Prepared for the

William M. Keck Foundation

Undergraduate Education Program

Prepared by

Pepperdine University

For the project

Developing the Undergraduate Student as Scholar: An Institutional

Approach to Early Student Engagement



Dr. Dorothy Andreas (far right) and students in her Keck Scholars Program course "Communication Meltdown? Exploring the Challenges of Nuclear Discourse."

Report Date: January 31, 2012

Current Reporting Period: From: 01/01/2011 To: 12/31/2011



GRANTEE INSTITUTION NAME:	PROJECT DESCRIPTION OR TITLE:
Pepperdine University	Developing the Undergraduate Student as Scholar: An Institutional Approach to Early Student Engagement
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PROJECT TIME PERIOD: From: 01/01/2011 To: 07/31/2015

1. NOTABLE ACCOMPLISHMENTS (Write a brief summary of the most significant accomplishments of the project to date within the context of the proposed goals and timeline. Please do <u>not</u> repeat last year's progress, but relate new progress to the aims outlined in the original application.):

The first year of the Keck Scholars Program at Pepperdine University has brought significant rewards to student and faculty participants and has set the University on a potentially transformative path in discovering the payoffs of learner-centered inquiry at the very early stages of students' undergraduate careers. The following summarizes major accomplishments related to

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the six proposed project objectives and cites assessment data from pre- and post-surveys (included in report package) of students, peer mentors, and faculty.

1. Engage students in research through first-year seminars

In the program's first year, 142 students conducted original research projects in small teams across disciplines. Students were recruited early in the summer, and those who were particularly interested in challenging course content received preference for selection. From the pool of all first-year students, 22% enrolled in courses designated as Keck Scholars Program courses. Only 14% of the Keck Scholars reported having participated in research projects prior to beginning the program.

2. Encourage faculty development in sharing their scholarship with students through learner-centered and discovery-based practices and postures

Faculty were selected in the winter of 2011 and met throughout the spring and summer to learn how to invite first-year students to develop their own original research projects. Dr. Stephen Davis and Dr. Constance Fulmer presented ideas for how faculty could isolate aspects of their research for the purposes of the courses. Faculty shared their ideas with one another and received feedback. During the workshops, faculty also shared preliminary syllabi as way of anticipating potential challenges. During the semester they continued to meet as a group with Dr. Lee Kats and Dr. Fulmer to strategize over what appeared to be working well and to discuss areas where they wanted additional input. Surveys of Keck Scholars Program faculty revealed that eight out of nine professors reported that other professors were helpful in designing their course. Seven of nine reported that the workshops were helpful.

There were a total of nine courses taught by faculty whose fields spanned diverse disciplines. Faculty included Drs. Dorothy Andreas (Communication), Paul Begin (Hispanic Studies), Dana Dudley (American Literature), Stella Erbes (Teacher Education), Jennifer Harriger (Psychology), Darlene Rivas (History), Chris Stivers (Communication), Tom Vandergon (Biology), and Nicole Velasquez (Accounting).

2011 Keck Scholars Program Course Offerings

- Communication Meltdown? Exploring the Challenges of Nuclear Discourse
- Spanish Cinema/Spanish Society
- *Uncovering the Voice of the Marginalized Writer*
- Discovering the Secret of Inspirational Teaching
- Body Image and Disordered Eating
- Telling Lives: Biography and History
- Communication in the Digital Age
- Biodiversity and Genomics
- Talking through Technology: What Happens?

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3. Create a learning environment in which peers serve as role models of scholarship
In all, 17 students were recruited and trained to serve as peer mentors to first-year students. Presurveys of the peer mentors revealed 14 of the 17 peer mentors had prior experience with teaching or research. Eight had been research assistants, eight had conducted independent research, and two had been teachers' assistants. The reasons they decided to serve as mentors varied, yet 13 of 17 reported that either teaching experience or research experience was the most important factor in deciding to participate in the program. During the course of the term, Dr. Constance Fulmer held a Mentors' Tea for mentors and faculty to connect with one another and share their experiences. By the end of the term, 59% of the mentors said that their participation as a research mentor reinforced their decision to attend graduate school. All reported that they were extremely satisfied overall and their expectations were met with regard to their participation in the program.

