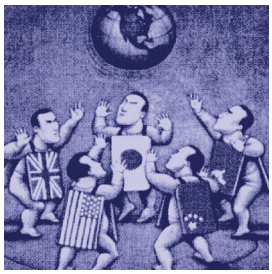
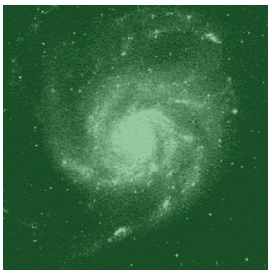
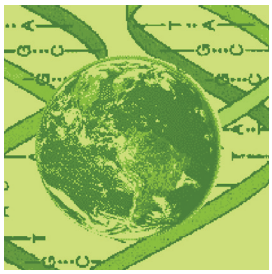




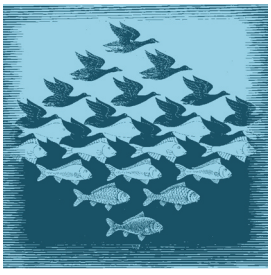




SELF-REVIEW 2003-2011

FRESHMAN CLUSTER PROGRAM

August 2011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UCLA Division of Undergraduate Education

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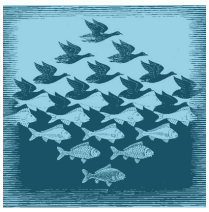

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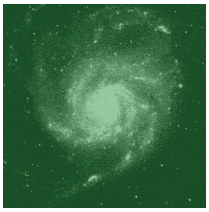

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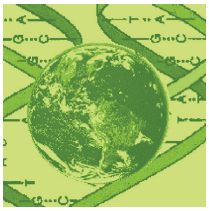

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FRESHMAN CLUSTER PROGRAM SELF-REVIEW 2003-2011

Prepared for the
Undergraduate Council
Academic Senate

August 2011

Undergraduate Education Initiatives
Division of Undergraduate Education
UCLA

This Self-Review was drafted by a group of academic administrators in the Division of Undergraduate Education under the direction of Dr. M. Gregory Kendrick, Director of the Freshman Cluster Program. The final draft of the report was reviewed, edited and approved by the faculty coordinators of the clusters, who serve as the program's Faculty Advisory Committee. The review's principal writers were:

M. Gregory Kendrick, Director, Freshman Cluster Program
Jennifer Lindholm, Special Assistant to the Vice Provost and WASC Coordinator
Lucy Blackmar, Assistant Vice Provost, Undergraduate Education Initiatives

It should also be noted here that because the clusters are yearlong collaborative academic communities, this report is largely focused on capturing the voices of the freshmen, graduate students and faculty members who participated in the program over the last eight years. Indeed, the observations and insights of these individuals regarding their experiences in the clusters during this time constitute the very heart and soul of this review.

Finally, the authors wish to dedicate this report to all of the many participants in the Freshman Cluster Program. Since the program's inception in 1998, these have included 16,322 freshmen, 372 graduate student instructors, and 228 ladder and non-ladder faculty members. The commitment of these individuals to achieving the aims of the clusters, as well as to meeting the challenges of teaching and learning in these unique courses, has made this innovative general education program a success.

Acknowledgements
The program's director and Faculty Advisory Committee members wish to thank the following UCLA administrators and staff for providing critical student, personnel, and budgetary data.

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INTRODUCTION

THE FRESHMAN CLUSTER PROGRAM SELF-REVIEW REPORT

The Academic Senate mandates the periodic review of academic programs for the purpose of maintaining and strengthening the quality of UCLA's curricula and instruction. These reviews provide departments, special programs (e.g., Honors Collegium, Summer Sessions, etc.), Academic Senate agencies, and senior administrators with information regarding a program's strengths and achievements, areas of weakness, and future plans and expectations. A review normally takes two years to complete and involves a period of self review by the program in question, as well as a site visit by a team of campus and extramural scholars.

This Self-Review Report has been prepared by members of the cluster administrative team in collaboration with cluster faculty, graduate student instructors and members of the Center for Educational Assessment in the Undergraduate Education Initiatives unit of the Division of Undergraduate Education. It summarizes data collected from an eight-year period, beginning in 2003-04 and ending in 2010-11. During the summer of 2011, a draft of the entire Self-Review Report was shared with the cluster coordinators, who constitute the Faculty Advisory Committee of the Freshman Cluster Program, and, after discussion, it was transmitted to the Undergraduate Council. During 2011-12, the report will be reviewed by the College Faculty Executive Committee, General Education (GE) Governance Committee, and Undergraduate Council.

The Freshman Cluster Self-Review Report is presented in five sections designed to provide the reader with information about the background of the program, the development of its administrative team, the experiences of its various participants, and the program's overall strengths, weaknesses, and future aims. The five sections are as follows:

SECTION ONE—OVERVIEW, ADMINISTRATION, AND ASSESSMENT

Section One presents an overview of the program and its goals, addresses the challenges of administering the cluster program, and provides a comprehensive description of the program's administrative team, annual budget, and expenditures.

SECTION TWO—THE CLUSTER EXPERIENCE OF FRESHMEN

Section Two describes cluster students and analyzes their reasons for enrolling in clusters, as well as their perceptions of how these courses have affected their intellectual and social development. This section's findings are based on a freshman student database provided by the Office of Analysis and Information Management, longitudinal studies of student perceptions of the Freshman Cluster Program at the end of their undergraduate careers, cluster student course evaluation feedback, and attrition surveys and focus groups.

SECTION THREE—THE CLUSTER EXPERIENCE OF GRADUATE STUDENT INSTRUCTORS

Section Three gives a profile of cluster graduate student instructors (GSIs), examines their principal reasons for teaching in these courses, and addresses their teaching and learning experiences in the clusters. This section also analyzes the GSI role in developing cluster courses, their experiences designing and teaching freshman seminars, and the impact of cluster teaching on their intellectual development and progress to degree. The findings in this section are based on information provided by the Office of Analysis and Information Management and graduate student instructor focus group discussions conducted in 2011.

SECTION FOUR—THE CLUSTER EXPERIENCE OF FACULTY MEMBERS

Section Four describes cluster faculty and analyzes their motivations for participating in the program, their experience developing and teaching these courses, and their appraisal of the affect of cluster participation on their intellectual development, workload, and interactions with lower division students and GSIs. This section's findings are based on information provided by the Office of Analysis and Information Management, as well as focus group discussions with faculty coordinators conducted in 2010-11.

SECTION FIVE— KEY ACHIEVEMENTS AND ONGOING CHALLENGES

Section Five concludes the Self Review with an overall summary of the Freshman Cluster Program's key achievements and ongoing challenges.

SECTION ONE

OVERVIEW, ADMINISTRATION AND ASSESSMENT

Section One of the self review is comprised of three parts. The section begins with an overview of the Freshman Cluster Program, focusing on its goals for its three participant groups (freshmen, graduate student instructors, and faculty). The next part focuses on the program's administration, instructional support, and budget. The last part of Section One addresses the role of Academic Senate oversight in cluster development and review processes, as well as the Division of Undergraduate Education's program assessment efforts.

OVERVIEW OF THE FRESHMAN CLUSTER PROGRAM

What is a Cluster Course?

Clusters are yearlong courses that are only open to freshmen. As illustrated in Figure 1.1, students attend lecture courses and small discussion and/or laboratory sections during the fall and winter quarters. In the spring quarter, these same students enroll in one of a number of "capstone" seminars that build on their experiences in the first two quarters and challenge them to complete a substantive project of their own. Because of the clusters' heavy workload requirements, as of Fall 2010, students receive 18 units of credit (six per quarter), as well as honors credit if they are in College Honors. By completing the entire yearlong sequence of courses, freshmen satisfy four general education (GE) requirements within the GE curriculum adopted by the College in 2002. Given the intensive writing they do in a number of disciplinary discourses, students also receive Writing II credit.

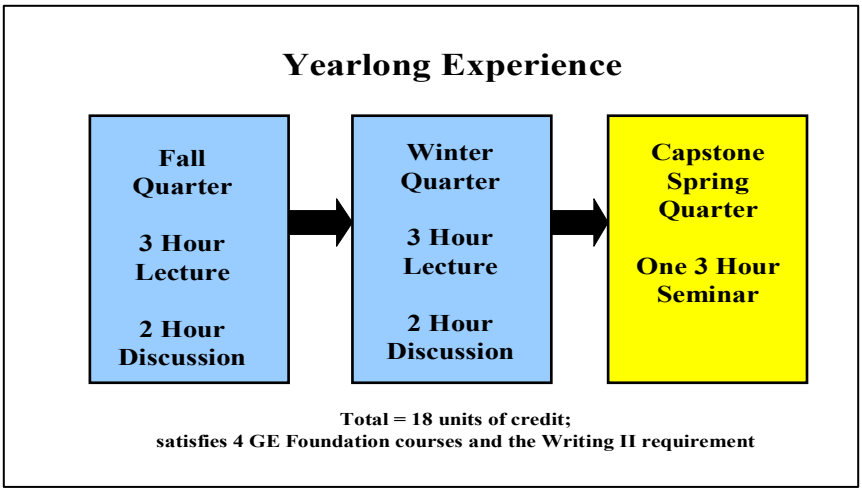


Figure 1.1: A schematic representation of the yearlong structure of a cluster course over three academic quarters, and a summary of the general education credits accorded to the sequence

All cluster classes are listed in the *UCLA Catalog* and in the *Schedule of Classes* under the heading of General Education Freshman Clusters. Each cluster sequence has it own course number. For example, the *Evolution of Cosmos and Life* cluster is numbered 70A, 70B and 70CW. The "W" denotes Writing II credit, which all clusters have carried since Fall 2002. As of 2001-02, the spring seminar has also carried Honors Collegium credit. Two clusters, *Global Environment* and *Work, Labor, and Social Justice in the U.S.*, are listed under the Institute of the Environment and Labor and Workplace Studies, respectively; and their course numbers are M1A, M1B, and M1CW. ("M" denotes multiple listing.)

In addition to being a year in length, clusters are collaboratively taught, interdisciplinary courses focused on topics of timely importance such as the "global environment" and "human sexuality." Clusters are taught by cohorts of faculty and senior graduate student instructors (GSIs) from departments and schools across campus, and they are designed to introduce freshmen to the ways in which different disciplines address common problems. Figure 1.2 shows how freshmen in the *Interracial Dynamics* cluster in 2010-11 were introduced to the question of race in America by a collaborative team of faculty drawn from the History, Sociology, and English departments, as well as the departments of Asian American and Chicano/a studies and the interdepartmental program in African American Studies.

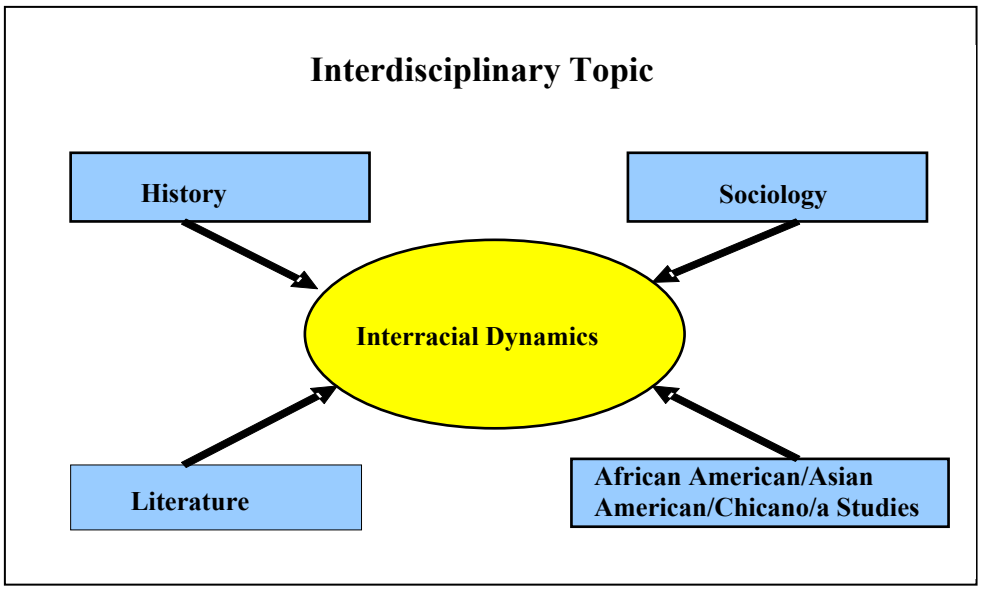


Figure 1.2: Disciplinary Components Providing an Interdisciplinary Perspective for 2010-11 Interracial Dynamics Cluster Students

While no two clusters are completely alike in course content or instructional methods, they all include four groups of participants. As illustrated in Figure 1.3, each cluster consists of a student audience of anywhere from 160 to 240 freshmen, a teaching cohort of three to four faculty members and four to six graduate student instructors (labeled T.A.s here), and an instructional support network, including the cluster administrative team, librarians from the undergraduate library (College Library), Residential Life representatives, and Writing Programs consultants. In fall and winter quarters, faculty members lecture to the whole student audience, and GSIs lead weekly discussion sections.

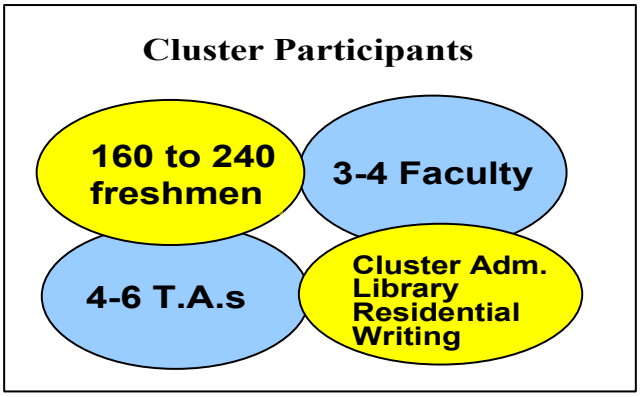


Figure 1.3: Participants in a typical freshman cluster course and the various support staff who work with the faculty, TAs and students

Goals of the Freshman Cluster Program

The Freshman Cluster Program has four goals based on a set of recommendations made by a general education workgroup in 1994-95. These goals are:

- *Interdisciplinary Teaching and Learning.* To offer yearlong courses that challenge freshmen to understand complex and controversial issues from select disciplinary perspectives.

- *Foundational Academic Skills.* To strengthen skills—critical thinking, problem solving, rhetorical effectiveness, creative expression—that give freshmen the tools necessary for success in a research university environment and a rapidly changing world.

- *Spring Seminars.* To offer a spring capstone seminar experience that challenges freshmen to expand on the knowledge and skills acquired during the first two quarters of the cluster, engage in in-depth dialogue about complex issues, and to complete a substantive learning project of their own.

- *Yearlong Learning Communities.* To create a community of learners among cluster faculty, GSIs, and freshmen, through yearlong academic and social experiences occurring both in and out of the classroom.

To achieve these goals, a number of objectives were established for each of the three participant groups: freshmen, graduate student instructors, and faculty.

Freshman Students

The cluster program was initiated to assist UCLA's incoming freshmen with their transition from high school to college. As such, clusters aim to provide these students with a cornerstone experience that will provide them with the skills and general knowledge they will need to succeed both at UCLA and in their future capacities as citizens and professionals. To achieve these aims the cluster program has worked to help freshmen:

- Grasp complex interdisciplinary material and understand the contributions of distinct disciplinary perspectives to the subject of their clusters.

- Strengthen such academic skills as critical thinking, problem solving, rhetorical effectiveness, and creative expression.

- Participate in learning communities led by distinguished ladder faculty that encompass not only in-class but also out-of-class learning experiences.

Graduate Student Instructors
The cluster program seeks to provide UCLA's most experienced doctoral students with an advanced instructional experience that gives them both yearlong financial support and the opportunity to:

- Engage in interdisciplinary teaching and innovative pedagogical practices.

- Design and teach a seminar that is based on their own scholarly research and cluster experiences during the fall and winter quarters.

- Participate in an intellectual community with motivated freshman students, distinguished faculty from programs and departments across campus, and graduate student colleagues in a wide array of disciplines.

Faculty
The ultimate success of the cluster program is predicated on the engagement of UCLA's distinguished scholar-teachers in a collaborative teaching venture aimed at demonstrating to freshman students how different disciplines address a common problem. To achieve this aim, faculty must work together to:

- Design and deliver a cohesive, integrated course that clearly conveys to a freshman audience the ways in which different disciplines approach a shared subject matter.

- Develop assignments and class activities that encourage students to improve certain academic skills necessary for learning in a research university.

- Engage in a collaborative teaching process that provides the opportunity to become learners as well as teachers in a community of scholar-teachers.

In creating assessment plans for the Freshman Cluster Program, we have attempted to focus on assessing the goals set for each of the participating groups. These efforts are discussed in the last part of this section of the Self Review.

Current Size and Scope of the Freshman Cluster Program

Since the program's inception in 1997-98, when one cluster was offered, a total of fifteen cluster courses have been taught, involving a total of 16,322 freshmen, 372 graduate student instructors, and 117 faculty members. Nine to ten clusters have been offered regularly during the eight years under review (2003-04 to the present). Appendix A summarizes these offerings by the year (or years) in which each cluster was offered, and also provides participation figures for each cluster's freshmen, graduate student instructors, and faculty. Appendix B contains a complete list of cluster faculty.

Since the last review, three new cluster sequences were approved and offered:

1. *Sex: From Biology to Gendered Society* (approved 2006; first offered in 2006-07);

2. *Los Angeles: The Cluster* (approved 2007; first offered in 2007-08); and

3. *Neverending Stories: Multidisciplinary Perspectives on Myth* (approved 2009; first offered in 2009-10).

The lengthy process required to develop a new cluster is explained in the following part of this section. Given the time needed to develop a cluster, it is expected that, once approved, a cluster will be offered for at least two years. All but two of the 15 clusters developed—*Perception and Illusion* and *Towards a Global Economy*—have been offered on a regular basis since 2003-04.

For cluster courses with multiple offerings, teaching team membership often changes, typically every two years or, in some cases, every year. For some clusters, a change in faculty has resulted in a substantial reworking of the course's overall structure and aims so as to more closely mirror the expertise of the teaching team's new members.

