

Keck First Year Seminar: STUDENT post-survey: Fall 2011

I. POST Results: Self-perceptions of Student Research Abilities (n=124)

Students used these guidelines to assess their level of capability to accomplish the following tasks.

- 1: Slightly.** Able to accomplish with *continuous guidance and direct instruction*.
- 2: Relatively.** Able to accomplish with *frequent guidance* from an expert/mentor.
- 3: Adequately.** Able to accomplish with *regular (scheduled) assistance* from an expert/mentor.
- 4: Considerably.** Able to accomplish with *few questions and guidance* from an expert/mentor.
- 5: Exceptionally.** Able to accomplish *without consulting an expert/mentor*.

	To what extent do you feel capable of:	<i>POST Average</i>	<i>POST Standard Deviation</i>
Planning Research	1. <i>Designing</i> an original research study?	<i>3.77</i>	<i>0.787</i>
	2. <i>Locating current research</i> studies relevant to any research topic?	<i>4.06</i>	<i>.886</i>
Analyzing Research	3. <i>Demonstrating problem-solving or critical thinking skills</i> when carrying out a research project?	<i>3.77</i>	<i>.777</i>
	4. <i>Interpreting research</i> findings appropriate to a research topic?	<i>3.81</i>	<i>.803</i>
Communicating Research	5. <i>Communicating</i> clearly in well-organized and persuasive <i>oral</i> presentations?	<i>3.87</i>	<i>.836</i>
	6. <i>Communicating</i> effectively in well-organized and clear <i>written</i> discourse?	<i>3.88</i>	<i>.812</i>

Mean Comparisons of Midterm and Post Surveys for Total Group

	To what extent do you feel capable of:	N	Mid-Average	Mid SD	Post-Average	Post SD	p value < .05
Planning Research	<i>1. Designing</i> an original research study?	124	2.76	1.015	3.77	0.787	0
	<i>2. Locating current research</i> studies relevant to any research topic?	124	3.4	0.962	4.06	0.886	0
Analyzing Research	<i>3. Demonstrating problem-solving or critical thinking skills</i> when carrying out a research project?	124	3.5	0.812	3.77	0.777	0.001
	<i>4. Interpreting research</i> findings appropriate to a research topic?	124	3.39	0.871	3.81	0.803	0
Communicating Research	<i>5. Communicating</i> clearly in well-organized and persuasive <i>oral</i> presentations?	124	3.5	0.958	3.87	0.836	0
	<i>6. Communicating</i> effectively in well-organized and clear <i>written</i> discourse?	124	3.43	0.818	3.88	0.812	0

Mean Comparisons of Midterm and Post Surveys for Each Section

	To what extent do you feel capable of:	Section	N	Mid-Average	Mid SD	Post-Average	Post SD	p value < .05
Planning Research	<i>1. Designing</i> an original research study?	1	13	2.92	0.862	3.92	0.76	0.001
		2	10	2.9	1.287	3.3	0.823	0.309
		3	13	2.54	0.877	3.46	1.05	0.021
		4	14	3.29	0.994	4.07	0.475	0.035
		5	15	3.07	1.1	4.13	0.743	0.001
		6	14	2.29	1.069	3.5	1.019	0.001
		7	15	3	0.926	3.93	0.704	0.002
		8	16	2.25	0.931	3.69	0.479	0
		9	14	2.64	0.842	3.71	0.726	0.001
	<i>2. Locating current research</i> studies relevant to any research topic?	1	13	3.54	0.776	3.92	0.641	0.175
		2	10	2.9	1.101	3.5	1.08	0.024
		3	13	3.08	0.862	3.85	0.899	0.054
		4	14	3.64	0.633	4.29	0.726	0.013
		5	15	4	0.926	4.47	0.516	0.029
		6	14	2.71	1.069	3.64	1.216	0.001
		7	15	3.8	0.862	4.27	0.961	0.11
		8	16	3.69	0.873	4.25	0.683	0.014
		9	14	3	0.877	4.07	0.917	0.002
Analyzing Research	<i>3. Demonstrating problem-solving or critical thinking skills</i> when carrying out a research project?	1	13	3.46	0.776	3.85	0.801	0.24
		2	10	3.6	0.843	3.6	0.843	1
		3	13	3.38	0.961	3.62	0.87	0.427
		4	14	3.79	0.699	4	0.679	0.336
		5	15	3.6	0.507	3.93	0.704	0.136
		6	14	3.43	0.938	3.64	1.008	0.426
		7	15	3.67	1.047	3.73	0.799	0.806
		8	16	3.19	0.834	3.62	0.719	0.048

Communicating Research	4. <i>Interpreting research</i> findings appropriate to a research topic?	9	14	3.43	0.646	3.86	0.663	0.054
		1	13	3.23	0.725	4	0.913	0.026
		2	10	3.5	1.08	3.7	0.823	0.555
		3	13	2.92	1.038	3.46	0.877	0.11
		4	14	3.36	0.745	4	0.555	0.033
		5	15	3.93	0.704	3.87	0.834	0.774
		6	14	3.21	0.802	3.79	0.975	0.071
		7	15	3.8	1.014	3.93	0.594	0.634
		8	16	3.38	0.806	3.81	0.655	0.11
		9	14	3.07	0.616	3.64	1.008	0.088
	5. <i>Communicating</i> clearly in well-organized and persuasive <i>oral</i> presentations?	1	13	3.31	1.032	4	0.913	0.006
		2	10	3.3	1.16	3.8	0.919	0.096
		3	13	3.15	0.801	3.62	0.65	0.082
		4	14	3.71	0.726	4.14	0.535	0.082
		5	15	3.2	0.941	3.53	0.743	0.29
		6	14	3.36	1.008	3.57	1.089	0.189
		7	15	3.87	0.99	4	0.926	0.61
		8	16	3.75	0.931	4.12	0.719	0.054
		9	14	3.71	0.994	4	0.877	0.365
6. <i>Communicating</i> effectively in well-organized and clear <i>written</i> discourse?		1	13	3.15	0.899	4.08	0.76	0.004
	2	10	3.3	1.059	3.7	0.949	0.223	
	3	13	3.38	0.65	3.77	0.832	0.096	
	4	14	3.5	0.65	3.79	0.893	0.365	
	5	15	3.6	0.91	3.93	0.594	0.096	
	6	14	3.21	0.893	3.86	0.949	0.045	
	7	15	4	0.655	4.33	0.724	0.136	
	8	16	3.44	0.727	3.69	0.479	0.164	
	9	14	3.14	0.77	3.71	1.069	0.15	