- **4. Empower students by allowing them to take ownership of their creative, original ideas** Over the course of the term, students asserted their ability to investigate a topic of interest and they presented their findings during poster-sessions and presentation sessions. Additionally, 142 students completed a mini-grant proposal as a final exercise in their course. Post-surveys reveal that 89% of students found the mini-grant proposal assignment to be somewhat or extremely useful. Forty students would like to be considered for summer funding to carry out their proposed projects. Applications for mini-grants are currently under review by Dr. Kats' office. We have allocated funding to enable all interested students to carry out their projects. Selected proposal titles include:
 - o "Climate Change and its Effect on Ecosystems"
 - o "The Trailblazer of Communication or a Bizarre Fraud?"
 - o "The Effects of Standardized Reading"
 - o "Upton Sinclair vs. Hollywood: Tearing down the Silver Screen"

5. Foster an environment in which students are encouraged to continue scholarly contributions to their disciplines

Students conducted research projects in teams and presented those projects for one another and a broader University audience. The format for the presentations varied according to the particular disciplines.

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First-year students enrolled in *Discovering the Secret of Inspirational Teaching* make their final presentations.



Fellow students in *Discovering* the Secret of Inspirational Teaching comment on their peers' presentations.

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Students, mentors, and faculty were encouraged to attend the Southern California Conference for Undergraduate Research. Attendance of the SCCUR conference was optional in this first year, but there are plans to make it mandatory for participants in the forthcoming years of the project.

As this first Keck Scholars cohort progresses, we will offer travel grants to students who pursue publications, particularly upon completing research projects funded by mini-grants this summer. The pre-survey of students revealed that 72% are interested in attending graduate school and this figure stayed constant in the post-survey. Thus, we anticipate many will seek to publish and present their research.

6. Integrate research with existing curricular and co-curricular endeavors

Keck Scholars were invited to attend a Fellowships Information session in the fall, and they will continue to receive similar invitations in future terms. They are far more likely to be competitive for national awards as a result of their early research experiences.

As the students progress in their academic careers at Pepperdine, we will track their development by obtaining information on their participation in honors programs, capstone projects, completion of theses, among other opportunities. Thus far, the mini-grant proposals open the possibility that students will continue to pursue research opportunities through the Summer Undergraduate Research Program (SURP), Academic Year Undergraduate Research Initiative (AYURI), or Cross-Disciplinary Undergraduate Research (CDIUR).

2. UNANTICIPATED DEVELOPMENTS or CHALLENGES (Describe any factors that have contributed to or impeded the success of the project to date and explain their affect on the proposed goals and timeline.):

We did not anticipate that the Keck Scholars would have a broader audience for their poster-presentations, and the fact that students who were not in the Keck Scholars Program attended in great numbers was an encouraging development. The impact of the program extends beyond the nine courses alone in other ways as well. A faculty member in the Communication division sent this email to her colleagues, Dr. Chris Stivers and Dr. Dorothy Andreas, regarding their involvement and that of their students:

Dear Dorothy and Chris,

My students in Com Ethics and I were so impressed with your students' poster presentations today—and their willingness to think about ethical implications that my students asked them about.

Some of my students commented that they wish they'd had the same kind of opportunity as freshmen because of the advantage they'd have in other classes and in their career and grad school pursuits.

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Your hard work as their professors was so evident. Thank you for helping add to the culture of research in our division and at Seaver more generally.

Best, Juanie

A second unanticipated development occurred when participating faculty in certain disciplines determined that Keck Scholars should learn about the Institutional Review Board (IRB) as they proposed and executed projects involving human subjects. The chair of Pepperdine Seaver College's IRB visited relevant Keck courses to make a presentation on IRB and its role in ensuring research conducted at the University follows proper, ethical conduct. Some students were required to submit applications to Pepperdine's IRB. Exposure to IRB policies and procedures ensures that students learn what will be asked of them in the future as they continue to develop as researchers and scholars.

We had one less class than expected, yet we believe nine courses was a great accomplishment for the first year of the program. One factor is that we learned the Posse Program participants are now required to participate in their own first-year seminar course, and therefore we were not able to invite them to take part in the Keck Scholars Program.