In its twelve-year history, the cluster program has offered 753 capstone spring seminars. These seminars constitute a vital feature of the clusters, offering students with a common cluster background the opportunity to deepen their connections with the material and each other, while producing a substantive final project. These seminars have focused on a wide array of topics including:

- *The Color of Violence: The Meanings & Significance of Racial Violence in U.S. History*
- *Environmental Engineering in Los Angeles*
- *Gender, Sexuality and Popular Culture*
- *Why Do Men Have Nipples? And Other Explorations into the Evolution of the Human Animal*
- *From Ulysses to Princess Leia: The Heroic Ideal in the West*
- *Heart of Aztlan: Los Angeles and the Chicana/o Civil Rights Movement*
- *Death and Dying*

ADMINISTRATION OF THE FRESHMAN CLUSTER PROGRAM

From its inception, it was evident that supporting, administering, and monitoring a collection of yearlong courses with mixed instructional cohorts and a highly ambitious agenda of pedagogical aims would pose a number of challenges. To address these challenges, an administrative support team was established to:

- Engage faculty and graduate student instructors across campus in the development and implementation of yearlong interdisciplinary courses for freshmen.
- Design, implement, and support an Academic Senate oversight and assessment process aimed at ensuring that freshman clusters adhere to a clearly defined and consistent set of general education goals and practices.
- Mount and support a program capable of providing anywhere from 1800 to 2400 UCLA freshmen with the opportunity to enroll in a cluster.

The ways in which these administrative challenges have been addressed are discussed in the subsections that follow.

The Cluster Administrative Team

The cluster administrative team is housed in the Undergraduate Education Initiatives (UEI) unit of the Division of Undergraduate Education. In addition to overseeing the cluster program, the unit is responsible for several other academic programs that require collaborative efforts with, and among, faculty and departments across campus, including: the Writing II curriculum, Fiat Lux seminars, Community Learning, and two minors (Civic Engagement and Disabilities Studies).

The composition of the cluster team and its responsibilities are as follows:

1. *Director of the Freshman Cluster Program* (M. Gregory Kendrick, History): A full-time academic administrator and adjunct faculty member who works directly with the Vice Provost for Undergraduate Education (Judith L. Smith) and the Assistant Vice Provost for Undergraduate Education Initiatives (Lucy Blackmar) to:

    - Supervise cluster budgetary and personnel matters;
    - Plan future cluster development;
    - Coordinate linkages between clusters and other undergraduate curricular initiatives at UCLA (e.g., Writing II, information literacy, and general education reform); and
    - Oversee all logistical coordination for clusters.

2. *Instructional Coordinators* (Jeffrey L. Decker, English and Anthony Friscia, Integrative Biology and Physiological Science): Doctoral level, discipline-based scholars with significant teaching experience and adjunct faculty appointments who handle the following administrative and instructional cluster responsibilities:

    - Identify and recruit faculty cohorts to both design and teach cluster courses;
    - Shepherd cluster course proposals through the Senate approval process;
    - Train and mentor graduate student instructors so that they are prepared to supervise and teach cluster discussion sections and spring seminars; and
    - Provide instructional support in clusters by giving lectures, supervising discussion sections, and designing and offering spring seminars.

Budgetary, personnel, assessment, and scheduling support is provided to this administrative team by the UEI staff, which is comprised of a Management Services Officer, Budget Analyst, and Program Representatives.

Instructional Support for Clusters

The cluster program seeks to provide freshmen with a learning community experience that strengthens their intellectual skills and introduces them to interdisciplinary approaches to teaching and research.

Achieving these aims involves significant collaboration between the cluster's administrative and instructional teams and UCLA's College Library, Office of Instructional Development (OID), Office of Residential Life, Center for Community Learning, and Writing Programs. This section addresses the many ways in which these different units have provided instructional support for the clusters.

Powell College Library

A key aim of the cluster program is to help freshmen acquire a high degree of information literacy that will allow them to identify and acquire the knowledge they will need to address a wide range of questions and topics, as well as to make critical and logical assessments of information in both traditional and digital formats. Throughout the cluster program's history, its administrative and instructional cohorts have worked with the head of the College Library and her colleagues in UCLA's Information Literacy Initiative, to achieve this goal. As a result of this collaborative effort, each cluster course has been assigned its own reference librarian who works with faculty and GSIs to:

- Design information literacy and critical thinking exercises that are tied directly to the aims and objectives of that cluster's research and writing assignments.
- Organize and conduct information literacy sessions for cluster discussion sections and seminars.
- Develop information resource web pages for the cluster's lecture classes, discussion sections, and seminars of each cluster course.

For lecture link examples, see: http://guides.library.ucla.edu/ge30myth and http://guides.library.ucla.edu/GE70; http://guides.library.ucla.edu/GE80.

For seminar examples see: http://guides.library.ucla.edu/GE21UrbanEnvironment; http://guides.library.ucla.edu/ge30harris; http://guides.library.ucla.edu/ge72cw-legal.

Writing Programs

Improving and strengthening the writing skills of freshman students is one of the cluster program's principal aims. Since launching the cluster initiative in 1998, all clusters have required students to complete a number of revised writing assignments during the fall and winter quarters, as well as a substantial paper in the spring seminar. In their cluster assessments, students report that they do considerably more writing than their counterparts in more traditional, single-quarter courses.

Given the intensive nature of writing in the clusters, the Writing II Implementation Committee voted unanimously at its April 22, 2002 meeting to allow students who complete an entire yearlong cluster sequence to earn credit for Writing II. To ensure that cluster writing assignments are compatible with Writing II criteria, writing instructors under the supervision of Bruce Beiderwell, Director of Writing Programs, consult with cluster coordinators. Each year, during fall and winter quarters, these instructors also collaborate with the cluster administrative team to provide 11 hours of prescribed training to cluster GSIs in a series of intensive workshops and individual mentoring sessions.

Office of Instructional Development

Over the last thirteen years, the Office of Instructional Development (OID) has provided a wide range of grants and services to the cluster program. These include:

- A number of instructional improvement grants (from 1999 to the present) that provide faculty release time, GSR salaries, and course materials budgets for the development of new cluster

courses. These grants also support the efforts of faculty in continuing cluster courses to improve instruction through developing innovative web-based resources.

- OID educational technology service units that provide cluster faculty and GSIs with instructional media equipment (video tapes, laserdiscs, DVDs, and films), technical assistance, and training in the use of various kinds of media systems for course lectures, assignments, and lab experiments.

- Mini-grants for cluster faculty and GSIs that enable them to purchase films, audiotapes, and videotape programs for their classes, defray the costs of student field trips, and provide honoraria for distinguished experts visiting the clusters.

Center for Community Learning

One objective of the cluster program is to engage freshmen in experiential and service learning projects. For example, since 2001-02, *Frontiers in Human Aging* faculty, in collaboration with Dr. Kathy O'Byrne, Director of the Center for Community Learning (CCL), have placed their cluster students in service learning experiences with Los Angeles-based non-profit organizations that serve older adults or address the aging experience. Over a five-week period during winter quarter, these students spend a total of 20 hours performing various services for these organizations and conducting in-depth studies of the agencies in which they are placed. At the end of the quarter, students prepare in-class presentations of their experiences and findings.

Since Spring 2003, a number of the GSIs who offer *Work, Labor, and Social Justice in the U.S.* seminars have collaborated with CCL to place more than 40 cluster freshmen in service learning experiences with organizations that deal with homelessness, affordable housing, welfare reform, and labor issues in the Los Angeles area. As of 2009-10, the *Work* cluster's faculty team is also exploring the possibility of emulating the *Aging* cluster by integrating a winter quarter internship experience into their course. The instructor for one of the *Biotechnology and Society* seminars also worked with CCL to place 17 students in food banks run by Aids Project LA (APLA).

Office of Residential Life

One of the primary goals of the Freshman Cluster Program is to cultivate a learning community environment, particularly in and around the student residence halls. Over the past thirteen years, working closely with Suzanne Seplow, Director of the Office of Residential Life (ORL), cluster program affiliates have strived to achieve this objective in a number of ways. First, to accommodate the clusters' instructional and social needs, a large multi-media auditorium with smaller adjacent meeting rooms was created in DeNeve. Since its completion in 2002, all but one of the clusters has been regularly taught in this classroom. To facilitate faculty and GSI access to the auditorium, special parking arrangements have been made with UCLA Parking, and cluster faculty receive permits for specially designated parking spaces adjacent to the DeNeve auditorium.

Second, Residential Life has made three classroom spaces available in the Covel Commons complex for cluster discussion sessions and spring seminars. Plans for turning one of these three rooms into a dedicated lab space for the science-centered clusters are also in process. This ORL cluster laboratory will include computer work stations for groups of students and secured cabinets for the storage of geological and paleological specimens.

Third, all of the clusters sponsor an array of social events in the residential life area. Most of these events are centered on food or films – and sometimes both. For example, the *Interracial Dynamics*, *Sixties*, and *Myth* clusters all hold evening movie screenings as required components of their courses. Prior to each

screening, students are invited to dine with cluster faculty and GSIs in one of the residential dining halls providing them with an opportunity to interact with their instructors in an informal setting conducive to promoting learning outside the classroom.

The Cluster Budget

Fund Sources and Student Enrollments

In the spring of 1997, Chancellor Charles E. Young pledged $2 million to be used, beginning in 1999-00, for undergraduate education, particularly for new initiatives. The goal was to offer enough cluster enrollments to accommodate about 40% of the freshman class of ~4,000. In 2002-03, the Provost's Office made its final installment to fully fund the program, bringing its permanent budget to $1.8 million.

In 2006-07 and 2007-08, the program received temporary funds from the College Executive Dean amounting to $200,000 each year for the purpose of offering ten clusters that provided seats for over 43% of the College's incoming freshman class. By 2009-10, this growth money was made permanent, allowing the cluster program's budget to grow to ~$2.2 million. However, the onset of California's fiscal crisis in 2009 resulted in cuts of $300,000 to the cluster budget, leaving the program with permanent funding amounting to ~$1.9 million (i.e., $100,000 more than it was at the time of the last review in 2002-03).

Table 1.1 demonstrates the effects of growth funds on the cluster program in terms of student enrollment. Over the last eight years, the program has had sufficient funds to mount nine to ten clusters each year, which can accommodate 40% of all UCLA freshmen (the program's original goal). In terms of College-only first year students, this funding has ensured cluster seats for an average of 47% of Letters and Science freshmen during the eight-year period covered by this review. For three of these eight years, the program has accommodated over half of the College's incoming class.

Table 1.1: Cluster Enrollment Patterns, 2003-11 (based on fall enrollments)

	03F	04F	05F	06F	07F	08F	09F	10F
Cluster Freshmen	1,502	1,473	1,580	1,726	1,779	1,835	1,932	1,860
All College Freshmen	3,599	3,077	3,731	4,012	3,469	3,870	3,549	3,659
All UCLA Freshmen	4,269	3,723	4,422	4,809	4,564	4,735	4,472	4,636
Percent All College Freshmen in Cluster	42%	48%	42%	43%	51%	47%	54%	51%
Percent All UCLA Freshmen in Cluster	35%	40%	36%	37%	40%	40%	44%	41%

Table 1.2 summarizes fund sources for the cluster program from 2003-04 to 2010-11. State funds refer to the program's permanent allocation. Supplemental funds are monies that include both salary reimbursements for cluster personnel time spent on projects not related to the program, as well as grant support from on-campus agencies such as the Office of Instructional Development or extramural funding from the Howard Hughes Medical Institute. These grant monies are used for course development and, occasionally, for the delivery of teaching. This table also includes information relating to the reduction in the program's state funds due to California's ongoing fiscal crisis.

Table 1.2: Fund Sources for the Cluster Program

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-yr Total
State Funds									
19900 Permanent Funding	$1,565,213	$1,712,668	$1,673,016	$1,698,437	$1,737,945	$1,761,302	$1,804,361	$1,645,791	$13,598,733
19935 Permanent Funding	$0	$9,466	$0	$0	$0	$325,000	$335,224	$159,381	$829,071
19900 Carry Forward	$12,939	$135,438	$144,805	$140,817	$39,531	($90,323)	$176,333	$101,311	$660,852
19935 Carry Forward	$0	$9,466	$9,466	$7,015	$228	$0	$0	$4,810	$30,985
19900 Growth Temp Funding	$0	$0	$0	$200,000	$200,000	$0	$0	$0	$400,000
19935 Growth Temp funding			$15,000			$94,224			$109,224
Total State Funds	**$1,578,152**	**$1,867,038**	**$1,842,287**	**$2,046,269**	**$1,977,704**	**$2,090,203**	**$2,315,918**	**$1,911,293**	**$15,628,864**
Reduction State Funds:19900		($59,882)	$0	$0	$0		($44,152)	($8,116)	($112,150)
Reduction State Funds:19935						($75,000)	($200,957)		($275,957)
TOTAL STATE FUNDS	**$1,578,152**	**$1,807,156**	**$1,842,287**	**$2,046,269**	**$1,977,704**	**$2,015,203**	**$2,070,809**	**$1,903,177**	**$15,240,757**
Supplemental Funds									
Salary Reimbursements	$75,325	$146,779	$82,799	$6,564	$49,793	$3,643	$0	$22,905	$387,808
Grant Support	$201,650	$115,102	$52,443	$32,147	$67,368	$33,150	$32,000	$63,458	$597,318
Grand Total	**$1,855,127**	**$2,069,037**	**$1,977,529**	**$2,084,980**	**$2,094,865**	**$2,051,996**	**$2,102,809**	**$1,989,540**	**$16,225,883**

Cluster Program Expenditure

Cluster funds are used for three basic expenditures: faculty instruction, graduate student instructor support, and course expenses/administration. Table 1.3 (next page) summarizes expenditures for each of these three areas over the eight-year period under review.

Faculty. From 2003-04 through 2007-08, each faculty participant or writing consultant (Writing Programs) typically received one course release for each quarter they participated in teaching (or consulting). With the onset of the state's budget crisis in 2007-08, the cluster program was able to continue offering nine to ten clusters a year and maintain past levels of support for graduate student instructors by reducing the funds transferred to departments in partial compensation for their faculty members' teaching time. Consequently, beginning in 2008-09, departments receive a flat $5000 GE support stipend per faculty member for each quarter of their cluster teaching, as well as a guarantee that at least one of their graduate students will receive a full year of employment in a cluster course.

Each faculty coordinator has received an additional course release/GE support stipend or some summer funding. Funds have also been allocated for spring quarter course releases/GE support stipends prior to the teaching of a new cluster to allow the faculty coordinators of new clusters time to develop course syllabi and materials, and to hire and integrate graduate student instructors into their cluster teaching teams. In a few cases, a summer stipend is provided to faculty members, who seek support to modify an existing cluster or plan a new one.

Graduate Student Instructors. Cluster funds pay the salaries of graduate student instructors. GSIs are also paid a modest stipend to attend the orientation sessions and seminar development workshops that are designed to prepare them for their cluster work. Beginning in 2001-02, funds have also been used to hire graduate student coordinators who assist faculty in a given cluster with coordinating students' community placements for their service-learning projects. These coordinators are trained and supervised by the Center for Community Learning.

Administration. Administrative costs include administrative team salaries, as well as costs associated with ongoing cluster program assessment efforts. Funds are also allocated to support GE Governance Committee activities, conference travel, and publication of the annual cluster brochure as well as to

provide for administrative office expenses and general supplies. The program also pays for lecture room rental for clusters holding lectures in the DeNeve Auditorium and allots each cluster an annual "supplies and expenses" budget of approximately $3,000 to cover such items as field trips, social events, and cluster T-shirts.

Table 1.3: Freshman Cluster Program Annual Expenditures

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-yr Total
Faculty:									
49% of Total	**$1,057,843**	**$924,377**	**$1,038,684**	**$1,117,333**	**$1,062,459**	**$759,959**	**$865,657**	**$650,434**	**$7,476,745**
Development	$37,700	$44,282	$26,959	$33,943	$23,670	$10,500	$38,755	$0	$215,809
Faculty Course Releases/GE Stipends	$627,461	$539,923	$558,671	$672,623	$699,968	$346,359	$440,768	$413,374	$4,299,147
Lecturer/Instructional Coordinator Salaries	$361,437	$306,380	$421,929	$376,295	$299,425	$360,469	$340,000	$237,060	$2,702,994
Writing II Consultants	$31,245	$33,792	$31,125	$34,471	$39,396	$42,632	$46,134	$0	$258,795
Graduate Student Instructors:									
42% of Total)	**$566,005**	**$646,321**	**$699,562**	**$662,595**	**$885,660**	**$928,842**	**$1,075,997**	**$990,959**	**$6,455,941**
Training & Development	$17,399	$3,800	$11,500	$1,000	$11,500	$11,500	$11,500	$11,500	$79,699
GSI Salaries	$529,586	$637,736	$679,328	$653,663	$861,536	$903,778	$1,038,252	$941,651	$6,245,530
Service- Learning Coordinators	$11,944	$4,785	$6,700	$6,700	$6,868	$8,370	$8,417	$11,222	$65,005
Benefits & Fee Remissions	$7,076	$0	$2,034	$1,232	$5,756	$5,194	$17,829	$26,586	$65,707
Administration:									
(9% of the Grand Total)	**$215,045**	**$169,330**	**$180,205**	**$172,255**	**$174,193**	**$205,587**	**$161,475**	**$105,550**	**$1,383,641**
Instructional Coordinator	$35,796	$37,662	$38,229	$40,755	$38,524	$44,700	$42,092	$46,165	$323,923
Staff Salaries	$85,883	$44,103	$71,865	$54,087	$58,383	$65,976	$38,486	$0	$418,783
Supplies & Expenses	$93,366	$87,565	$70,111	$77,413	$77,286	$94,911	$80,897	$59,385	$640,934
Total	**$1,838,893**	**$1,740,028**	**$1,918,451**	**$1,952,183**	**$2,122,312**	**$1,894,389**	**$2,103,129**	**$1,746,943**	**$15,316,327**

The summary of expenditures in Table 1.3 shows that 91% of the cluster general funds support teaching, either by faculty or graduate student instructors. The remaining 9% supports staff salaries and administrative costs. During the past eight years, $7.4 million has been used to support faculty and $6.4 million has been used to support graduate student instructors. Most of these resources have been distributed to departments either in the form of course-release dollars, general education stipends, or graduate student salaries.

