



Counseling SLO Results Fall 2012

Overview: In fall 2012, the counseling department assessed the following student learning outcome (SLO): SLO #1: The student demonstrates knowledge of the Associate Degree requirements leading toward graduation.

Methodology: An online assessment was developed to assess student knowledge of the requirements for an associate's degree following a session with a counselor. Crafton Hills College's three full-time counselors completed the online assessment between October 1 and October 17, 2012, following meetings with students. The counselors rated the students on their knowledge of the course requirements, competency requirements, catalog rights, course numbering system, and transfer degree option on the following rubric:

- 1 – The student is aware of the requirements necessary to achieve an Associate's Degree
- 2—The student is familiar with the requirements leading to an Associate's Degree
- 3—The student has a firm knowledge of all requirements leading towards an Associate's Degree
- 4—Not applicable

Finally, counselors indicated how many units each student had completed.

Summary of Findings:

- 25% of students had completed between 15 and 29 units
- 20% had completed 45-60 units
- 19% had completed more than 60 units
- 17% were new students
- After meeting with their counselors, the majority of students had “firm knowledge” of most of the requirements for an AA/AS degree, including
 - A minimum of 60 units are required to obtain an AA/AS degree
 - AA/AS degrees are comprised of general education courses
 - AA/AS are comprised of major courses
 - AA/AS are comprised of elective courses
 - The reading and writing competency requirement
 - The mathematics competency requirement
 - Catalog rights

Sample: Between October 1 and 17, 2012, the three full-time counselors at CHC evaluated the knowledge of 78 students with whom they had met. The largest number of students (17 students, or 25%) had completed between 15 and 29 units (see Table 1). About 20 percent had completed 45 to 60 units, and 19 percent had completed more than 60 units. About 17 percent were new students. No other demographic data were collected. For the sake of analysis, students are separated into two groups: those who had completed less than 30 units, and students who had completed 30 units or more.

Table 1: # of units completed by students meeting with counselors in October 2012.

# of units completed	# of students	
	N	%
None	12	17.4
1-14 units	7	10.1
15-29 units	17	24.6
Less than 30 units	36	52.1
30-44 units	6	8.7
45-60 units	14	20.3
More than 60 units	13	18.8
30 units or more	33	47.9

Note: Data on units completed are available for 69 of 78 students.

Findings: As shown in Table 2, most students were rated by their counselors as having a fairly good understanding of the requirements for an associate’s degree. It should be noted that the “not applicable” option was used frequently by the counselors, presumably because the item being rated (e.g., reading competency requirement) did not come up in discussion, or was not an issue for that student. “Not applicable” responses as well as missing responses were excluded from analyses, so the totals are often less than the total number of students evaluated (78). Counselors rated the majority of students a “3” (firm knowledge of all requirements) on the following items: a minimum of 60 units are required for a degree (73%), associate’s degrees include general education courses (78%), associate’s degrees include major courses (71%), associate’s degrees include elective courses (73%), the reading and writing competency requirement (69%), the mathematics competency requirement (73%), and the catalog rights (69%). Fewer students demonstrated firm knowledge of the course numbering system (49%) and the AA/AS Transfer Degree (30%). However, the majority of these students were still rated by their counselors as being “familiar with” the requirements; when the 2 and 3 ratings are combined, 86% were familiar with the course numbering system and 67% were familiar with the AA/AS Transfer Degree.

Table 2: Students’ understanding of degree requirements.

Understanding of requirements	1: aware		2: familiar		3: firm knowledge		Total	
	N	%	N	%	N	%	N	%
A minimum of 60 units are required to obtain an AA/AS degree	6	9.5	11	17.5	46	73.0	63	100.0
AA/AS degrees are comprised of general education courses	7	10.4	8	11.9	52	77.6	67	100.0
AA/AS are comprised of major courses	7	10.1	13	18.8	49	71.0	69	100.0
AA/AS are comprised of elective courses	5	12.5	6	15.0	29	72.5	40	100.0
The reading and writing competency requirement	5	11.9	8	19.0	29	69.0	42	100.0
The mathematics competency requirement	4	10.0	7	17.5	29	72.5	40	100.0
Catalog rights	4	8.3	11	22.9	33	68.8	48	100.0
Course numbering system	5	13.5	14	37.8	18	48.6	37	100.0
AA/AS Transfer Degree	11	33.3	12	36.4	10	30.3	33	100.0

Effect Size and Statistical Significance. The effect size statistic is commonly used in social science and medical research. Jacob Cohen developed one method of interpreting effect size. Cohen defined “small,” “medium,” and “large” effect sizes. He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large. Effect size is calculated by dividing the difference of the two means by the pooled standard deviation. It is important to mention that the number of students in each group does not influence effect size; whereas, when statistical significance is calculated, the number of students in each group does influence the significance level (i.e., “p” value being less than .05). Accordingly, using Cohen as a guide, a substantial effect would be .20 or higher.¹

For the next analysis, the students were divided into two groups, those who had completed less than 30 units and those who had completed 30 units or more. Students who had completed at least 30 units were statistically ($p < .05$) and substantially (effect size $> .50$) more knowledgeable about almost all of the associate’s degree requirements compared to students who had completed less than 30 units (see Table 3). The difference was especially large for knowledge of the 60-unit minimum for a degree ($p < .01$, effect size = .92) and knowledge of the AA-T and AS-T degrees ($p < .05$, effect size = .88); see rows highlighted in yellow. The exception was the course numbering system ($p = .25$, effect size = .44); see row highlighted in blue. Students’ knowledge of the course numbering system did not differ significantly based on how many units students had completed, although the effect size was substantial, .44.

Table 3: Comparison of Students’ Knowledge of Degree Requirements by Number of Units Completed.

Item	Students with at least 30 units			Students with less than 30 units			Comparison			
	Mean	N	SD	Mean	N	SD	Pooled SD	Mean difference	p-value for mean difference	Effect Size (Hedges’ g)
Min. 60 units	2.90	31	0.40	2.35	23	0.78	0.59	0.55	0.00	0.92
General Education	2.87	31	0.43	2.48	27	0.80	0.63	0.39	0.02	0.61
Major	2.83	30	0.46	2.40	30	0.77	0.63	0.43	0.01	0.67
Elective	2.80	20	0.52	2.27	11	0.91	0.68	0.53	0.05	0.76
Reading and Writing	2.76	21	0.54	2.25	12	0.87	0.67	0.51	0.04	0.74
Math	2.81	21	0.51	2.30	10	0.82	0.63	0.51	0.04	0.79
Catalog rights	2.78	27	0.51	2.33	12	0.78	0.60	0.45	0.04	0.73
Course numbering system	2.56	16	0.63	2.25	12	0.75	0.68	0.31	0.25	0.44
AA-T, AS-T	2.27	11	0.79	1.62	13	0.65	0.72	0.65	0.04	0.88

¹ The statistic used here is actually Hedges’ *g*, a version of Cohen’s *d* that has been adjusted for bias based on the sample size.

Figure 1: Assessment Cycle Diagram for SLO 1: Students will understand the eligibility requirements and available resources of the EOPS program.