Given the way in which we proposed the budget to follow an academic rather than calendar year, we have requested and received permission to spend down funding for the student mini-grants over the course of this spring and summer. We will gladly report on that spending by July 31, 2012.

3. OTHER SOURCES OF FUNDING (Describe any funding you have received from other foundations, corporations or government bodies for the project WMKF is supporting. Please include each funder's name, the amount provided and date of the award.):

4. OTHER COMMENTS:

The following pages are the pre- and post-surveys that were given to student participants, peer mentors, and faculty involved in the Keck Scholars Program.

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3. Rank in order the importance of the following outcomes of undergraduate research. (1=most

professional education or make a commitment to a research-related career.

Students get to experience *participating in the research process*, regardless of the

____ The research experience motivates the student to attain a higher-level of graduate or

The research findings make a *contribution to the field of study* and can be presented at

important)

_____ Other:

findings of the research experience.

a conference or published.

How important are the following considerations in your decision with undergraduate researchers	to work applicable	Slightly Important	Relatively Important	Moderately Important	Important	Very Important
4. Desire to influence the undergraduates	careers of 0	1	2	3	4	5
 Contributing to the set the fields represented to projects 		1	2	3	4	5
6. Contribution to undergresearch experience	graduate 0	1	2	3	4	5
7. University encourages participation	0	1	2	3	4	5

a conference or published.

_____ Other:

1.	What resources were helpful when carrying out your Keck seminar throughout the semester? ☐ Summer Workshops sponsored by Dean's Office ☐ Other Keck seminar professors ☐ Particular texts List:
	☐ Student Research Mentors ☐ Other:
2.	Rank in order the importance of the following outcomes of undergraduate research. (1=most important) Students get to experience <i>participating in the research process</i> , regardless of the findings of the research experience.

_____ The research findings make a *contribution to the field of study* and can be presented at

_____ The research experience motivates the student to attain a higher-level of graduate or

professional education or make a commitment to a *research-related career*.

Section: ____ Code:____

How important was the research experience in helping the undergraduates in your Keck seminar develop the following skills?	Not applicable	Slightly Important	Relatively Important	Moderately Important	Important	Very Important
3. Designing an original research study?	0	1	2	3	4	5
4. Locating current research studies relevant to any research topic?	0	1	2	3	4	5
5. Demonstrating problem- solving or critical thinking skills when carrying out a research project?	0	1	2	3	4	5
6. Interpreting research findings appropriate to a research topic?	0	1	2	3	4	5
7. <i>Communicating</i> clearly in well-organized and persuasive <i>oral</i> presentations?	0	1	2	3	4	5
8. <i>Communicating</i> effectively in well-organized and clear <i>written</i> discourse?	0	1	2	3	4	5

9. What lessons have you learned from this experience as a teacher and researcher?

C	C = 1
Section:	Code:
00001111	

Use these guidelines to assess your 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 wh	nat exten	t do you feel capable of:	Not applicable	Slightly Capable	Relatively Capable	Adequately Capable	Considerably Capable	Exceptionally Capable
ing rch	1.	Designing an original research study?	0	1	2	3	4	5
Planning Research	2.	Locating current research studies relevant to any research topic?	0	1	2	3	4	5
Analyzing Research	3.	Demonstrating problem-solving or critical thinking skills when carrying out a research project? Interpreting research findings appropriate to a	0	1	2	3	4	5
		research topic?	Ŭ	_	_	3	7	3
Communicating Research	5.	Communicating clearly in well-organized and persuasive oral presentations?	0	1	2	3	4	5
Commu. Rese	6.	Communicating effectively in well- organized and clear written discourse?	0	1	2	3	4	5

7.	Goals after graduating from college (Check <u>all</u> th	at apply):	
	_Attending graduate school. Name field of study:		
	MAPhD	Law School	Other:
	Starting to work. Career Choice:		
8.	Check <u>all</u> the reasons for selecting a Keck spons	ored research into	ensive first year seminar.
	Related to my field of interest or major	Was my first	t choice
	Was not my first choice, but was in my top 3.	Was assigned	d to me; I did not list it as a choice.
9.	Have you participated in prior research projects ?	(Circle One)	Yes No
IT YE	S, in what capacity?		
_	Research Assistant Teacher's Assistant Other:	Ind	ependent Research