Flow of Resources to Departments for Course Releases and Graduate Student Support

The cluster program reimburses departments for faculty time spent teaching in the clusters. As explained above, from 2003-04 through 2007-08, each faculty participant typically received one course release for each quarter they participated in teaching. With the onset of the state's budget crisis in 2007-08, the cluster program was only able to continue offering nine to ten clusters a year and maintain past levels of support for graduate student instructors by reducing the funds transferred to departments in partial compensation for their faculty members' teaching time. Consequently, beginning in 2008-09, departments received a flat $5000 GE support stipend per faculty for each quarter of their cluster teaching, and a guarantee that at least one of their graduate students will receive full employment in a cluster course.

Table 1.4 summarizes the course release allocations and GE support stipends for the past eight years by academic division and school. (For distribution by individual departments, see Appendix C). Over the past eight years, Social Sciences departments have been compensated for more course releases and provided with more GE stipends than any other UCLA unit. Within this division, the departments of History and Sociology received over 63% of the funds. Humanities is the second largest recipient of cluster funding, with English and Writing Programs receiving over 75% of the monies distributed to the

departments and programs within this division. The College's Physical and Life Science Divisions have also received over $800,000 from the cluster program, with four departments—Ecology and Evolutionary Biology, Earth and Space Sciences, the Institute of the Environment, and Physics and Astronomy—receiving over 80% of this funding.

The data also show that five professional schools have received compensation, totaling over $1 million, with Medicine/Dentistry and Public Policy and Social Welfare receiving well over two-thirds of this amount.

As predicted in the initial discussions about the establishment of clusters in 1997, faculty in small departments, particularly those in the Division of Humanities have not participated in the program, despite the availability of course-release and GE support stipend compensation. Indeed, most small departments find it very difficult to release faculty to participate in yearlong courses. The cluster program has attempted to engage faculty members in these departments but, to date, has not identified a broadly viable solution to this challenge.

Table 1.4: Faculty Course Releases & Stipends by Unit
Funding details by department are posted in Appendix C

Campus Units	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-yr Total
Humanities	$123,054	$102,764	$84,879	$89,891	$70,497	$98,632	$134,394	$58,000	**$762,111**
Life Sciences	$53,095	$44,362	$41,038	$66,651	$87,861	$8,000	$23,000	$29,000	**$353,007**
Physical Sciences	$60,390	$71,932	$84,631	$79,233	$74,936	$44,907	$35,000	$48,000	**$499,029**
Social Sciences	$236,010	$191,358	$193,010	$262,796	$295,377	$148,000	$144,000	$171,000	**$1,641,552**
Professional Schools	$154,912	$129,506	$155,113	$174,053	$171,297	$46,820	$104,374	$107,374	**$1,043,448**
Total	**$627,461**	**$539,923**	**$558,671**	**$672,623**	**$699,968**	**$346,359**	**$440,768**	**$413,374**	**$4,299,147**

As noted earlier, the cluster program hires and trains the GSIs who are vital members of the cluster teaching teams. Table 1.5 summarizes the number of GSI positions (one position is equal to a 0.5 FTE, or a full year of financial support) by College Division and Professional Schools supported by the cluster program. Over the last eight years, the Freshman Cluster Program has supported GSIs in 39 different departments, 23 in the College and 16 in the Professional Schools. A total of 419 GSI positions have been funded during this time period, 277 of which have been unduplicated or distinct graduate student instructors. The College's Social Sciences division has been the largest recipient of cluster graduate student support (209 positions), followed by the Humanities (93 positions), Professional Schools (72 positions), Life Sciences (32 positions), and Physical Sciences (13 positions).

Table 1.5: GSIs by College Division or Professional School Affiliation
Funding details by department are posted in Appendix D

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-Yr. Total
Total Graduate Student Instructors	**36**	**45**	**44**	**58**	**61**	**52**	**63**	**60**	**419**
Humanities	7	10	7	8	12	15	19	15	**93**
Life Sciences	1	4	2	4	6	2	5	8	**32**
Physical Sciences	3			3	2	2	2	1	**13**
Social Sciences	17	24	23	29	28	28	32	28	**209**
International Institute								1	**1**
Arts & Architecture	1	2	2	2	4	2			**13**
Education & Info Studies			1	1	1				**3**
Engineering & Applied Sciences					1				**1**
Medicine			1	2			2	2	**7**
Public Affairs	4	2	4	6	3			1	**20**
Public Health		1	2	1	3	3	3	3	**16**
Theater, Film & TV	3	2	2	2	1			1	**11**

Departmental assignments were derived via majors. A small number of GSIs declared two majors.
The unduplicated or distinct number of Graduate Student Instructors who have taught in GE CLST courses from 2003-04 to 2010-11 is 277 individuals.

Budget Challenges

Declining state support for the University of California and the need to levy permanent budget cuts across common UCLA units will continue to challenge the financial health of the UCLA Freshman Cluster Program. To date, mandated budget reductions have been sustained largely by reducing the buy-out rate for ladder faculty who participate in the program. No further reductions in this area are possible, and many have argued that the program should restore its original buy-out rate. Currently, salary increases for TAs, lecturers, academic administrators, and staff must be covered by the existing budget; the same is true for benefits and retirement contributions for cluster employees. As these costs escalate, funds to develop and mount cluster courses will continue to decrease.

The program's permanent budget is slightly more than $1.9 million. As illustrated in Table 1.3, this budget barely covers the cost of nine clusters. The provost has provided temporary money (called Undergraduate Academic Incentive Funds) of $290,283 for 2011-12 to help accommodate 280 more freshmen by hiring additional graduate student instructors. In the coming year, cluster enrollments will be able to teach 2100 freshmen (an all time high), with three clusters enrolling 280 students, two enrolling 240, and four enrolling 200 students. As a result, the program will accommodate about 45% of the College's largest ever entering class, which increased by 34% from ~3500 freshmen in fall 2010 to ~4700 (expected) for fall 2011.

Given a recent expectation that, in the near future, the College freshmen class will stabilize between 4500 and 4800 freshmen, the program will need to mount ten clusters annually to serve at least 45% of the entering class. Given this, and given expected increased costs for GSI and staff salaries (as well as increased costs for staff benefits and retirement contributions) the Dean/Vice Provost is requesting the cluster budget be increased permanently from $1.9 to $2.4 million over the next few years. This $500,000 increase will make it possible to enroll about 45% of the incoming freshmen by mounting 10 clusters with an average of 220 students per cluster.

FACULTY OVERSIGHT AND CLUSTER ASSESSMENT

Faculty Advisory Committee

A Faculty Advisory Committee, comprised of the faculty coordinators of each cluster works closely with the cluster program director to address the program's budgetary support, personnel, pedagogy, and assessment issues. A convener is selected from the committee's membership by the Dean/Vice Provost for Undergraduate Education, in consultation with the director. When there are program changes and/or special initiatives requiring Academic Senate input and approval (e.g., an increase in cluster units and course credit, or the program's academic review), the convener represents cluster faculty in addressing any concerns and questions from the Senate bodies charged with the oversight of the cluster program. The Faculty Advisory Committee meets quarterly.

Oversight by Three Academic Senate Committees

In order to ensure that both regular general education course offerings and clusters would adhere to a clearly defined and consistent set of general education goals and practices, a General Education Governance Committee was established on May 8, 1998 by the Undergraduate Council (UgC). This new body was a Senate/Administration committee jointly appointed by the Chair of UgC and the Provost of the College, and its charge was to advise the UgC and the Provost on all matters pertaining to general education at UCLA. This includes, "defining the values and purposes of GE at UCLA; encouraging diversity, innovation, and the building of a vibrant intellectual community; and the systematic review, evaluation and improvement of general education." As of April 9, 2009, the GE Governance Committee has been designated a committee of the UgC within Academic Senate bylaws (Appendix XIII) by the Legislative Assembly.

With regard to cluster oversight, the UgC charged the GE Governance Committee to advise the Vice Provost for Undergraduate Education on all cluster course proposals and to make recommendations for their approval to the College FEC. If a cluster course elects to carry Writing II credit, the Writing II Committee must approve the inclusion and scope of writing assignments. Finally, UgC has final approval over all cluster proposals.

The Academic Senate process that has been created over the last five years for the review and approval of cluster courses is as follows:

1. Fall Quarter

    - Preparation and submission of detailed cluster course proposals to the GE Governance Committee.

    - Committee recommendations to the Vice Provost for Undergraduate Education as to which cluster proposals merit further development and support in the following academic year.

    - Review of Governance Committee recommendations by the Vice Provost and selection of cluster proposals for development and support.

    - Official recommendation for course approval of selected cluster proposals by the GE Governance Committee to the College of Letters and Science Faculty Executive Committee (College FEC).

2. Winter Quarter

    - January: College FEC review and approval of cluster course proposals for offering in the upcoming academic year.

    - February: Review and approval of GE credit requested for each cluster course proposal by the Curriculum Committee of the Undergraduate Council.

    - March: Review and approval of cluster courses for Writing II credit by the Writing II Implementation Committee.

Developing New Cluster Sequences

Developing new cluster sequences is a challenging task that proceeds through two phases, each lasting about 9-12 months. The cluster administrative team manages this process with appropriate oversight from relevant Academic Senate groups.

- Phase I encompasses the "conceptualization and socialization" period of cluster course development. This phase involves identifying and organizing an "affinity group" of five or more faculty members from different departments and schools who share interest in organizing a cluster around a given topic. Sometimes the process is initiated by faculty members, and other times by cluster administrative team members.

- Phase II can be described as a "development and implementation" period during which a faculty affinity group works with the cluster administrative team to prepare a course proposal for review and approval by the relevant Academic Senate Committees. Following the Academic Senate's approval of a proposed cluster, a teaching team must be selected, a budget and syllabus has to be prepared, and graduate student instructors need to be hired and trained.

During Phase II, cluster instructional coordinators work closely with the faculty affinity groups to crystallize the themes of their proposed courses, identify potential cluster teaching team members, prepare course proposals, and secure course approval from the appropriate Senate committees. It is also during this particular phase that cluster affinity groups normally designate an individual within the group to serve as the course's "coordinator." These faculty coordinators provide intellectual leadership for their clusters, and are also responsible for identifying and recruiting cluster faculty and graduate student instructors. Coordinators also serve as liaisons to the program on all budgetary and logistical matters related to the course.

Following the approval of a new cluster, the designated faculty coordinator typically receives a course teaching release, as well as FTE to hire and pay the course's GSIs for preparatory work prior to the beginning of the academic year in which the cluster will be offered. To assist cluster graduate student instructors with their many course-related responsibilities, the administrative team provides:

- A series of graduate student instructor orientation and training sessions during the spring quarter prior to the academic year in which a cluster is offered. These sessions offer new cluster GSIs information about the freshman cluster program's history and aims, the characteristics of incoming freshmen, the cluster assessment process, instructional support services, and Writing II training.

- Three seminar development workshops during fall and winter quarters of the year in which the graduate students are teaching. These workshops provide GSIs with information about such

subjects as developing seminar syllabi, selecting course reading materials, developing writing assignments, and facilitating in-class discussions.

Cluster Program Assessment

The Undergraduate Education Initiatives' Center for Educational Assessment has primary responsibility for cluster assessment. During 2000-01, a joint effort by the cluster administrative team and Center staff produced *The Assessment of the General Education Cluster Course Experience: Year Two of a Five-Year Study* (see http://www.college.ucla.edu/ge/clusters/reports.html; click on Self-Review Report of the Freshman Cluster Program 1998-2003.)

Since the last cluster self study, the cluster administrative team, in collaboration with Center for Educational Assessment researchers and Office of Instructional Development staff, have:

- Conducted two longitudinal studies of cluster students' program experiences and perspectives (see http://www.college.ucla.edu/ge/clusters/reports.html; click on Four Years Later: Reflections Freshman Cluster Experiences.)

- Developed evaluation of course instruction forms that are specifically tailored to fall and winter quarter cluster lecture courses and to spring quarter cluster seminars. These new forms, designed by Office of Instructional Development staff in collaboration with cluster faculty coordinators, facilitate more useful student evaluation of cluster aims, course assignments, and exams, as well as self-perceived skill acquisition (See Appendix E).

- Incorporated a GE Freshman Clusters module on the annual UCLA Senior Survey, which queries students' retrospective perceptions of their experiences in the clusters and their perspectives on how their cluster experience impacted their subsequent academic careers (see Appendix F).

The First Academic Senate Program Review of Clusters

During 2002-03 and 2003-04, the Academic Senate conducted a program review of what was then the Freshman Cluster Initiative. The internal review was conducted in 2002-03 by the cluster administrative staff in collaboration with cluster faculty and Office of Undergraduate Evaluation and Research (now the Center for Educational Assessment) researchers. This team prepared a comprehensive report relating the history, administration, and budget of the freshman clusters, as well as assessments and case studies addressing the experiences of cluster freshmen, faculty, and graduate student instructors, (see http://www.college.ucla.edu/ge/clusters/reports.html).

The Academic Senate conducted a site review of the cluster initiative by a team of internal and external scholars on March 11-12, 2004. Over the course of two days, this review team met with Vice Provost Judith Smith, the cluster program administrative team, cluster faculty and graduate student instructors, instructional support representatives from Powell Library, Writing Programs, the Office of Instructional Development, and the Office of Residential Life, the Chair of the GE Governance Committee, David Rodes, and current and former cluster students. The review team's final report was presented to and endorsed by both the undergraduate and graduate councils at their June 11, 2004 meetings. The Senate's review of the cluster program's strengths and achievements, and its recommendations for the further strengthening of its curricula and instruction, can be accessed at http://www.college.ucla.edu/ge/clusters/reports.html by clicking on the following links:

- 2003-04 Academic Senate Review of the General Education Freshman Cluster Program
- Report from Professor Hank Dobin, External Reviewer, Princeton University
- Report from Professor Christina Maslach, External Reviewer, UC Berkeley

Both the Academic Senate internal and external reviewers found the Freshman Cluster Program to be enormously successful. In their report, they stated:

> *We view it as one of the jewels of undergraduate education at UCLA, an innovative educational experience that should be celebrated and nourished in these times of budgetary difficulties.*

The Senate reviewers also commented on the cluster student, faculty, and graduate student instructor experiences. Their findings are summarized below.

Freshmen

Students find clusters more intellectually stimulating and challenging than their other first year courses. The workload in these classes is heavy and students experience some difficulty in piecing together the different arguments and styles of their cluster teaching teams. Despite these challenges, however, cluster freshmen also report that these courses:

- Smooth their transition from high school to college.
- Expose them to a broad range of disciplinary and interdisciplinary subjects and methodologies.
- Strengthen their core academic skills in critical thinking and writing.
- Afford them the opportunity to form and participate in communities of learning.

Graduate Student Instructors

Graduate student instructors note that participation in the cluster program involves somewhat more work than a regular teaching assistant position due to the regular class meetings, extra preparatory work, and challenge of contextualizing interdisciplinary materials for freshman students. Notwithstanding this workload, the GSIs interviewed by the committee unanimously regarded their participation in the cluster program as positive. In particular, the GSIs appreciated the opportunity to:

- Design and teach a spring seminar based on their own research interests.
- Work with senior faculty and GSIs from across campus.
- Become familiar with different teaching styles and pedagogical strategies.
- Work with students for a full year.

Faculty

Faculty also find participation in the cluster program to be challenging and time-consuming. Nevertheless, they reported that cluster engagement offered many intellectual rewards. Among them:

- The challenge of creating novel year-long, interdisciplinary classes.

- An instructional format that encourages new forms of pedagogy.
- A rare opportunity to interact with and learn from colleagues in different fields.
- The possibility of introducing undergraduate students to their work.

Recommendations and the Cluster Program's Responses

Academic Senate reviewers recommended that the cluster program be supported at all costs and strongly urged the university to maintain the program's budget at its current level. The reviewers also made a number of recommendations aimed at further strengthening and improving clusters. These recommendations and the cluster program's efforts to address them to date are as follows:

Cluster Course Development

The reviewers recommended the following steps in the area of future cluster course development:

- Continue to develop new cluster courses such that an inventory of cluster classes is established sufficient to allow approximately ten clusters to be offered each year.

As noted above, the cluster program has developed 15 cluster courses and, budget permitting, offers nine to ten of these every academic year. Two additional clusters, one focused on neuroscience and another on the visual arts, are currently being developed. It is important to continue developing new clusters in order to have a full complement of sequences available annually, as well to involve new faculty and address additional themes.

- Reduce the overly burdensome GE course approval process for cluster courses.

Cluster courses still require the approval of three Senate committees (i.e., the GE Governance and Curriculum Committees of the Undergraduate Council (UgC) and the Faculty Executive Committee (FEC) of the College of Letters and Science). This process has become smoother, however, as the UgC Curriculum Committee and College FEC tend to defer to the recommendations of the GE Governance Committee, which exercises primary faculty oversight of the Freshman Cluster Program.

- Try and find ways to encourage greater participation of science faculty and graduate students in the cluster program.

Increasing science faculty and GSI participation in the cluster program remains a challenging task. However, since the 2002-04 program review, two new science-centered clusters—*Biotechnology and Society* and *Sex: From Biology to Gendered Society*—have been developed in collaboration with the UCLA Center for Society and Genetics. These clusters, in turn, have brought more science faculty and graduate students into the program. Plans to develop and offer a neuroscience cluster in 2012-13 are also proceeding.

Graduate Student Instructor Training and Support

Reviewers were also concerned about GSI workload, particularly in the area of writing instruction. Their recommendations in this area were as follows:

- Revise the system of training for graduate student instructors to emphasize smaller training workshops, expanded preparation, and year-round instruction and support.

Quarterly meetings are now held between the cluster program's Writing Programs consultants and the cluster GSIs for the purpose of discussing ways of improving delivery of writing instruction in the clusters. In addition to these meetings, cluster GSI Writing II training was restructured so as to provide GSIs with more opportunities to work with actual writing assignments from their clusters, and to engage in more one-on-one consultation time with their Writing Programs consultants.

- Meet with GSIs to address logistical concerns about teaching at DeNeve.

The Office of Residential Life currently provides cluster GSIs with additional office space, parking, and classrooms on the hill.