*In 8 out of 9 sections, there was statistically significant growth in students' abilities to design an original research study.

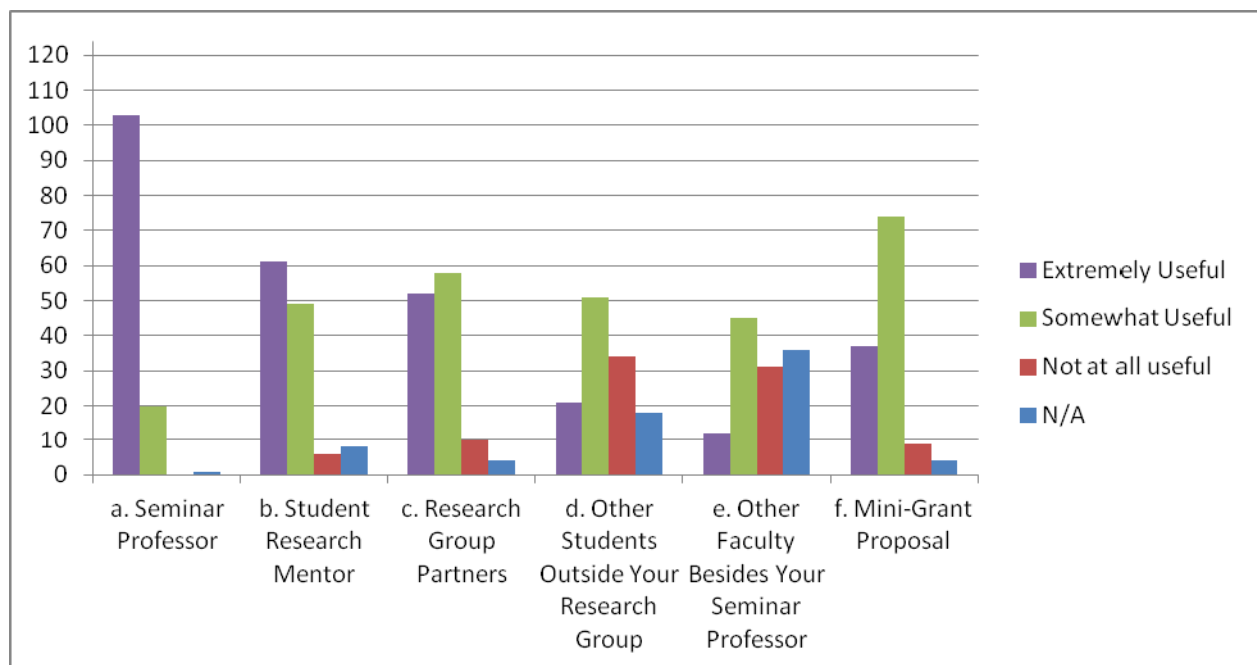
*In 6 out of 9 sections, there was statistically significant growth in students' abilities to locate current research studies relevant to any research topic.

II. Post-baccalaureate Goals

1. 85 out of 124 students (69%) are interested in attending graduate school. Their interest to study business & the sciences were cited the most.
2. 69 out of 124 students (56%) are interested in starting to work after graduation. Education, business, and communications are three main areas of interest that were reported.

III. How useful were the following elements of the Keck Seminar program?

	N/A (0)	Not at all useful (1)	Somewhat useful (2)	Extremely Useful (3)
a. Seminar Professor	1	0	20	103
b. Student Research Mentor	8	6	49	61
c. Research Group Partners	4	10	58	52
d. Other Students Outside Your Research Group	18	34	51	21
e. Other Faculty Besides Your Seminar Professor	36	31	45	12
f. Mini-Grant Proposal	4	9	74	37
g. Other: (List here)	119	0	2	3



1. 103 out of 124 students (83%) reported that their ***seminar professor*** was extremely useful during their Keck seminar experience. 126 out of 124
2. 61 out of 124 (49%) reported that the ***student research mentor*** was extremely helpful. 49 students (40%) reported that the mentor was somewhat useful.
3. 52 out of 124 (42%) reported that their ***research group partners*** were extremely helpful. In this same way, 111 out of 124 students (90%) found research group partners to be somewhat or extremely useful.
4. 34 out of 124 (27%) reported that ***students outside their research group*** were not at all useful. 36 out of 124 (29%) did not find this element to be applicable to their experience.
5. 67 out of 124 students (54%) found that ***faculty besides the seminar professor*** were not at all useful or no applicable to their experience.
6. 111 out of 124 students (90%) found the ***mini-grant proposal*** to be somewhat or extremely useful.
7. Specific assignments, learning to read/analyze research documents/writing, and workshop time & class lectures were ***other elements*** that were reported as being useful during the students' Keck experiences.