Describe your responsibilities in your previous research experiences:

	Keck First Year Seminar STUDENT 1	oost-survey: Fall 2011	Section:	Code:
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Use these guidelines to assess your 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 wh	nat extent do you feel capable	e of: Not applicable	Slightly Capable	Relatively Capable	Adequately Capable	Considerably Capable	Exceptionally Capable
ing rch	 Designing an origin research study? 	al 0	1	2	3	4	5
Planning Research	2. Locating current research studies rele to any research topic		1	2	3	4	5
Analyzing Research	3. Demonstrating problem-solving or critical thinking sk. when carrying out a research project?	<i>ills</i> 0	1	2	3	4	5
A R	4. Interpreting resear d findings appropriate research topic?		1	2	3	4	5
Communicating Research	5. <i>Communicating</i> cle in well-organized and persuasive <i>oral</i> presentations?		1	2	3	4	5
Commu	6. <i>Communicating</i> effectively in well- organized and clear <i>written</i> discour	0	1	2	3	4	5

7.	Goals after graduating from college (Check <u>all</u> that apply):			
	_Attending graduate school. Name field of study:			
	MAPhDLaw SchoolOther:			
	Starting to work. Career Choice:			

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

	N/A	Not at all useful	Somewhat useful	Extremely Useful	Comment:
a. Seminar Professor					
b. Student Research Mentor					
c. Research Group Partners					
d. Other Students Outside Your Research Group					
e. Other Faculty Besides Your Seminar Professor					
f. Mini-Grant Proposal					
g. Other: (List here)					

	Put <i>in order (1,</i> nsive first year sem		ons for	you are ser	ving as a research	mentor in a Keck sponsored research
	•	To list on my resi				arch I'm interested in teaching
2.		duating from col te school. Name				
		M	IA	PhD _	Law School	 Other:
	Starting to work.	Career Choice:				
	Have you partions, in what capacity Research Assistate Other:	? int Te	acher's	s Assistant		pendent Research
Desc	cribe your responsi	bilities in your pr	evious	research ex	rperiences.	
4.	What do you th	ink you <i>will do o</i>	r learn	as a reseai	rch mentor in this	Keck research seminar?

Keck First Year Seminar MENTOR pre-survey: Fall 2011 Section: ____ Code: ____

	1-not satisfied; did not fill my expectations	2- somewhat satisfied; expectations minimally met	3- adequately satisfied; met general expectations	4- considerably satisfied; almost all expectations met	5 – extremely satisfied; met ALL my expectations
Comments	:				
2. Pla	ns after Undergradua				
				decision to attend <i>gi</i> decision to pursue a	
			· ·	to <i>reconsider</i> my pla	
un	wy participation as dergraduate experienc			to reconsider my plan	•
		·			
3. Re	search Mentor Work:				
As a resear	ch mentor, I:				
	dividually with researc	h groups			
→ Met in	d groups with formula	ting a research que:	stion		
	a groups with formula				
☐ Assiste	d with finding resource	es			
☐ Assiste☐ Assiste	•				
☐ Assiste☐ Assiste☐ Assiste☐ Assiste	d with finding resource	n designs	to the research p	rocess	
☐ Assiste ☐ Assiste ☐ Assiste ☐ Helpec ☐ Assiste	d with finding resource d groups with research groups with problem- d groups with oral pre	n designs solving as it related sentation skills	to the research p	rocess	
□ Assiste□ Assiste□ Assiste□ Helpec□ Assiste	d with finding resource d groups with research groups with problem-	n designs solving as it related sentation skills	to the research p	rocess	
☐ Assiste ☐ Assiste ☐ Assiste ☐ Helpec ☐ Assiste ☐ Assiste ☐ Assiste ☐ Review	d with finding resource d groups with research groups with problem- d groups with oral pre- d groups with written yed research proposals	n designs solving as it related sentation skills presentation skills	·	rocess	
☐ Assiste ☐ Assiste ☐ Assiste ☐ Helped ☐ Assiste ☐ Assiste ☐ Assiste ☐ Review ☐ Taught	d with finding resource d groups with research groups with problem- d groups with oral pred d groups with written	n designs solving as it related sentation skills presentation skills	·	rocess	

☐ Other: ______