Student Advising

Reviewers recommended that improvements be made in the quality and consistency of information provided to prospective cluster students during the summer counseling sessions.

During the summer of 2004, the cluster administrative team and the Orientation staff completely revised all cluster information materials so as to give incoming freshmen a much clearer sense of the content, course format, workload, and seminar offerings for each cluster course. At every yearly cluster training session, this information is now discussed with the orientation counselors.

Assessment

Reviewers recommended that the cluster program expand its student evaluation program to enable more effective comparisons, including quantitative indicators of performance, between cluster and non-cluster students.

As detailed earlier (see *Freshman Cluster Assessment*), several assessment initiatives have been undertaken since the last cluster program review, including: (a) conducting two longitudinal studies of cluster student experiences and perspective, (b) developing evaluation of course instruction forms that are specifically tailored to cluster teaching and learning, and (c) incorporating a cluster module in the annual UCLA Senior Survey.

Insights gleaned through these assessment efforts, in addition to findings from a series of faculty and GSI focus group interviews conducted in winter 2011, are addressed in greater detail in the cluster freshmen, GSI, and faculty experience sections that follow.

SECTION TWO

THE CLUSTER EXPERIENCE OF FRESHMEN

UCLA freshmen come from diverse backgrounds. Their childhood and adolescent years are characterized by widely varying life circumstances and cultural traditions that frame, consciously or not, how they view themselves, others, and the world. Our freshmen bring with them to campus a wide range of individual talents, interests, aspirations, and expectations. As a group, they are highly intelligent, ambitious, idealistic, and self-confident. They are also some of the most academically talented students in the country, with an average high school GPA of 4.18, and mean SAT scores of 637 (math), 607 (verbal), and 618 (writing). Many freshmen enter UCLA with 20 to 40 advanced units, and they have passed their entry-level writing and quantitative reasoning requirements. At entry, a quarter of these students are also eligible for the College Honors Program.

UCLA freshmen are used to succeeding, and they readily anticipate continuing to do so within their new college environment. Like their peers across the country, however, most entering UCLA freshmen have limited awareness of how college expectations for teaching and learning differ from those they have known in high school. Moreover, very few have a clear conception of what a research university is, what it does, and what they need to know to make full use of its rich resources. Not unexpectedly, freshmen also tend to have limited understanding of the complexities that characterize our world today. Given their brief life experience, most rely on relatively narrow frames of reference through which to interpret their own and others' perspectives and practices.

The cluster program was initiated to assist UCLA's incoming freshmen with their transition from high school to college. Cluster sequences aim to provide a cornerstone experience that familiarizes first-year students with the mission and practices of a research university, and equips them with the skills and general knowledge to be successful at UCLA and in their future lives as citizens and professionals. To achieve these aims, the cluster program has worked to help students:

- Grasp complex interdisciplinary material and understand the contributions of distinct disciplinary perspectives to the subject matter of their clusters,
- Strengthen such academic skills as critical thinking, problem solving, rhetorical effectiveness, and creative expression, and
- Participate in learning communities led by distinguished ladder faculty that encompass not only in-class but also out-of-class learning experiences.

This section of the self study presents enrollment, demographic, and academic profiles of cluster freshmen (compared with non-cluster freshmen, as applicable) as well as cluster attrition patterns. From there, the principal focus is on students' perceptions of their cluster experiences, as anchored to four of the program's hallmarks: 1) appreciating interdisciplinarity, 2) enhancing skill development, 3) establishing a sense of place within the academic community, and 4) promoting active learning. The section concludes with student recommendations for cluster program improvement.

ENROLLMENT, DEMOGRAPHIC, AND ACADEMIC PROFILES

During this eight-year review period, nearly 14,000 freshmen elected to enroll in a fall cluster course, including roughly 47% of all College freshmen. Enrollments for the 13 clusters offered during this span are shown in Table 2.1. Six clusters were offered every year (albeit sometimes by a different teaching team), three were taught for the first time, and two were discontinued. The average enrollment per cluster was 180 students. In the more "popular" clusters (i.e., those that fill quickly during Summer Orientation), enrollments averaged 200 or more.

Table 2.1: Fall Cluster Enrollments: 2002-03 through 2010-11

Cluster Course	# Years Offered	Average	Total	% of Cluster Enrollment
Interracial Dynamics	8	216	1,725	12%
America in the Sixties	8	213	1,701	12%
The History of Social (or Modern) Thought‡	8	200	1,599	11%
Evolution of the Cosmos and Life	8	192	1,538	11%
The Global Environment	8	169	1,350	9%
Frontiers in Human Aging	8	154	1,231	9%
Work, Labor, and Social Justice in the U.S.	7	168	1,178	8%
Inside Performing Arts^	5	125	627	4%
Sex from Biology to Gendered Society*	4	197	789	6%
Politics, Society, and Culture in Modern East Asia	4	152	609	4%
Biotechnology and Society^	4	136	544	4%
Los Angeles: The Cluster*	3	225	675	5%
Multidisciplinary Perspectives on Myth*	2	199	397	3%
Totals	**N/A**	**180**	**13,963**	**100%**

* New clusters established and offered for the first time during this 8-year period

^ Clusters discontinued during this 8-year period

‡ The title changes from "Social" or "Modern" Thought depending on the teaching team.

Demographic and academic profiles of cluster and non-cluster freshmen are presented in Table 2.2. Three observations are particularly noteworthy. First, the demographic characteristics of students who enroll in clusters roughly parallel those of the overall freshmen year class. Women are more likely to enroll than men, and Asian American students are less likely to enroll than White (non-Hispanic) students. In both cohorts, underrepresented minority proportions are similar.

Second, freshmen admitted directly to College Honors are more likely to enroll in a cluster than students who are not eligible for honors. On average, freshmen honors students have better high school GPAs and higher standardized test scores than those not eligible for the Honors Programs[1]. Given the comparatively

[1] Freshmen qualify for College Honors Programs by GPA or Test Scores: GPA must be at least 4.1 (weighted, capped) and a combined SAT score of at least 2080 or an ACT score of at least 31. Students not meeting these requirements may be admitted to College Honors if they rank in the top 3% of their high school class.

greater proportion of honors students among cluster freshmen relative to non-cluster freshmen, the mean high school GPAs and test scores of cluster freshmen as a whole are higher than those of non-cluster freshmen. During summer orientation, newly admitted honors students are encouraged to enroll in a cluster sequence because participation enables them to receive honors credit each quarter toward completing coursework that is required for them to remain, and advance, in the Honors Program. The spring seminar qualifies for additional Honors Collegium course credit.

Third, the cluster program attracts students from all divisions of the College, with declared science majors (especially those in the physical sciences) being generally more inclined than non-science students to enroll in a cluster. A related point of interest is that in clusters where the topic is not "science" oriented, the mixture of science and non-science freshmen tends to be relatively even. For example, in two of the most popular clusters, *Interracial Dynamics* and *History of Social/Modern Thought*, the percentage of science and non-science students in both was 46% and 54%, respectively. However, in science-oriented clusters such as *Evolution of the Cosmos and Life* and *The Global Environment*, enrollments are higher among non-science students (75% and 77%, respectively).

Table 2.2: Characteristics of Cluster and Non-Cluster College Freshmen

	Cluster Freshmen		Non-Cluster Freshmen	
Selected Characteristics	**2003-04 to 2006-07 (N=6282)**	**2007-08 to 2010-11 (N=7405)**	**2003-08 to 2006-07 (N=8138)**	**2007-08 to 2010-11 (N=7141)**
Female	66%	65%	63%	61%
Race/Ethnicity				
African American	2%	4%	3%	6%
Asian American	42%	37%	46%	43%
Chicano/Latino/a	14%	19%	17%	17%
White (non-Hispanic)	37%	36%	30%	30%
Other or unknown	5%	4%	5%	4%
Mean HS GPA	4.2	4.28	4.1	4.18
Mean SAT-math	662	634	636	619
Mean SAT-verbal	640	613	600	585
Mean SAT-writing	646	626	618	609
College Honors at entrance	34%	28%	15%	16%
College Division of Major*				
Humanities		15%		9%
Life Science		35%		42%
Social Science		16%		21%
Physical Science		48%		25%
Non-College Major		3%		2%

*Beginning in 2007-08, students applying for admissions had to declare a specific major or division of interest. Prior to academic year 2007-08, students seeking admissions to the College were permitted to list "undeclared" without declaring a major. As such, comparable data from 2003 to 2007 are not available.

CLUSTER PROGRAM ATTRITION

Since the program's inception, cluster faculty and administrators have shared a sustained commitment to soliciting input from students about their cluster experiences as they progress through the yearlong sequence and beyond. Toward facilitating student learning and enhancing overall experience, cluster faculty use student feedback to inform course design and pedagogical practice. Historically, program retention rates have been high, with 80% or more of those who enroll in the fall completing the entire three-quarter sequence. As detailed in the subsections that follow, the "cluster experience" also tends to resonate well with the overwhelming majority of students who complete it. This is particularly so as students progress through their undergraduate careers and "look back," with broader perspective, on the cluster component of their UCLA education.

During the past eight years, however, the number of freshmen who complete the yearlong cluster sequence has decreased (Table 2.3). Beginning in academic year 2008-09, the cluster program experienced an attrition spike that coincided with curricular changes which eliminated the requirement to complete a GE seminar (or second Writing II course) as one of the ten required GE courses. To better understand attrition-related issues, Center for Educational Assessment researchers surveyed students who exited the program between fall 2009 and winter 2010. Focus group interviews with a subset of these non-persisting students were also conducted.

Table 2.3: Aggregated Attrition of Cluster Freshmen: Fall to Spring Quarters (2003-04 to 2010-11)

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Fall Cluster Freshmen	1,505	1,482	1,604	1,780	1,846	1,893	1,967	1,890
Spring Cluster Freshmen	1,336	1,267	1,352	1,513	1,500	1,405	1,465	1,453
Percent difference (attrition)	**11%**	**15%**	**16%**	**15%**	**19%**	**26%**	**26%**	**23%**

Survey findings showed that non-persisting students tended to feel that clusters required more work than they expected, or wanted. Overall, 42% reported that they left their cluster to find a "less rigorous" way to fulfill GE requirements. Course "dissatisfaction" compelled 34% to depart, while "scheduling conflicts" led 22% to quit. The remaining 3% cited "other" reasons for non-completion, ranging from a desire to "explore different courses" to "personal" factors.

Focus group discussion revealed that non-persisting freshmen commonly lacked what they perceived to be meaningful incentives to complete the cluster experience, particularly since they "no longer needed to satisfy the GE seminar requirement" and "could find other GE courses that required less work." Also noteworthy is that regardless of their motivations for leaving the cluster, non-persisting students tended to report favorable social experiences within their clusters. Some remarked, for example, that they had "enjoyed interacting with cluster peers and faculty" and, upon leaving the program, lamented the perceived "loss of community" they experienced.

SENIORS' RETROSPECTIVE PERCEPTIONS OF THEIR CLUSTER EXPERIENCES

The student experience component of the last (1998-2003) cluster program self-study focused on perspectives from four cohorts of cluster freshmen who completed a year end survey that queried their reasons for selecting a cluster, their experiences during the program, and their impressions regarding participation effects on their intellectual skills, sense of community, and educational aspirations. Student responses to quarterly course evaluations served as a supplementary information source. In the current

self study, the student experience component shifts primary focus to insights provided by three cohorts of former cluster students (2000-01, 2001-02, and 2006-07) as they look back on their experiences, from the vantage point of graduating seniors.

Initial efforts to understand the longer range effects of cluster participation were summarized in 2007, when Center for Educational Assessment researchers prepared the first retrospective report of students' cluster program perspectives. *Four Years Later: Reflections on Freshman Cluster Experiences* provided the first opportunity for program faculty and administrators to learn, from former cluster students themselves, the potentially longer range effects of cluster participation. *Four Years Later* highlighted the views of graduating seniors who had participated in the program during academic year 2000-01 or 2001-02 and who responded to the UCLA Senior Survey as they were completing their undergraduate education in 2004 or 2005.

The report was particularly focused on students' overall impressions of the program, its effects on self-perceived skill development, and its impact on their transition to college as well as their subsequent undergraduate careers. Students were also asked to identify the most memorable aspects of the clusters and the reasons they would (or would not) recommend the program to incoming students. Building on that effort, new items were incorporated on the 2010 UCLA Senior Survey to gain further insight into the 2006-07 freshman cluster cohort's retrospective perceptions of their cluster experiences, including the most academically challenging aspects and recommendations for how their cluster experience could have been improved.

Many of the UCLA Senior Survey questions that 2006-07 cluster cohort members were asked to answer differed from those to which their 2000-01 or 2001-02 cluster counterparts were invited to respond. Consequently, for purposes of this self study, we have highlighted information that was first aggregated by respondent cohort, then organized topically to illustrate key themes that emerged across the three senior survey respondent groups. Necessarily, most of the percentages referenced in the subsections that follow reflect proportions of respondents from a single cohort rather than all three cohorts.

The subsections that follow are delineated based on the four major cluster participation themes that emerged initially through analysis of 2004 and 2005 Senior Survey responses, and were reaffirmed via analysis of 2010 Senior Survey responses: 1) appreciating interdisciplinarity, 2) enhancing skill development, 3) establishing a sense of place within the academic community, and 4) promoting active learning. Within each subsection, brief synopses of thematically-related freshman perspectives (including insights gleaned through 2009-10 freshman cluster cohort course evaluation feedback) are incorporated to provide additional context for interpreting seniors' retrospective perceptions.

Appreciating Interdisciplinarity

One goal of the cluster program is to challenge freshmen to understand complex and controversial issues from multiple perspectives. Toward that end, teams of faculty and graduate student instructors (GSIs) from different disciplines, departments, and programs familiarize freshmen with their distinct disciplinary perspectives on the cluster topic. Teaching team members also work together to demonstrate how their various disciplines converge and diverge in approaching common issues and problems.

Retrospectively, the overwhelming majority of graduating seniors who participated in a cluster note that the interdisciplinary approach and team-taught lectures were "important" to their cluster learning experience. Nearly 90%, for example, "agreed" that the interdisciplinary nature of the clusters and the faculty's collaborative approach to teaching helped them view a topic from alternate perspectives, aided

their ability to synthesize knowledge from disparate fields, and increased their understanding of the similarities and differences between disciplines. Roughly 30% to 45% felt that the cluster experience impacted their abilities in each of these areas either "strongly" or "to a great extent."

More than nine in 10 former cluster students also noted that understanding a topic from a different perspective was either "somewhat" or "very" important to their broader academic performance at UCLA, and characterized interdisciplinarity as a "valuable" (67%) or "essential" (27%) aspect of the program. Asked specifically to evaluate the effects of cluster participation on their ability to view topics from multiple perspectives, more than eight in 10 (84%) rated the clusters as having had "some" or "great" impact. For many, the interdisciplinary nature of the clusters was the program's "most" memorable aspect. In fact, just under half (49%) indicated that the opportunity to study a new or unfamiliar discipline is a "very" important reason why they would recommend the cluster program to incoming freshmen. One student recalled:

> *The cluster totally blew my mind. I had never been exposed to one topic from the perspective of multiple disciplines, and it was really great. It was really wonderful to think about the same topic all year long, and it gave my first year a degree of structure that I really appreciated.*

While graduating seniors tended, overall, to value the interdisciplinary aspect of clusters, there was also widespread agreement that this was one of the most academically challenging program elements. As illustrated by the following comments, many Senior Survey respondents recollected the difficulty they initially experienced as freshmen when challenged to "think across" traditional disciplinary lines and apply different "lenses" and "frames of reference" to the material they were studying:

> *As a social science double major, the science itself was academically challenging in its own right. However, the real challenge was connecting knowledge from different fields for a better understanding of [the cluster topic].*

> *It was a challenge to work in different frameworks within the same quarter. Writing papers was a particular challenge, as different fields demand different levels of analysis.*

Other Senior Survey respondents still readily recalled the difficulties they faced in attempting to "integrate ideas across a wide spectrum," including:

> *...learning to appreciate different perspectives, meaning [those based] both on different academic backgrounds and [the] different social backgrounds of my peers and teachers.*

> *...having to look past what one has learned and trying to look through the eyes and understand the mindset of others, given many factors and constraints.*

Many remembered vividly that, as freshmen, the need to "continually think outside the box" within the clusters was "not enjoyable." For most, however, the value of working through associated intellectual challenges became increasingly apparent over time. Lingering distaste was most evident among students who were not "passionate" about the cluster topic as well as among those who viewed the interdisciplinary approach as "producing a somewhat disorganized curriculum" and who felt "more could have been done to unify the many topics covered." As illustrated by the following remarks, some senior survey respondents were still especially perturbed by exam-related frustrations they attributed to the cluster's interdisciplinary nature:

> *Although I gained valuable information from the four disciplines that the professors taught in, [their] ideas and theories would sometimes contradict each other, and when it came time for the test it was difficult because I did not know [which disciplinary perspective] I should [use] to answer the question.*
>
> *The [professors'] ideas clashed and made it impossible to know how to answer questions correctly on the test. This was by far the most confusing, complicated class I have ever taken.*

With few notable exceptions, Senior Survey respondents expressed their appreciation not only for the "broad overview" and "solid foundation" they gained as a result of clusters' interdisciplinary emphases, but also for the increased consciousness they felt with respect to how "amazing," "diverse," "interconnected," and "rewarding" previously unfamiliar fields of study can be. Ultimately, just over one-third (37%) reported that they opted to take more courses related to their freshman cluster that were <u>not</u> related to their major or minor field of study, while roughly one-quarter (26%) said that, as a result of their cluster experience, they became more interested to major or minor in a cluster-related field. Some even opted to "change majors" or "add another minor" as a result of the unanticipated passion they developed for previously unfamiliar subject matter. For others, the "difficult" experience of taking a cluster outside their primary field of interest served to reinforce pre-existing interests and inclinations. As one student offered:

> *Taking the GE cluster in an area other than my major was extremely challenging. I'm glad I did it as a freshman because I do not think I could do it now. It was very difficult and just affirmed my decision to major in the humanities, rather than to explore new areas.*

Looking back on their cluster experiences, students also expressed considerable appreciation for having learned early on in their undergraduate careers to approach an issue from "multiple," "often divergent," and sometimes "controversial" sides; become comfortable with "incorporating" different perspectives; and work in disciplines that are "outside my area of interest," "completely unfamiliar to me," or that "I am simply not good in."

