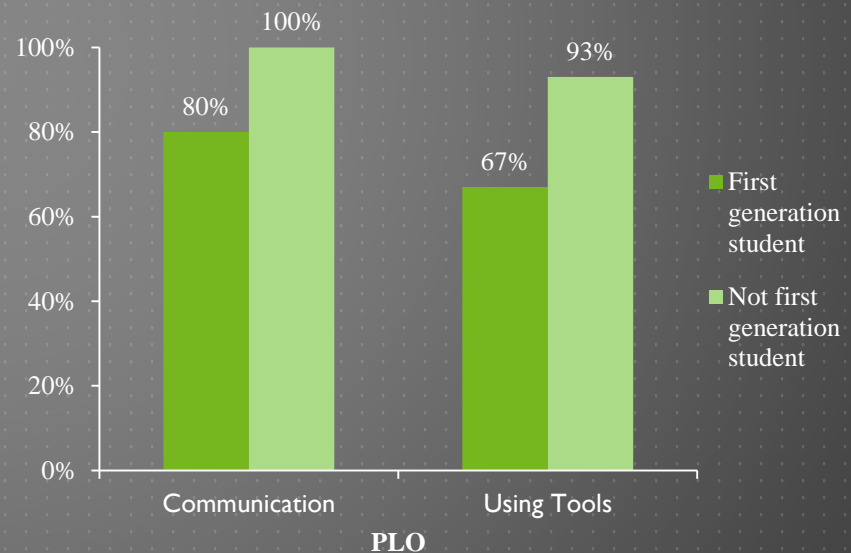
	Does not meet expectations (1)		Almost meets expectations (2)		Meets expectations (3)		Exceeds expectations (4)		Meets or Exceeds expectations (combined)		Total N
	Count	%	Count	%	Count	%	Count	%	Count	%	
Organizational Structure: Organize the presentation in a way that communicates effectively.	Demonstrates inadequate organization of the writing.		Demonstrates some organization of the writing.		Demonstrates adequate organization of the writing.		Demonstrates skillful organization of the writing.				
	2	2%	8	10%	30	36%	43	52%	73	88%	83
Coherence and Clarity of Expression: Develop a coherent presentation in which ideas are expressed clearly and appropriately to the purpose.	Demonstrates inadequate abilities to articulate ideas clearly and in a coherent way.		Demonstrates satisfactory abilities to articulate ideas clearly and in a coherent way.		Demonstrates very good abilities to articulate ideas clearly and in a coherent way.		Demonstrates excellent abilities to articulate ideas clearly and in a coherent way.				
	2	2%	15	18%	26	31%	40	48%	66	80%	83

DIRECT EVIDENCE: CONFIRMING THAT THE SAMPLE IS REPRESENTATIVE

Respondent Characteristics				
Characteristics		Sample Count	Sample %	Graduating seniors %
Gender	Female	5	10%	10%
	Male	46	90%	90%
Transfer Status	Started as Freshmen	36	71%	76%
	Transfer	15	29%	24%
First Generation Status	First Generation	15	29%	27%
	Not First Generation	28	55%	57%
	Unknown	8	16%	16%
Race/Ethnicity	African American or Black	1	2%	3%
	Asian American	16	31%	31%
	Hispanic or Latino	10	20%	14%
	Non-Hispanic White	17	33%	40%
	American Indian/Alaskan Native	0	0%	1%
	Unknown	7	14%	10%
	Total		51	100%

ANALYSIS OF EQUITY

- ▶ Analyze student performance by gender, transfer status, first generation status, race/ethnicity, GPA
- ▶ Determine statistically significant differences (Chi-Square for met/exceeded versus did not meet/almost met)
- ▶ Explore possible explanations of the findings (student performance by race/ethnicity and GPA)
- ▶ Identify disparities and necessary actions at the program level



INDIRECT EVIDENCE

Sources of Indirect evidence: Self-reported competencies and skills

- Focus groups
- Self-evaluations and self-reflection papers
- Student surveys

INDIRECT EVIDENCE

FROM 2 STUDENT SURVEYS

1. **UCUES** (University of California Undergraduate Experience Survey)

- Biennial UC-wide survey
- Large, representative sample (40% responded at UCSC in 2014)

2. Graduate Student Survey

- Biennial UCSC survey
- Large, representative sample (50% responded at UCSC in 2013)
- Connected with institutional data



INDIRECT EVIDENCE FROM UCUES

➤ Students rate their skills

- When they started at UCSC
- At the time of the survey (e.g., spring of senior year)
- Gains calculated



Examples of Skills

Analytical and critical thinking skills

Ability to be clear and effective when writing

Ability to read and comprehend academic material

Quantitative (mathematical and statistical) skills

Ability to speak clearly and effectively in English

Ability to participate in research or creative projects specific to your field of study

Ability to prepare and make a presentation

Ability to work with people from other cultures

EXAMPLE:

PLO statement: “BA graduates will demonstrate an ability to communicate effectively.”

Survey question: “Evaluate your ability to be clear and effective when writing “

INDIRECT EVIDENCE OF CURRICULAR SUPPORT

- Measure how well the curriculum supports student learning

How frequently during this academic year have you...

Extensively revised a paper before submitting it to be graded

Sought academic help from instructor or tutor when needed

Talked with the instructor outside of class about issues and concepts derived from a course

Made a class presentation



INDIRECT EVIDENCE FROM THE GRADUATE STUDENT SURVEY

- Students rate the quality of their preparation to do several academic activities

Examples of Competencies

Preparation to ...

Conduct independent research/scholarship

Teach undergraduate or graduate students

Write proposals to obtain funding

Write scholarly articles for publication

Adhere to research and/or professional ethics

Make a presentation to academic audiences

Work with people from diverse backgrounds

EXAMPLE

PLO: “Students will demonstrate an understanding of professional, legal, and ethical obligations”

Survey question: “Rate the quality of your preparation to adhere to research and/or professional ethics “

INDIRECT EVIDENCE FROM THE GRADUATE STUDENT SURVEY

Disciplinary knowledge and field-specific skills and other program specific questions can be included in the 2015 Survey.

For a PLO “ Students graduating with a PhD will demonstrate knowledge and ability to critically evaluate current research in one or more subfields of oceanography relevant to a selected research specialty.”

Survey questions may include:

- Self-evaluation of their preparation to critically evaluate...
- What courses and assignments helped them develop these skills
- What the department could do to improve student achievement in this area

SUMMARY OF SERVICES

IRAPS provides the following services to UCSC faculty:

- PLO study design consultation
- Rubric design consultation (Check out our example rubrics online!)
- Online data entry for faculty (e-rubrics)
- Analysis of direct & indirect evidence
- Survey question design and data collection
- Focus group facilitation (to collect additional indirect evidence)
- Report drafting

CONTACT US!

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