To be sure, "processing" interdisciplinary perspectives creates "new," "complex," and sometimes "overwhelming" challenges for freshmen. Over time, however, former cluster participants tend to view the "exposure to so many ideas" coupled with the experiences of "being pushed to think outside my comfort zone," transcending "focus on a singular school of thought," and "learning to open my mind to new perspectives" as helping to "develop my thought processes" and stimulating a "crucial adjustment in my thinking." Along these lines, two students elaborated:

> *It was an eye-opening experience to see different areas of study outside my major. I would never have learned about such topics if it wasn't for the cluster.*
>
> *[The cluster] was one of the best classes I have taken at UCLA and it really got me excited about college-level learning. I really value the interdisciplinary nature of the cluster and how I was able to be exposed to so many ideas.*

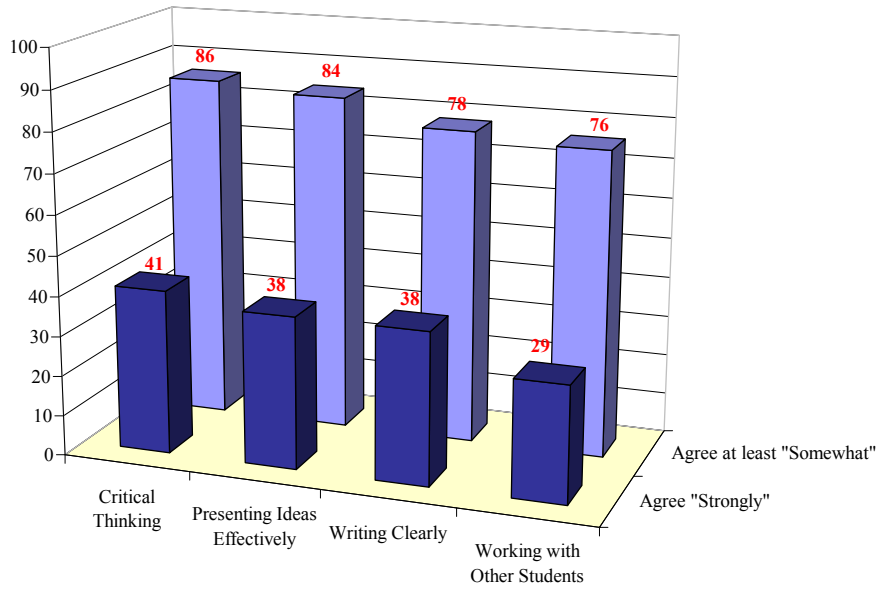
Ultimately, the interdisciplinary focus of the cluster program helped many students embrace what one described as a mindset for "learn[ing] about the world in whatever category it comes."

Enhancing Skill Development

Another central goal of the cluster program is to help freshmen develop and strengthen skills (e.g., critical thinking, problem solving, rhetorical effectiveness, and creative expression) that will enable them to succeed both academically and within a rapidly changing world. Senior Survey responses of students who participated in the 2000-01, 2001-02, and 2006-07 freshman cluster cohorts reveal that the experience does indeed positively impact various aspects of students' self-perceived intellectual development. Additional skills that promote students' academic success and self-understanding are also commonly strengthened. Highlighted here are graduating seniors' retrospective perceptions of how their cluster experience affected their thinking, communicating, writing, and collaborating abilities, as well as their information literacy, citizenship, and time management skills.

Thinking, Communicating, Writing, and Collaborating

Looking back, nearly 90% of former cluster students indicate that they felt "more intellectually challenged" during their freshman year as a result of their cluster program involvement. The clusters' most consistently pronounced self-perceived effects were on critical thinking skills, capacity to present ideas effectively, ability to write clearly, and ability to work well with other students. In each of these areas, more than three-quarters of former cluster participants agreed that, to at least "some" extent, their cluster experience contributed positively (see Figure 2.1).



*Those who "agree 'strongly" are a subset of the population who "agree at least 'somewhat." To determine the proportion who "disagree," subtract from 100% the percent who "agree at least 'somewhat."'

Figure 2.1: Cluster Effects on Selected Aspects of Student Motivation and Confidence*

Overall, students expressed the highest regard for the cluster program's role in enhancing their critical thinking skills. Reflecting back on their undergraduate career in its entirety, former program participants believed that cluster activities "pushed us to think outside our everyday lives." This, in turn, helped them

learn to be a "critical consumer of information" and to evaluate situations thoughtfully before "jumping to conclusions fueled by narrow-mindedness and preconceptions." As one student recalled:

> *The cluster taught us to think critically about things, and once we learned [that], everything became easier.*

The process of struggling to "wrap my mind around difficult concepts" coupled with the overall "broadening" capacity of the clusters also contributed to helping students feel more "confident" in asserting their own opinions and more "tolerant" of others' sometimes dramatically different perspectives. As one former cluster participant explained:

> *I loved the opportunity I had to write an opinion paper in the first quarter and then re-write [from] the same prompt in the second quarter to see how my views had changed. It challenged me to really develop my own critical thinking skills and decide for myself my own feelings.*

Former cluster students often recalled that they "disliked" (sometimes "strongly") the expectation for them to express their thoughts and opinions about "complex" and often "foreign" subject matter. Recollected negative sentiments were most prominent among students for whom such expression was, "at the time," a "completely new experience" as well as for those who were "nervous" both about public speaking in general and the prospect of appearing ignorant in front of peers, GSIs, and faculty. "Looking back," however, students often credited the process of enduring associated struggles and anxieties with helping them become "less shy" and "more open to participating in class discussions throughout the rest of college."

Senior Survey respondents also attributed their enhanced critical thinking skills to the challenges they experienced when expected to read and evaluate texts that were, "in many cases beyond my full understanding," and then attempt to communicate those ideas clearly. One student, for example, recalled being "excited" by the opportunity to delve into unfamiliar texts on a topic that intrigued him, but then daunted relatively quickly upon realizing that it would "take hours of concentration and focus to even begin to understand" the extremely dense and otherwise challenging material. Another student remarked:

> *Keeping up with the readings and being able to analyze them in discussion section was pretty challenging, especially as a freshman. Many of my friends were not in clusters and wanted to take things easy their first year. However, I am glad I took my cluster because I learned things and I feel it helped me transition from the writer and analyzer I was in high school to the one I became in college.*

In keeping with these sentiments, graduating seniors who "stuck it out" through the inevitable trials and tribulations of the yearlong endeavor were also highly complimentary about the positive effects they believed the cluster program had on their writing ability. Nearly 20% considered their self-perceived gains in writing ability to be the "most" valuable aspect of the cluster experience. This assessment was based, at least in part, on the value these students saw in learning how to "research, understand, digest, and then reconceptualize completely foreign ideas." As one student elaborated:

> *The most challenging aspect of the cluster for me was to expand my writing and analytic skills. I got by in high school writing papers that were flawless in form but lacked any significant insight. My first paper for the cluster showed me that I would have to grow drastically in these areas if I was going to succeed in my major, or even as a citizen in society, at UCLA. I was able to considerably alter my reading tendencies and compose*

> *essays that bequeathed true analytical depth. And while these skills were enhanced, and blossomed, throughout the rest of my undergraduate experience, the first seed was sown in my freshman cluster course.*

Another commented:

> *During my first quarter at UCLA, I had a hard time writing a coherent paper. It took me awhile, because I was still making the transition from high school to college, and I really did not have any mentor or relative who went through it [before me to help] lessen my fears. When I received my paper back, it was filled with question marks and grammatical errors. To say the least, I was very scared and confused. It was not until the last quarter that I was able to regain lost ground on how to write a decent paper.*

Finally, although only about two-thirds (65%) of former cluster participants viewed their capacity to work with other students as having been "important" to their overall academic performance at UCLA (this was the lowest rated item on a list of ten skills queried), fully three-quarters (76%) felt that their cluster experience had either "some" or "great" impact on their ability to work collaboratively. Indeed, some highlighted "group work" as one of their favorite parts of the cluster experience, underscoring the value of "creative group projects," "enforced work teams," and "study groups" as having enhanced both the quality and quantity of their cluster learning.

Information Literacy, Citizenship, and Time Management

While not as highly rated overall, many Senior Survey respondents also felt that their cluster experience enhanced other skills that were instrumental to their subsequent academic success. Seven out of 10, for example, believed that freshman cluster activities improved their reading strategies and enhanced their understanding of how to use others' words and ideas ethically. Other augmented information literacy skills included locating books and other materials in the UCLA library (60% agreed) and evaluating Internet sources for academic purposes (59% agreed). Overall, roughly one-quarter concurred that the clusters "strongly" impacted their skill development in each of the above-mentioned areas.

Participating in the clusters also influenced some students' values, citizenship, and awareness of current events. For example, 80% of Senior Survey respondents "agreed" that their cluster experience contributed to their understanding of contemporary issues and problems. Not all of the clusters emphasize citizenship and the development of personal values as part of their curricula. Nonetheless, between five and six out of every 10 respondents reported that the clusters impacted their personal values (61%) and made them more aware of their responsibilities as citizens (56%). Overall, just under one-quarter of these respondents (23%) noted a "great" impact in each of these areas. Looking across clusters, fewer than 15% of respondents indicated absolutely "no" cluster impact on their sense of responsible citizenship (14%), personal values (11%), or understanding of contemporary issues and problems (5%). One student's remarks capture especially well the impact clusters can have on broadening social awareness and associated habits of mind:

> *Coming from a small high school, this class was a perfect introduction to life at UCLA. They introduced me to ways of thinking that I had never been exposed to before. This class also exposed me to different types of people [who] I had never been familiar with before, and I am so thankful for that. Taking this class was probably one of the best decisions I ever made at UCLA because it laid a foundation of acceptance, tolerance, and open-minded thinking for the rest of my life.*

Finally, approximately two-thirds of respondents reported that their cluster experience had improved their time management skills. Seniors recalled that they were particularly challenged by the amount of reading they were assigned in the clusters, alternately describing it as "grueling," "aggressive," "difficult," and "more than one person could actually complete." As one student determined:

> *The workload was very intense for a freshman course. My cluster reader may be the largest collective works I will ever have owned.*

For many students, "balancing" the "large amount" of "rigorous cluster course material" including, in at least one case, navigating through a "kajillion pound reader," with their responsibilities for other classes was "very challenging, especially during the first quarter of my college experience." As one student noted, "The intense workload forced me to change my study habits and adapt to college life rather quickly."

Over time, however, most came to view the "heavy workload" and related time pressures they experienced as cluster students to be ultimately helpful with respect to enhancing their ability to manage multiple, and sometimes conflicting, academic and personal demands later on in their undergraduate careers. Faced with "constant" reading demands, students were "forced," to "evaluate the importance" of each assignment, "develop strategies" to help them effectively cover large amounts of material, and determine how to establish and maintain a healthy "balance" between their academic and social lives. Several students, for example, commented:

> *The fact that so much was expected from our incoming freshman cluster group was at first overwhelming, yet proved to be essential in developing our academic writing and time management skills.*

> *I took a topic that was out of my general area of interest so it made me really learn the material. [I had to] manage my time [and] keep up with the reading, and that paid off for the rest of my time in college.*

> *Looking back, the GE cluster was the most challenging course for me in freshman year. There were a lot of readings, which I wasn't used to, and had to learn that close reading isn't very effective. Instead, I needed to read critically and gain a more global understanding of the concepts. I invested a lot more time in this course compared to my other science courses and therefore had to learn to manage my time well.*

Establishing a Sense of Place within the Academic Community

In addition to instilling an appreciation of interdisciplinarity and enhancing skills to promote academic success, the cluster program aims to help ease students' transition from high school to college by creating a community of learners among freshman, faculty, and GSIs. Community bonds are established and nurtured via academic and social experiences that occur both in and out of class. As such, the clusters are designed not only to challenge students intellectually, but also to foster their academic self-confidence, socialize them to college teaching and learning, encourage them to be more engaged in the first year of college (and, hopefully, beyond), and provide them with opportunities to establish meaningful connections with their peers and instructors. Perspectives offered by former cluster participants via the Senior Survey provide additional insights on how the cluster experience often serves to enhance students' academic and social self-confidence.

Academic Self-Confidence

As detailed in the previous subsection (*Enhancing Skill Development*), graduating seniors lauded the clusters for helping them develop and strengthen the skills to succeed as UCLA undergraduates. Seven in 10 students also "agreed" that their cluster experience had at least a "somewhat" positive effect on their confidence approaching faculty and graduate student instructors, excitement about college level learning, and motivation to explore their own ideas. A subset of roughly one-quarter or more of that same population agreed "strongly" that their freshman cluster experience had a positive effect on each of these conditions (Figure 2.2).

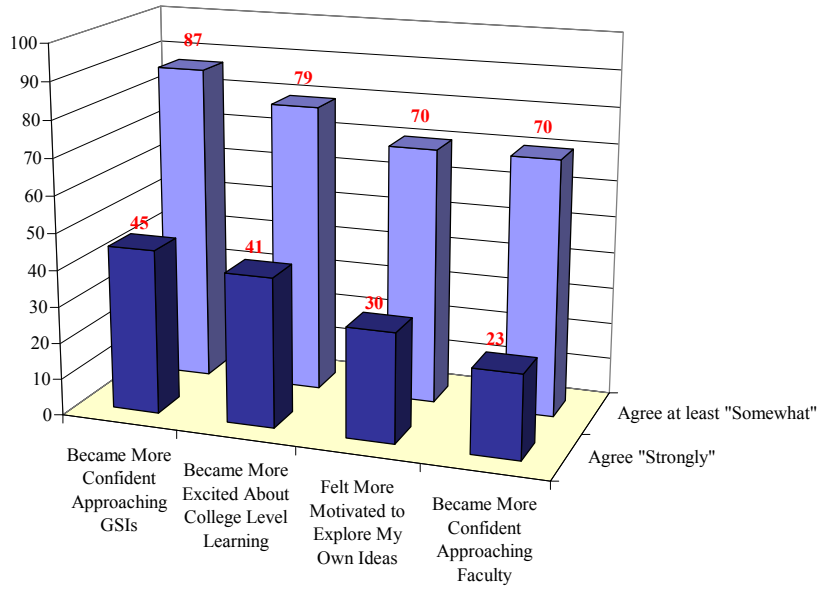


Figure 2.2: Cluster Effects on Selected Aspects of Student Motivation and Confidence

In response to a separate question, just over three-quarters (78%) reported that their cluster experience "enhanced my academic self-confidence." Students also underscored the clusters' instrumental role in helping them "learn how to learn in a college environment," and "prepare for the rigorous expectations of various disciplines," as well as teaching them "how to get the most out of my education," and instilling the "work ethic one needs to succeed in college."

Eight in ten former cluster students noted that the cluster experience helped them "understand what it means to participate in an intellectual community." Looking back, for example, many described the cluster experience as playing an especially important role in acclimating them to college expectations. The following recollections capture well students' self-perceived gains in academic self confidence:

> *The overall cluster was no walk in the park. It was a lot of new information coming my way at the time, and really showed me the type of level I'd be in for the rest of [my] time at UCLA.*

> *As freshmen, not only did we have to do research on our own, but we also had to participate in an intellectual environment with our professors. Even though it was academically challenging, I believe that it truly was an essential and very valuable academic experience. It helped me establish a foundation for how UCLA life would be as far as schoolwork, lectures, and pace.*

> *I was able to challenge myself on intellectual levels that I didn't know existed prior to coming to UCLA.*
>
> *[The cluster] was the best experience of my time at UCLA. I totally had to push myself as a writer. It pushed me outside my comfort zone. Finishing it successfully completely boosted my self-esteem.*
>
> *I am so glad that I took this cluster at the beginning of my college experience because I know that it is essentially what made me so successful my following years. I was a completely different (poor) writer and very muddled analytical thinker before this course. I reflect on my cluster as a kind of academic boot camp that made me an exponentially better writer, researcher, and critical reader.*

Other accounts of growth in academic self-confidence related more directly to learning to cope, often for the first time, with receiving less than stellar grades. Indeed, some senior survey respondents still lamented the "tough," "unfair," and otherwise "disappointing" cluster grading ("especially for the first quarter of college") that "made a lot of freshmen disheartened because we were all so used to getting good grades in high school" and were "still learning the best way to study and manage time." Some also expressed frustration that instructors seemed "determined to knock us all down a peg" regardless of the "actual quality of our work" or the "time we had invested" in preparing it, and lamented that "those bad grades brought down my entire GPA for the rest of my career." Others recalled cluster grade-related challenges and frustrations as fundamentally "testing the human limits of patience."

Indeed, one of the most potentially traumatizing academic experiences for high achieving, highly grade conscious freshmen is adapting to new performance standards, and allowing oneself the "permission" to fall short of perfection in the midst of striving to learn and grow. As illustrated by the following accounts, however, "persisting" and "succeeding" through such challenges is often rewarded with newly discovered self-confidence and self-understanding:

> *Everything about the cluster was challenging. Lecture material was complex, readings were dense, exams and grading schemes were not generous, and writing requirements were strict/ demanding. I felt very unprepared to take such a cluster as an entering freshman. I was forced to adapt to college standards rapidly. As each quarter progressed, my grades for the course improved: B-, B, A-. I was extremely proud and garnered the essential academic skills necessary for all other courses.*
>
> *[The cluster midterm] was my first at UCLA, and I failed because I did not manage my time well during the test and did not complete an essay. I started freaking out and was looking into dropping the course. But after talking to my GSI, she reassured me that I could still do well in the course. I ended up with a 'B' by the end of the quarter and my grade rose with each successive quarter. It was a really good transition from high school into college and allowed me to discover the caliber of work needed for college.*
>
> *In the beginning, it was difficult to adjust to college level exams and studying. However, after the first quarter, I adjusted well and learned what needed to be done to understand the material and get a good grade.*

Social Self-Confidence

Student feedback reveals that, in addition to the cluster program's academic benefits, many students experienced lasting social gains. For example, more than 70% of seniors report that their cluster experience contributed to their feeling a sense of belonging to UCLA and made the social environment seem less intimidating. Roughly 60% of students also indicated that they made lasting friendships with their cluster peers (Figure 2.3).

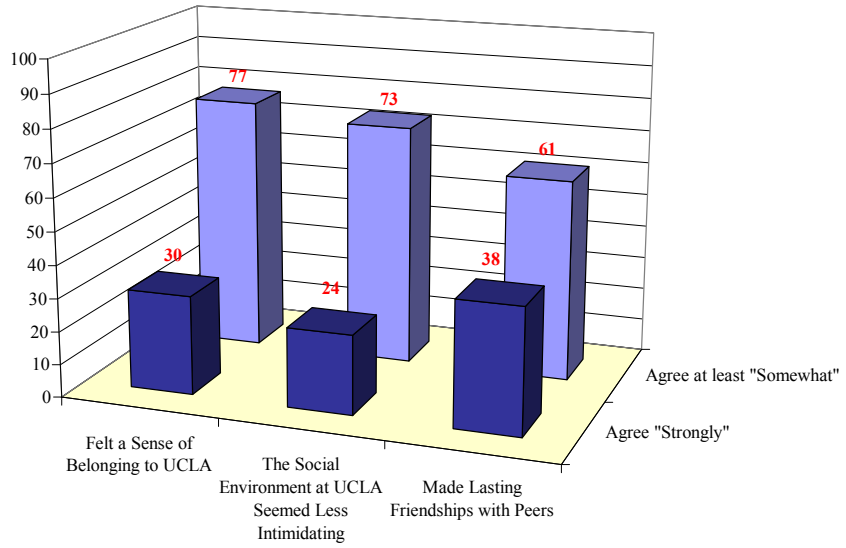


Figure 2.3: Cluster Effects on Selected Social Outcomes

The overwhelming majority of former cluster participants who responded to the Senior Survey credited their cluster experience with playing a significant role in socializing them, within a very supportive environment, to the expectations and practices of a research university. The clusters' yearlong format was especially instrumental in helping students begin to feel "at home" in the UCLA community and "get into the swing of college life," both academically and socially. Reflecting back on their freshman year cluster experience, some seniors expressed their appreciation for what one referred to as the "consistency" that cluster participation provided in the "craziness of freshman year."

More than 90% of former cluster participants indicated that having the same class for an entire academic year was "important" to their process of becoming "acclimated" to college life. Many seniors also recalled that the structured opportunities to interact with peers and instructors outside of class were instrumental in "structuring a positive living and learning environment" and reinforcing to freshmen that undergraduates are important members of the academic community. Learning from "brilliant" and "kind" faculty, participating in their research activities, and engaging with them in individual and small group dialogue, (as opposed to simply "listening to them lecture" in a traditional classroom environment), was especially important to helping students fell less "intimidated" interacting with faculty, more "enthused" about the subject matter, and more "secure" in their own abilities. Many students welcomed opportunity for more "direct contact" and "small group activities" with faculty.

Ultimately, the opportunity to embark on their undergraduate careers in a "warm," "welcoming," and "supportive" environment where they felt simultaneously "comfortable," "confident," and "challenged" contributed substantially to students' abilities to establish connections and to create a sense of place for themselves within an academic environment that can feel very large and impersonal. Expanded commentary that further captures these sentiments included:

> *I loved my cluster experience. I met most of my UCLA friends in this class. It think this was the one class out of all my classes where I truly felt connected to classmates, faculty, and the course. It was a great way to be introduced to UCLA.*
>
> *I was able to establish great friendships with peers, and having the class for an entire year ensured a certain comfort level in approaching the teaching staff with questions or concerns.*
>
> *This was the most amazing class I took while at UCLA. The field trips and lunches with the teaching team really made it what it was. I met my best friend in that class and we still talk about our experiences from that class…and it was three years ago! I will remember it for years to come.*
>
> *I learned a lot about how the real world operates, and this was something that high school did not teach me. While I learned a great deal of information, it was not without struggle and personal growth.*

Seniors' positive regard for the learning community aspect of the program is also evident in the proportions who identified as "very" important the following reasons they would recommend the clusters to entering freshmen: Helps with transition to college (47%), opportunity to develop good relationships with GSIs and faculty (41%), opportunity to participate in an intellectual community (38%), instructors' concern for students (34%), and opportunity to make friendships with other cluster students (34%).

Promoting Active Learning

As elaborated in earlier sections of this report, senior survey respondents emphasized the cluster program's benefits with respect to helping them appreciate interdisciplinarity, enhance their skill development, and establish a sense of place within the academic community. Evidence of students' active engagement in their learning process is woven throughout the findings presented in each of those sections. Here, the focus shifts more specifically to how graduating seniors perceived the program's core pedagogical tools (i.e., "best practices") to promote active learning: discussion/lab sections, field trips and community engagement, and culminating seminars.

Discussion/Lab Sections

In addition to attending weekly lectures, cluster students participate in weekly two-hour discussion/lab sessions to develop the skills embedded in course assignments. Between two-thirds and three-quarters of Senior Survey respondents "agreed" that their cluster discussion/lab sections helped them become more confident in expressing their opinions in class. For some students, "working in discussion groups" that "forced me to speak out" was "new" and, at least initially, "very challenging." "Contributing effectively" and "offering appropriate thoughts" in the midst of "heated" discussions about "controversial" topics while remaining "respectful of others' ideas" were often noted as among the most challenging, but important, lessons learned through the cluster experience. Science cluster students concurred broadly that the "labs and papers kept me engaged" and "challenged me to understand the material better."

The "intimate" nature of the cluster discussion and lab sections also allowed students to get to know each other, their GSIs, and their faculty, creating an atmosphere that made it, in the words of one student, "easier to engage in constructive arguments, debates, and exchange of ideas." As illustrated by the following remarks, this course dynamic ultimately served them well:

> *It was hard for me to participate in [the discussion] section mainly because I have a fear of public speaking, even in small settings. But, as the year went by, I was able to express my thoughts on certain issues.*
>
> *The interaction with other students showed me many views on a number of ideas and opened my mind to new ways of thinking.*
>
> *I thought it was a great experience to be able to discuss and debate with fellow students about such controversial subjects.*
>
> *The class discussions meant I had to be prepared not only to know the subject, but to contribute.*
>
> *The most challenging aspect [of the cluster] was transitioning into intelligent discussion sections. As a freshman, I had little experience with forum type education and I'm glad the cluster was there to introduce me to stimulating discussions.*

Seniors also commented that the small group discussions were "memorable" in that they enhanced active engagement with course material and gave new college students an opportunity to interact with instructors who were "approachable" and "wanted to answer questions." As noted previously, the connections established between students and their instructors, as well as among peers, also stimulated students' intellectual engagement and enhanced their willingness to participate in class discussions. As one student elaborated:

> *Taking a cluster was a great experience! I think it was one of the most influential learning experiences I had at UCLA. Analyzing the course content and having the discussion sections were the most academically challenging aspects. We had to read a lot of academic texts and intertwine them with contemporary events and issues. I learned so much, and I think it actually transformed the way I thought about the world. I still have many of those ideas that I learned from cluster fresh in my mind and I use them from time to time as foundational basis for my thoughts. A lot of this would not have been possible without having great graduate student instructors. The GSIs really determined the path of the course.*

Overall, when asked to rate the "value" of cluster discussion sections, nearly two-thirds (64%) of graduating seniors concurred that they were "somewhat" or "very" valuable. Just over one-quarter (29%) viewed the discussion component as an "essential" cluster element.

Field Trips and Community Engagement

Some clusters engage freshmen in "out-of-class" learning experiences that encourage them to actively apply knowledge gleaned through their course reading, lecture, and discussion/lab activities. While the nature of these "hands on" opportunities vary depending on the cluster subject matter, they are designed to engage students in discovery-based learning and reflect an additional "best practices" element of the cluster program. When queried about their "organized out-of-class" activities as a collective set of

experiences, just under two-thirds of respondents (64%) noted that such inclusions were "somewhat" or "very" valuable; 21% considered them "essential."

While at times "inconvenient" for students to incorporate given other academic responsibilities, scheduling challenges, and transportation issues, retrospective reactions regarding the activities themselves and their broader educational value were overwhelmingly positive. For some, this cluster component was "the highlight of my experience." "Going into the field" was "beneficial" in that it provided "great opportunity" and "very unique" experience "putting into practice all that I learned." Getting "outside of classroom experiences" enabled students to "gain additional perspective on the subject," "meet amazing people," and "analyze my experience through my work." Examples of more detailed student commentary on the academic and social benefits related to this aspect of their cluster experience include:

> *In addition to [our field trip] being a great bonding experience, it was great to see how the science we learned could be applied to real life.*
>
> *The best part of my cluster experience was the internship, as I was challenged intellectually and developed stronger public speaking skills.*
>
> *The community based learning was particularly challenging, as it was very far out of my comfort zone. It was extremely educational, as we were able to put a face to some of the issues we had learned about.*
>
> *The amazing field trip I went on was a formative experience for me. I would not be the person I am today if it were not for the friendships that solidified during that trip.*
>
> *The service learning was the most challenging aspect of the cluster. It was hands on learning without the GSIs or professors. It was fun, and difficult at times. It made what we learned in class very, very real.*

Culminating Seminars

During spring quarter, cluster freshmen participate in a seminar that challenges them to expand on the knowledge and skills they have acquired during the first two quarters of the cluster and to complete a substantive project of their own. Asked specifically about the spring quarter culminating seminars, 90% of senior survey respondents indicated that the seminar was "important." Students also frequently characterized the spring seminar as a "valuable" (64%) or "essential" (29%) program element. Many identified the seminar as the "most" memorable aspect of the cluster. Alternatively described as "fantastic," "engaging," "challenging," "really great," and "the highlight of my cluster experience," the seminar component tends to be particularly important to students for four reasons.

First, the seminar experience allows students to "build" on the course material they are introduced to in fall and winter quarters. Second, participation enables students to "deepen" their understanding of the ways in which different disciplinary approaches can illuminate a topic. Third, the seminars allow students to "explore" a topic of their own choosing in greater depth, providing them with opportunities to "think outside the box" and to be "creative" and "independent." Finally, the seminars' limited enrollment makes for a more intimate, less intimidating classroom environment which encourages participation and allows students to receive more personal attention from their instructors.

Senior survey respondents devoted some of their lengthiest, and most enthusiastic, open-ended responses to their seminar experiences. Reflecting the "culminating" nature of the spring seminar and its "best

practices" value, many student comments included here also encompass key themes that are highlighted in previous subsections. The following snapshots illustrate the typical nature and tone of students' remarks:

> *My seminar was by far the best class I ever took at UCLA or in my life. It taught me to be a critical thinker and to always question information and analyze it; an incredible class that was both rigorous and enjoyable.*
>
> *The seminar I chose was out of my comfort zone at the time. It opened my eyes to a new way of thinking about the subject and was one of the most valuable experiences at UCLA in terms of learning how to think about things more creatively, and from a different perspective.*
>
> *The culminating seminar was especially challenging, as there was a heavy load of reading in addition to a presentation to demonstrate our understanding of [the subject matter]. Back then, I had very poor critical reading skills, so it was extremely hard for me to interpret the material. By the end of the quarter, however, I had a decent grasp of analyzing literature and tried my best to give a presentation. This seminar served as a first step into more challenging upper division course work and GE classes which required evaluating and critical thinking.*
>
> *I loved my seminar. The interactions with faculty were incredible, and I really value the works we read. In fact, the best thing about my cluster was the body of works we read. I feel it has been invaluable to have this sort of foundation for my intellectual development and feel more students should have the opportunity to master this curriculum.*
>
> *[Working on my seminar project] and presentation was a very arduous process but, upon completion, I felt confident and proud of my abilities and performance.*
>
> *This was the first time I was in a seminar setting with a faculty member. It was nerve-wracking, but manageable because I was with only freshmen. It gave me confidence in participating in future seminars.*
>
> *This was the hardest and best class I've taken at UCLA. It was very hard intellectually and the papers were difficult to formulate and write, but I felt so much smarter after having taken this course, and I used the books I read for many classes during my four years at UCLA.*
>
> *I found the culminating seminar to be the most challenging and valuable part of my cluster experience. I really got a sense of what goes into scientific research and the process of knowledge making. I was exposed to scientific articles which I found more valuable than the typical textbook, and the small size of the seminar allowed everyone a voice and made me begin to think of myself as a developing scholar rather than a passive student.*

Overall, it appears that the unique combination of autonomy and connection that characterizes the culminating seminars contributes substantially to helping students gain a sense of their value as integral members of the UCLA academic community and, in the words of one student, "set off my academic experience at UCLA on the right foot." For example, the majority of follow-up survey respondents "agree" that the seminar afforded them the opportunity to explore their own interests (83%) and ideas (81%). Most also found that their spring seminars had an especially positive impact on their confidence to

participate in class discussions (68%) and to communicate with their instructors (64%). As one student commented, the spring capstone experience marked "the first time I was treated like a student of higher education." Underscoring the significance of understanding early on in one's undergraduate career the educational benefits of engaging actively within academic settings, one student concluded:

> *In college, I don't believe faculty or staff should have to hold hands with students in terms of assisting in academic success, but an increased emphasis on seeking out those deviating from active participation would greatly benefit those who have failed to wake up to the realities of their new environment.*

REVISITING FRESHMAN PERSPECTIVES ON THE CLUSTER EXPERIENCE

Assessments conducted in support of the cluster program's initial self study, coupled with regular analyses of cluster student course evaluation feedback, provide important, additional context for understanding the cluster experience. Since the last program review, faculty coordinators worked in collaboration with Office of Instructional Development staff to create evaluation of course instruction forms that are specifically tailored to cluster courses. The new forms enable faculty to assess student perceptions of course aims, assignments, exams, and skill acquisition more effectively, and to use the resulting information to inform teaching methods and course development (see Appendix E). In this subsection, we share feedback from a recent cluster cohort and consider how the perspectives of cluster freshmen as a whole tend to compare with those of the graduating seniors whose reflections were highlighted in the previous subsection.

Aggregated, mean perspectives from members of the 2009-10 freshman cluster cohort on their fall and winter courses are illustrated in Table 2.4.[2] Higher mean ratings during winter quarter (relative to fall quarter) on nearly all items indicate that students' self-ratings of their skill development, along with their perspectives on selected course elements and aspects of the cluster learning environment, tend to become significantly more positive over time. The only item where student responses indicated no measureable change between quarters was in the degree to which they "felt welcome seeking help outside of class." Interestingly, this was also the most positively rated item, on average, at the end of fall quarter, and remained a prominently endorsed characteristic of the cluster learning environment as the year progressed.

As shown in Table 2.4, and consistent with the views of their counterparts who participated in the program earlier, 2009-10 cluster students reported that their fall and winter courses were most immediately impactful with respect to strengthening "knowledge of contemporary issues" and "analytic skills." Greatest self-perceived developmental gains between fall and winter quarters are evident in library, research, writing, and communication skills. Students also commonly "agree" that cluster "writing assignments improved my understanding of course content" and that "extracurricular activities provided valuable information and experiences." Turning to perceptions of the cluster learning environment, a majority of cluster freshmen "agree" that instructors "encouraged questions and discussion," increasingly so as the year progressed. Finally, as they move through the program, freshmen tend to experience an increasingly stronger sense of community within the cluster relative to their other courses.

[2]Over the course of the current review period, consistent trends in course evaluation data were apparent. Consequently, for the purposes of this self study, perspectives from a single cluster cohort (2009-10) are highlighted here.

Table 2.4: 2009-10 Data from Freshman Cluster Evaluations

GE Cluster Course Evaluation Items	FALL 2009* M(SD)	WINTER 2010* M(SD)
Skill Development^		
Knowledge of contemporary issues	2.79 (0.90)	3.06 (0.90)
Analytic skills	2.51(0.80)	2.78 (0.80)
Writing skills	2.28 (0.80)	2.68 (0.80)
Research skills	2.22 (0.90)	2.67 (0.90)
Library skills	1.98 (1.00)	2.45 (1.00)
Communication skills	2.00 (0.80)	2.38 (0.90)
Course Elements^^		
Extracurricular activities provided valuable information/experiences	3.13 (0.80)	3.38 (0.80)
Writing assignments improved my understanding of course content	3.15 (0.80)	3.33 (0.80)
Learning Environment^^		
Instructors encouraged questions and discussions	3.28 (0.80)	3.49 (0.70)
Felt welcome seeking help outside of class	3.43 (0.80)	3.42 (0.70)
Felt a greater sense of community among students than in other courses	2.73 (1.00)	3.08 (0.90)

*Response rate was 82% in fall 2009 (N=1,967); 75% in winter 2010 (N=1,560)

^Scale: 1 = Not at all, 2 = Somewhat stronger, 3 = Stronger 4 = Much Stronger

^^Scale: 1 = Disagree Strongly, 2= Disagree, 3 = Agree, 4 = Agree Strongly

This course evaluation feedback, considered in conjunction with responses to open-ended course evaluation queries and additional insights offered by previous freshman cohorts, provide important context for understanding the cluster experience and its short- and longer-term impact on UCLA undergraduates. For example, freshmen whose cluster experiences are "in process" tend to report that the program's interdisciplinary approach has increased their awareness of contemporary issues and is "a good basis for all introductory classes." Freshmen also commonly indicate that the team-teaching approach "provides variety," and that they enjoy the "diversity of the course material as well as the perspective offered by multiple professors and graduate student instructors." Considering these perspectives relative to the responses of seniors whose experiences are the core focus of the current self study, the program's emphasis on interdisciplinarity appears to make a lasting, and very positive, impression. The comparative proportion of seniors relative to freshmen who emphasize the value of the clusters' interdisciplinary focus suggests that the value of this particular aspect of the program tends to become more prominent in students' minds as they progress through their undergraduate careers.

Seniors' generally positive assessments of the clusters' effects on selected aspects of their skill development are also consistent with freshman reviews. At the end of their cluster sequence, well over half of freshman participants reported that their writing, analytical, and library skills have been strengthened. The "depth of analyses and the breadth of concepts" within the clusters were described by one freshman as resulting in an "unparalleled opportunity for holistic education and intellectual stimulation." The program's value with respect to acquiring knowledge that "keeps people from being ignorant," facilitates "critical analysis of my life and experiences," and enables "applying course material to real life" is also commonly underscored. For freshmen, the "real world" relevance of topics addressed

within the clusters and the focus on "interesting and engaging" subject matter is especially compelling. As one student shared:

> *My cluster experience challenged me to analyze difficult texts on controversial issues. I also learned to discuss [potentially contentious] issues more openly with my peers in order to analyze the state of our society now and in the past.*

Class readings, writing, discussions, and guidance from faculty and GSIs are also perceived by freshmen as having especially salient effects on self-perceived skill development, particularly as they learn to "think critically" and "synthesize material." Illustrative comments include:

> *I found the weekly writings and discussions most valuable. [They] helped me to think critically about each topic, and I really enjoyed the issues.*
>
> *I thought discussions were the most valuable because [they] encouraged me to participate, share my thoughts, and think analytically.*
>
> *The readings really made me think about how the topics of the class affected my life, which is a surprisingly large amount.*
>
> *The [readings] themselves were the most interesting, while our instructor's interpretation and explanation were most valuable.*
>
> *The final paper enhanced my learning through strengthening my writing skills (in preparing/writing the essay), research skills (in utilizing library resources), [and] analytical skills (in developing my thesis/arguments). My skills in producing a creative project also improved.*

Regardless of how the questions posed to them may be specifically worded, student views on the "skill development" aspect of their cluster learning experience tend to remain both highly consistent and overwhelmingly positive over time. Encouragingly, as illustrated through the seniors' perspectives that were detailed in the previous subsection, the skill development aspect of cluster teaching and learning tends to continue to impact students, sometimes powerfully so, throughout their undergraduate careers.

Beyond promoting intellectual engagement, freshmen have particularly credited the cluster community with providing them with a sense of support as they transition from high school to college. Relationships developed with peers, GSIs, and faculty are often instrumental in helping freshmen establish a sense of place within UCLA's academic community, and cluster learning experiences tend, with time, to bolster both academic and social self-confidence. Overall, seniors' enthusiastic recollections of the benefits they enjoyed as members of a learning community closely parallel the more immediate sentiments expressed by freshmen. Taken together, student perspectives on the "academic community" aspect of the clusters affirm its importance both in helping students acclimate to college and enhancing students' overall program experiences.

Finally, in keeping with the perspectives of those who have participated in previous clusters, more recent cohorts tend to concur that cluster discussion sections promote "interesting" and "valuable" active learning opportunities. In addition, a substantial majority indicate that the spring seminar was a particularly important part of their experience because it allowed them to "investigate a topic in some depth" and to form "closer bonds" with course instructors and fellow students. Illustrative comments include:

> *I liked that the seminar addressed many modern issues and related them to our own individual lives. It presented the common view of society and why that may or may not be accurate, as well as how we can improve ourselves and others.*
>
> *My writing seminar at the end of the cluster was small and very interesting. [It] allowed me to get to know the instructor much better and I was able to write a very informed and well-researched paper at the end of it.*

Finally, for some students, the "less traditional" elements of their cluster classes, including field trips and community engagement, turn out to be "by far the highlight of my experience." Participating in a course that helps them make "real-life" applications and "gain new perspectives" on a topic tends to be especially meaningful. So too are opportunities to engage in a "smaller course" with instructors who are "knowledgeable" and who encourage freshmen to "dig deeper" or "do better work." As one student offered:

> *What I found most valuable was how much care [the professor] and [the GSI] put into the class. They were always available to help us, they provided us with snacks, [and] they tried to make class as interactive as possible.*

These insights parallel closely the recollections provided by seniors on the "active learning" aspect of the clusters, and reflect yet another program component that students continue to value four years later.

A FINAL LOOK BACK AND RECOMMENDATIONS FOR THE FUTURE

As illustrated in the previous subsections, freshmen and seniors alike offer compelling sentiments about the cluster program's role in helping them learn to appreciate interdisciplinarity, enhance selected skill sets, establish a sense of place within the academic community, and engage actively in their educational process. As elaborated earlier, program elements that freshmen typically note as most helpful during their transition to college tend to be the same ones that seniors highlight as having made the most lasting, positive impressions. All in all, the discussion, inquiry, and application format of the clusters appears to be contributing directly to students' engagement with their peers and faculty in ways that foster a sense of community and belonging at UCLA. The cluster learning environment also seems to be an especially fertile one for facilitating skill development and academic self-confidence, as most students note that cluster involvement prepared them well for future academic challenges and opportunities at UCLA.

What insights can we take away from students' accounts of their overall cluster experiences and their associated recommendations for program improvement? First, remember that ***people make the program***. As highlighted within this section of the self study, and further elaborated from different vantage points in the graduate student instructor and faculty sections that follow, cluster teaching and learning is an imperfect science. The program invites students and instructors to embark together on a "journey" that, in different ways, challenges them to stretch beyond what is "comfortable" or "familiar." For all involved, the experience is, at times, inescapably "humbling," "frustrating," or otherwise "challenging." Like cluster GSIs and faculty, current and former cluster students readily acknowledge that "clusters aren't the best thing for everyone." Yet there is also a broadly shared sentiment that, irrespective of one's particular role, the academic and social benefits of cluster participation are potentially "tremendous."

Ultimately, the program's success rests in the collective hands and hearts of those who participate. For freshmen, the importance of establishing connections; maintaining, (and, in many cases, "regaining") self confidence in their academic abilities; and feeling valued both intellectually and personally is often more important than they may openly express. Cluster faculty, graduate student instructors, program

administrators, and others who are affiliated in one way or another with the cluster enterprise clearly have tremendous power to impact student learning and experience, both positively and negatively. Indeed, in many, if not most cases, the nature of the interactions that students experience with peers, GSIs, and faculty, and the relationships they establish throughout the course of the year, figure prominently in shaping students' perceptions of the cluster program and its value to their academic and personal development.

By their own admission incoming freshmen lack subject matter knowledge, experience within the research university realm, and "maturity" in general. Indeed, at the end of their undergraduate careers, some look back and realize that their cluster experience "wasn't all it potentially could have been," but "I blame this on not really challenging myself." Others recall that, at the time, they wished faculty had been "less boring" but realize now that sentiment stemmed, at least in part, from "my maturity level at the time."

Nonetheless, as evidenced through the feedback they provide, freshmen are astute observers, readily able to identify those around them who "care," and who "enjoy working with us." Although at times "intimidated" by the prospect, they embrace and appreciate opportunities to engage with "creative," "interesting," and "dedicated" cluster faculty who are "passionate" about their subject matter and "challenge my academic abilities in a positive way." They welcome input from skilled, thoughtful, and generally "amazing" cluster GSIs who "have more expertise than I do," "genuinely care about teaching and student learning," are willing to "offer a guiding hand," and otherwise serve as "mentors." And they enjoy interacting with peers "who are all in the same boat," also "trying to figure everything out." Cluster students also applaud the efforts of administrators and others on campus who have "created a great program." The following comments illustrate the powerful positive effect that cluster relationships can have on freshmen:

> *I just loved my cluster because you could tell that the profs were energized by the new approach and ideas. My GSI was amazing too, and the fact that I had her all year was critical in forming an intellectual discourse. I switched majors after this cluster.*
>
> *Definitely the best GE experience I had at UCLA! My cluster was excellently taught and was a great place to make friends early in my academic career. The cluster system is outstanding and I recommend it to all freshmen.*
>
> *It was actually through the cluster that I chose what would be my eventual major. [Two of my cluster professors] were instrumental in encouraging my academic motivation throughout my university experience.*
>
> *The cluster was probably the intellectual highlight of my UCLA career. The faculty were brilliant and engaging. I've learned things that I will take with me for the rest of my life. I felt like I had a great amount of intellectual freedom. The cluster inspired me to [pursue an additional major]. As cliché and corny as this sounds, the cluster changed my life and my college career at UCLA.*

Not surprisingly, freshmen are sensitive to "conflict" and "lack of cohesiveness" within the teaching team:

> *This class was a classic yearlong study in struggles between GSIs and professors. They never seemed to want the same things from the students and would always relate failures in teachings or core ideas to the other side. Professors would blame bad GSIs. GSIs would blame confusing faculty. Get them on the same team!*

Freshmen also want "intellectual freedom" but simultaneously crave information that is "clearly organized" and "creatively" presented:

> *The class…wasn't very organized. Many professors would show up different days talking about different subjects, which confused me a lot. The material we touched upon was completely different from what I had ever learned in high school so the transition wasn't very good. I wish they would focus the material on the freshman academic level.*

> *The lectures from week to week had nothing to do with each other. We might as well have taken three different classes. My main suggestion is to make the course more cohesive and relevant to the subject matter. I honestly didn't learn very much.*

More than they might be inclined to admit, freshmen "depend" on their instructors to be "unbiased" and to help them make sense of "abstract concepts" and "unfamiliar topics," as well as to affirm their self concepts as developing scholars. Ultimately, student comments underscore the importance of ensuring that processes for selecting cluster faculty and GSIs include careful consideration not only of would be cluster teaching team members' expertise levels, but also their capacities as teachers, including their specific interest in working with, and supporting, freshmen.

Second, **more isn't always better.** As reflected consistently in the recollections of current and former cluster students, the "extensive" and "intensive" cluster reading, writing, and other course assignments coupled with the program's "high level intellectual demands" combine to create what is nearly universally described by students as a "really challenging" workload. The often "completely new" and relatively "abstract" nature of the cluster subject matter combined with the "strictness" of unfamiliar exam and grading processes leads many students to feel at least occasionally "overloaded" and "overwhelmed." For those who participate in "new clusters where faculty [are] still working out the kinks," clusters that seemingly "[have] a theme, but no clear purpose," or, as noted above, those in which "tensions among the teaching team" consistently run high, the accumulative pressures can be inordinately more anxiety producing.

Looking back on the cluster experience at the end of their undergraduate careers, many students readily identified multiple long-range benefits that accrued as a result of "surviving" through the "doubt," "uncertainty," and general "soul searching" the cluster experience can prompt. At the end of their undergraduate careers, some students for whom "simply getting through it" presented inordinate challenge still struggled to understand why the cluster experience had to be so "intense":

> *It doesn't help freshmen to adjust to the academic setting at UCLA if the cluster presents itself as being more challenging than the rest of the courses at UCLA.*

> *The cluster was probably the hardest class I have ever taken at UCLA, which seems unnecessary looking back. It seems slightly irrational to have such high expectations of first-year students to learn so quickly, without having any other college experience under their belt.*

> *[The cluster class] was extremely overwhelming, both for a GE and a freshman course. The way they are advertised is that this is supposed to be a 'great experience for freshmen' but it just makes you feel like college is impossible. However, when you finally escape the cluster and go into other classes, you realize that things aren't really that hard.*

Recollecting a frequently self-perceived lack of preparedness as freshmen to readily "succeed" in their new college environment motivated various recommendations for enhancing the program's capacity to support students effectively during their transition to college.

Creating "smaller discussion sections" with "more participatory elements," including more "student-led sections" and "informal presentations" was one frequently expressed set of ideas. Incorporating more "interactions with faculty," "out-of-class" activities, "media involvement in class," and "guest speakers who can offer additional perspective on topics" were also often endorsed. For some, offering "tips on how to study for our first exam," along with more general "recommendations" for "overall study skills improvement" were viewed as "helpful" for facilitating the adjustment process. Providing more "guidance" and "help" on writing assignments along with allowing "time to revise papers between peers" were also determined to be potentially promising practices.

Students also encouraged cluster teaching teams to consider whether including "fewer books in the syllabus" might enable "deeper" discussion of each work and "be better for both students and instructors."

Toward improving the overall quality of learning, suggestions for "decreasing" the overall "volume" of reading in favor of "increasing time for discussing special topics and relating them to life" were also offered, along with recommendations for considering options to potentially help improve students' focused concentration by "making the seminar course shorter" (e.g., changing the course to two hours, or to two weekly meetings of 1.5 hours each).

CONCLUSION

Clusters provide UCLA freshmen with a unique opportunity to participate in a learning community that emphasizes interdisicplinarity and "best practices" for undergraduate teaching and learning, promotes skill development, and unites students, GSIs, and faculty in a common yearlong intellectual enterprise. The student perspectives addressed in *Four Years Later*, and expanded here to incorporate more recent analyses of 2010 Senior Survey responses and cluster course evaluation feedback, reveal remarkable consistency over time in the gains and benefits that students identify as a result of their cluster program participation. Overall, the evidence suggests that the cluster program is successful in helping students develop competencies that play critical roles preparing them for the complex application of knowledge that life in the 21st century requires. In keeping with UCLA's goal to prepare students to be citizen scholars, the cluster program contributes significantly to providing students with critical tools for success both throughout their UCLA careers and in their post-college lives.

SECTION THREE

THE CLUSTER EXPERIENCE OF GRADUATE STUDENT INSTRUCTORS

One of the key aims of the cluster program is to give UCLA's most experienced doctoral students an instructional experience that provides them with both yearlong financial support and opportunities to:

- Engage in interdisciplinary teaching and innovative pedagogical practices;
- Design and teach a seminar that is based on their own scholarly research and cluster experiences during the fall and winter quarters; and
- Participate in an intellectual community with motivated freshmen students, distinguished faculty from programs and departments across campus, and graduate student colleagues in a wide array of disciplines.

In the general education clusters, graduate students are an integral part of the collaborative teaching model. During fall and winter quarters, they work closely with the faculty in their clusters as teaching apprentices and provide an important link between freshmen and faculty. In this capacity, they help shape the courses and assignments. Graduate student instructors (GSIs) also lead the clusters' weekly discussion and/or laboratory sections, which are typically comprised of roughly 20 students each. During the spring quarter, GSIs also develop and teach their own seminars in which they work intensively to develop students' writing, critical thinking, quantitative reasoning, and logical argumentation skills.

To assist with the many challenges posed by an interdisciplinary, yearlong course for freshmen, GSIs take part in several training workshops. Before teaching in the cluster, GSIs participate in an orientation in which they learn about the history and aims of the cluster program, characteristics of incoming freshmen students, the assessment process, and instructional support resources. These orientation sessions include featured panels of former cluster students and GSIs who share their experiences. As the year progresses, graduate students participate in workshops designed to help them create their seminar courses. For example, the cluster administrative team offers workshops on teaching writing, student research resources, Internet use, and seminar syllabus design. Finally, current GSIs met with a panel of former GSIs to discuss developing seminar goals, choosing readings, developing assignments, and organizing and facilitating discussions.

Cluster graduate student instructors are required to have at least five quarters of prior teaching experience, and most have advanced to candidacy. Typically, graduate students are recruited by cluster program faculty based on their outstanding academic work and demonstrated commitment to working with students. The majority of graduate students who work with the clusters are classified as Teaching Fellows (TFs), though some do fall into other classifications. Because of this diversity, for clarity's sake, cluster graduate students are referred to in the program and in this report as graduate student instructors, or GSIs.

The portion of the assessment focused on graduate student instructors sought to understand the experiences and perceptions of graduate students as they participate in and foster an intellectual community, engage in interdisciplinary teaching, and design and deliver their spring seminar courses. In

the subsections that follow, a demographic profile of UCLA's cluster graduate student instructors is presented, and their perspectives and experiences are highlighted.

PROFILE

Over the last eight years, the cluster program employed an average of 51 graduate student instructors per year (Table 3.1). On average during this period, 56 percent of cluster GSIs were women; 19 percent were under-represented racial/ethnic minorities. Cluster GSIs were responsible for teaching 95 percent of the program's fall and winter discussion and/or lab sections. They also developed and taught 63 percent of the spring seminars.

Table 3.1: Demographics of Cluster Graduate Student Instructors

		% Women	% Under-Represented
	N		
2003-04	36	50	8
2004-05	45	53	11
2005-06	44	61	25
2006-07	58	59	24
2007-08	61	66	23
2008-09	52	48	17
2009-10	63	51	16
2010-11	60	58	20
Average %		**56**	**19**

*Includes individuals who identify as African-American, Latino/Chicano, or Native American.

Graduate students who participated in clusters during the last eight years represented a significant cross-section of UCLA's academic units (Table 3.2). The largest representations were from the Social Sciences Division within the College of Letters and Science, particularly the departments of History, Sociology, and Political Science therein. Since a number of GSIs have taught in the cluster program for more than one year, the unadjusted totals reflected in Table 3.2 exceed the number of "unduplicated" or distinct individuals who participated. Adjusting for those who taught more than once, 297 graduate students participated in clusters during this eight-year period; 34 percent of GSIs were involved in the clusters for at least two years.

Table 3.2: Affiliations of Graduate Students in Each Program Year

Affiliations	Academic Year								
	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	Total*
Letters and Science: Social Sciences									
History	7	7	12	11	10	11	11	9	78 (49)
Sociology	3	6	6	11	8	7	7	5	53 (34)
Political Science	6	7	4	4	3	7	9	8	48 (26)
Geography	1	4			2	2	1	3	13 (10)
Women's Studies				3	3		2	3	11 (6)
Anthropology			1		2	1	2		6 (4)
Total	**17**	**24**	**23**	**29**	**28**	**28**	**32**	**28**	**209 (129)**
Letter and Science: Humanities									
English	3	5	4	2	5	3	7	7	36 (26)
Asian Languages and Cultures	2	3				5	4	3	17 (13)
Musicology		1	1	2	1	4	2	2	13 (9)
Philosophy	1	1	1	3	2	1			9 (7)
Art History			1	1	1	1		1	5 (4)
Comparative Literature					2	1	2		5 (3)
Indo-European Studies							2	2	4 (2)
Applied Linguistics					1		1		2 (1)
Germanic Languages							1		1 (1)
Slavic Languages & Literatures	1								1 (1)
Total	**7**	**10**	**7**	**8**	**12**	**15**	**19**	**15**	**93 (67)**
Letters and Science: Life Sciences									
Psychology			1	3	4	1	3	6	18 (10)
Ecology & Evolutionary Biology	1	4	1	1		1	2	2	12 (10)
Molecular Biology					1				1 (1)
Molecular, Cell, & Developmental Biology					1				1 (1)
Total	**1**	**4**	**2**	**4**	**6**	**2**	**5**	**8**	**32 (22)**
Public Affairs									
Social Welfare	2	2	3	5	2			1	15 (10)
Urban Planning	2		1	1	1				5 (5)
Total	**4**	**2**	**4**	**6**	**3**			**1**	**20 (15)**
Public Health									
Public Health		1	1		2	1	2	2	9 (4)
Health Services					1	1	1	1	4 (1)
Environmental Health Sciences				1		1			2 (2)
Epidemiology			1						1 (1)
Total	**0**	**1**	**2**	**1**	**3**	**3**	**3**	**3**	**16 (8)**
Arts & Architecture									
Music	1	2	2	2	2	1			10 (6)
Ethnomusicology					1	1			2 (1)
World Arts & Culture					1				1 (1)
Total	**1**	**2**	**2**	**2**	**4**	**2**	**0**	**0**	**13 (8)**
Letters and Science: Physical Sciences									
Physics & Astronomy	1			2	1	1	2	1	8 (6)
Earth & Space Science	2					1			3 (3)
Atmospheric & Oceanic Sciences				1	1				2 (1)
Total	**3**	**0**	**0**	**3**	**2**	**2**	**2**	**1**	**13 (10)**
Theater, Film, & Television									
Theater	3	2	2	2	1			1	11 (7)
Total	**3**	**2**	**2**	**2**	**1**	**0**	**0**	**1**	**11 (7)**
Medicine									
Human Genetics				1			2	1	4 (4)
Neuroscience			1					1	2 (2)
Biological Chemistry				1					1 (1)
Total	**0**	**0**	**1**	**2**	**0**	**0**	**2**	**2**	**7 (7)**
Education & Information Studies									
Education			1	1	1				3 (2)
Total	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**3 (2)**
Engineering & Applied Science									
Civil & Environmental Engineering					1				1 (1)
Total					**1**				**1 (1)**
International Institute									
Islamic Studies								1	1 (1)
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1 (1)**
TOTAL	**36**	**45**	**44**	**58**	**61**	**52**	**63**	**60**	**419 (277)**

*The number in parenthesis represents the number of "unduplicated" graduate student instructors from each unit over the past eight years of the cluster program.

GRADUATE STUDENT INSTRUCTOR PERSPECTIVES

To understand graduate student instructors' cluster experiences, a researcher in UCLA's Division of Undergraduate Education conducted a focus group interview with six current GSIs, all of whom have been involved for at least two years in cluster teaching, and were also selected by their peers to represent GSI perspectives on the cluster experience. The two hour conversation, which was audio taped and subsequently transcribed, was generally structured by use of an interview guide (see Appendix G), but participants were encouraged to prioritize talking about the issues they perceived to be most relevant as they reflected on their respective cluster experiences and perspectives. Discussion focused heavily on motivations to become involved in the cluster program and perspectives on cluster teaching and learning, especially as related to the professional development of graduate student instructors.

Additional insights regarding the cluster experiences and perspectives of graduate student instructors were gleaned through written reflections from half a dozen GSIs during academic years 2004-05 and 2005-06. The questions to which they responded are provided in Appendix H. The subsections that follow address graduate student instructors' motivations for becoming involved in the cluster program along with their perspectives on professional development aspects of cluster teaching, including experiences learning to teach, perspectives on working with freshmen, and thoughts on teaching team dynamics.

Motivations

In keeping with sentiments expressed by graduate student instructors who shared their perspectives and experiences for inclusion in the previous self-study report, those who offered comments more recently were encouraged to become involved in the clusters by faculty they know. In some cases, the student's doctoral advisor was already part of a cluster team and "invited me to join" given that "the cluster topic fit nicely with my ongoing dissertation research." For some, the route to serving as a cluster GSI was rather serendipitous:

> *I originally got involved because my advisor was starting a new cluster and she had a grant to build a resource website. I needed funding, so she used the grant money to help fund me. Then, just because I was really interested in how the class was progressing once I'd worked on it, and since the topic falls in line with my dissertation topic. I was going to lectures once a week. Then, the second quarter, one of the teaching fellows had to drop out. I had never TA'd at UCLA, but my advisor got special dispensation for me to step in and take over since I was most familiar with the cluster.*

In other cases, departmental faculty who had some indirect familiarity with the clusters were aware that a GSI was needed, and recognized a potential fit between a doctoral candidate's interests and potential capacity for interdisciplinary work. These students, many of whom were also strongly motivated by "needing money," typically had "never heard of the cluster program" but acted on the faculty member's encouragement to interview for a position and, ultimately, were hired. As one current GSI explained:

> *I went in completely naïve. I was recommended, but I didn't know any of the cluster faculty. It all turned out to be fantastic. I love it.*

GSIs from departments where "funding is always precarious" underscored that "readily available support" is a "huge, huge benefit" of the cluster program that "a lot of students rely on." Indeed, the three-quarter duration of the clusters provides GSIs with employment for a full academic year, eliminating the need for these students to seek new teaching assignments each quarter or search for other sources of support.

Overall, cluster GSIs were typically unfamiliar with the cluster program until faculty from their home department encouraged them to become involved. Apart from the yearlong financial support, would-be GSIs were attracted to the cluster program by the opportunity to develop and teach their own spring seminar, the interdisciplinary nature of the courses, and the potential career development experience that involvement assured, including "making connections outside your department" and "getting to know the experts" in other fields.

Cluster Teaching and Learning

Above all else, cluster teaching and learning was described by graduate student instructors as a "fantastic" professional development experience. Through focus group conversation and written communication, GSIs shared their experiences in learning to teach, working with freshmen, and collaborating within the teaching team. Insights gleaned and lessons learned are highlighted in the subsections that follow.

Learning to Teach

As noted earlier, cluster GSIs are selected from among UCLA's most advanced doctoral students, and most have extensive teaching assistant (TA) experience prior to becoming involved in a cluster. GSIs tended to view that experience as "helpful" preparation. However, they viewed their roles and cluster responsibilities as "extremely different" than serving as a TA in other courses. For example, to widespread agreement, one focus group participant offered:

> *Working in the cluster approximates professor training more than any other teaching experience I've ever had. [Compared with traditional TA work], it is a markedly different experience. [Based on my experience as an adjunct at another campus], if you've done cluster TA'ing, it really does prepare you. You get to see professors' different lecturing styles so you can model after them. [You also go beyond] just elaborating on different concepts that somebody else brings up. In your sections, you have some autonomy with respect to what you want to focus on. Then you also get to teach your own seminar and [receive] feedback [as you are] developing it.*

Another GSI explained further the distinctions between the cluster experience and "regular TA'ing" as she viewed them:

> *When I was a TA [for non-cluster courses], the professor would go through the book and lecture; then the TAs would elaborate on selected points. But [in the clusters] it's different. The faculty set up the background for certain work. The only chance that students have to devour the actual work they've introduced though is in the [discussion and/or lab] sections. So [my work] is more complementary rather than just additive or elaborative. [In that way], our roles are qualitatively different from what regular TAs do.*

Finally, acknowledging that "I can't imagine not having TA'd before and then suddenly having to do this job," another GSI offered her views:

> *I like having a lot of leeway with what I do. It's also a lot of responsibility. I appreciate the autonomy and the fact that I take care of things on my own. It's a benefit of the job. I like that we get to decide. We have to run everything by the faculty, but they really listen to us. They put a lot of stock in what we say because we have a lot more contact with the students and we understand their needs. It is a lot of work though! My first year, I was a mess..!*

Taking a "unique interdisciplinary approach" within the cluster to issues that GSIs consider "very relevant," "intellectually stimulating," and otherwise "enriching" motivated these emerging scholar-teachers to put forth their best efforts to teach students "we get to know well" and "really care about." As one GSI underscored:

> *I really enjoyed the material, which motivated me to convey it to students in the best way possible, trying to keep it interesting to them, instead of allowing it to be another course requirement to fulfill. Teaching the sections and grading the papers also taught me a great deal about time management and the appropriate level of feedback to give students.*

The degree of autonomy GSIs have in "developing" the fall and winter discussion and/or lab sections tends to vary considerably based, in part, on the nature of the cluster and its "newness." For example:

> *We meet weekly and we go over what the lab is going to be for that week, and we sort of walk through it. We have the lab worksheet that has all the instructions and we go through it together. If there are any questions, we can ask the professors there. Then we go and we run those labs. We have a lot of structure, and that works well.*

> *When I started, it was a new cluster. We were all sort of developing it together and the faculty didn't have a specific sort of idea of how all the elements were going to fit together. It pretty much fell to the TAs to figure out and then explain to the students in their sections how all those things came together. This year, based on the feedback from the first year, we did have more interaction with the faculty and there was more effort made trying to make sure all the lectures and discussion sections were communicating how everything fits together.*

> *Ours is one of the older clusters and [the discussion] sections are totally TA driven. The professors leave a lot to us to develop…which is nice because we get to bring in our own ideas. This is my fourth year, and every year I've been there, I feel like the sections get better because of different people's ideas. I can't imagine having everything planned out for me.*

Irrespective of the particular variations across clusters in the degree of autonomy GSIs have within the discussion and/or lab sections, there was widespread agreement that fall and winter quarter responsibilities are clearly designed such that "by the time you get to spring quarter, you're ready to teach your own class because you've had a lot of experience." Essentially, GSI work during the first two quarters "sets you up for the independent spring seminars." Indeed, for GSIs, developing and teaching the spring seminar is the culminating, and often most memorable, experience of the cluster program:

> *Teaching the seminar [gives] you a chance to pick a topic that's related to the general topic of the cluster and that you find really interesting and may want to delve into more.*

Focus group participants shared a variety of approaches taken in creating their seminars. Recalling, for example, that having taken seminars herself that "focused on things faculty are currently working on or are very excited about" were always "the most interesting because intellectually they were excited to be teaching on the topic," another GSI followed that example in creating her seminar:

> *I was preparing for my orals and writing my prospectus, so the class I taught focused either on things I had to read to be ready for that or things I'd recently read and was*

> *very familiar with. Teaching the seminar was very complementary to work that I was doing independently and that I was very interested in.*

Another GSI concurred, adding:

> *I wanted my seminar to be a bridge between my research and something the students might be more interested in, if they weren't interested in what I was specifically studying. That's worked pretty well. They can sort of focus on whichever of those two they're more interested in.*

In creating their seminars, other GSIs prioritized student interests that were identified during the fall and winter quarters, "adjusting" each year, as needed, "depending on the questions most commonly asked." In some cases, GSIs also actively resisted what some described as "a lot of competition to make your seminar fun." For example:

> *I take cue from what the students are concerned about the first two quarters. I try to figure out a topic that addresses the questions in their minds because the seminar is really where they can develop their critical thinking and research skills. They have to be interested in the topic though so they can do that. Other than that, the seminar is just very dry teaching. I don't do fun stuff like some of the other GSIs do, but my experience has been that students take it very seriously. They even will forego their breaks and continue sitting and thinking and discussing. [By that point,] I've had [most of] my students all year, so they pretty much already know what to expect from me.*

For many GSIs, designing and teaching the spring seminar was "by far, my best professional development experience," not only within the clusters but also to the present point in their emerging academic careers. One GSI explained:

> *I had the opportunity to interact closely with my students and get to know each one's strengths and weaknesses, [which enabled me to] provide, as much as possible, individualized help. I learned a great deal about choosing appropriate textbooks, leading discussions, and assigning papers. The seminar gave me the opportunity to practice something that I consider essential in a faculty member: the ability to merge one's own interests and expertise with the student's best interests, and to provide a perspective of how the material under consideration relates to the bigger picture of human knowledge.*

Even for GSIs who have multiple years of cluster teaching experience, the seminar component remains a formidable challenge. As one focus group participant shared:

> *The students are humbled when they start taking college classes and writing papers, but the seminar...this is my humbling moment. I think the seminar has been the most humbling experience of my graduate career. This is the fourth year I'm teaching it and I still feel like it needs a lot of work. Every year it's been so much harder than I thought it could be to design a good seminar. I think going into a faculty position…or hopefully going into that kind of position…and knowing that it's really hard work designing a course…and that every year something's not going to work and will need changing...that's a very valuable experience.*

To support cluster GSIs, the program sponsors several training workshops throughout the year. Many GSIs who shared their experiences as part of this review cycle found the cluster training workshops at least somewhat "helpful" overall. Some, like this GSI, had very favorable impressions:

> *The workshops helped enormously; the writing guidance was most relevant and useful. I learned how to manage a class, manage grades, design a course, develop a syllabus, and provide feedback. All very useful.*

However, given that cluster GSIs are among the most experienced teaching assistants/fellows at UCLA, many found that they were already largely familiar with many of the training topics. In retrospect, most useful were the requirement to "actually write down the spring seminar syllabus ahead of time so that I could have a chance to revise it later" and the opportunity to meet with former GSIs who were able to discuss the "ins and outs" of the cluster experience. Writing workshops were also viewed as helpful, especially with respect to providing practical tools that could be used in discussion sections and seminars.

Several GSIs also expressed "frustration" with selected aspects of the preparation workshops, which they were required to attend. Illustrative of these sentiments, one GSI noted:

> *Unfortunately, I did not have a good experience in the workshops. I felt that the people leading the discussions were not particularly interested in being there, and relied on passing out 15 pounds of material for us to read. Also, most of the supporting/experienced GSIs were hesitant to speak. In addition, approval or monitoring of our preliminary course design was exceedingly cursory. We were told that we were to design a course with some written component. Period. Course design pretty much depended on an individual GSI's experiences and initiative.*

Another offered this perspective:

> *My biggest challenge was trying to get my seminar up and running. I sometimes felt pretty lost because I wasn't really given any guidelines as to what the seminar was to be about or what purpose it was supposed to fulfill. We were just told to do a seminar and have a syllabus ready to share. The seminar ended up being a lot of fun and my students really seemed to enjoy the class, so I think it was successful. I still don't know though if there is any underlying theme or purpose to the seminar that I may have missed.*

All in all, GSIs concurred that no amount of workshop training, regardless of how well designed, could accurately approximate the powerful "hands on" experiences of cluster teaching and working with incoming freshmen. Looking back on the seminar experience, most were "pleased" with students' levels of participation, the "engaging and thoughtful" discussions that took place, and, with "how things went overall." Considering what they might have done differently, some commented that in their exuberance to share information with students, they created "too rigorous" a course, and would likely "lessen the work load" the next time around. One broadly shared recommendation for enhancing the seminar development and teaching experience was to create opportunities for GSIs to discuss seminar expectations, content, and workload with cluster faculty.

Working with Freshmen

GSIs reported that through their cluster program experiences, they have learned a great deal about pedagogy in general. They also gained considerable insights about working with freshmen, in particular. An inherent part of the teaching responsibility cluster GSIs have is "breaking in the students to life at

UCLA" including, in some cases, "fundamentals" that range from advising freshmen "how to send appropriate course-related email correspondences" to "how you behave in class." GSIs explained that there is no "set list of duties" associated with helping freshmen acclimate socially and intellectually to college:

> *Some people take the whole load. They become like the students' personal coaches through this first year. Others restrict themselves more to the formal kind of teaching.*

Nonetheless, however they define their personal investment in the "freshman adjustment" process, there are unique considerations that must be addressed when working with new college students. As one GSI explained:

> *An important part of what we do is academic socialization. Most of the other courses [freshmen] have are too big…no one pays enough attention to them. The clusters are the first contact they have really with anyone about academic life at UCLA.*

Reflecting on a conversation she recently had with a student, another remarked:

> *This is how the world works…I think that's one of the major lessons I try to teach my students all the time. For example, there's a student now who doesn't want to take the midterm on the day it's scheduled because she has a really busy day that day. Those things come up all the time. It's like you have to explain to them, 'This is life, you're going to have busy days or complicated situations to deal with and you've still got to take the midterm.'*

While sometimes marveling at the things incoming freshmen "don't seem to know," GSIs also uniformly appreciated the "enthusiasm" they bring to the teaching and learning environment:

> *From a teaching perspective, it's fantastic to have such eager students. I have not found that to be the case when I've taught in my own department. [In the cluster], I have an entire section full of students who are just eager.*

The "intellectual learning curve" for cluster freshmen, especially during the first quarter, is also "very steep" and the experience of helping these new undergraduates "work through" adapting to college teaching and learning can be "frustrating." Indeed, "learning to anticipate the needs, desires, and expectations of incoming freshmen, and balancing that with my own expectations of them" was viewed as one of the most "important" and "challenging" learning experiences associated with cluster participation. As one GSI explained:

> *The first quarter, intellectually is…not a wash…but it's such a steep learning curve to try to teach freshmen critical thinking skills, because they do not have them. They're not coming out of high school…even the great high schools…with the ability to have their own idea about a subject and support it with evidence.*

Reinforcing that sentiment, another focus group participant offered additional perspective:

> *There's a huge divide between the way [freshmen] are used to thinking and the way we expect them to think. There's also a huge difference between freshmen and graduate students in the ways that they think. That's one of the things, at least in our cluster, that we try hard to explain. There are big differences between high school and college*

> *expectations for writing and thinking and all sorts of processes. [Helping freshmen understand] that people don't agree on things and there is more than one theory is important…and even [teaching them] what a theory is, because they're so used to right and wrong.*

In response to these comments, one focus group participant remarked, "We have a really hard time with that in our cluster too: 'What do you mean you don't agree? What's the right answer?'" In many cases, even by the end of the year, "students still didn't have some important basic skills I would have expected them to have gotten by that point through the cluster experience." Nonetheless, GSIs reported encouraging stories both of students' tangible academic progress as well as increasing self-awareness throughout the course of the year. For example:

> *After the second quarter, I had one student who came up when he handed me his final and said, 'When I started college I thought I was a good writer. Thank you for being hard because you taught me I have to work harder.' That was great and I was really glad he stuck with it because he was a student who was very concerned about his grades. He did fine, but when he got a C on the first assignment, that was talking him down from a ledge. He'd never gotten a C in his life.*

Often, the "rewards" of a yearlong effort become most clearly apparent during the spring seminar:

> *I had two students [in my seminar last year] who had been with me the entire year. It was really astounding to see them from the beginning of the year to the end when they did a presentation of their own primary source research, came up with their own argument, and supported it. I wanted to run down the halls shouting, 'Hallelujah!' I was so excited for them because that's a big part of what we're trying to teach them.*

The overwhelming majority of freshmen (roughly 80%) who enroll in clusters complete the entire yearlong experience. However, one challenging aspect of cluster teaching for GSIs is contending with the inevitable sub-population of freshmen who elect not to complete the cluster experience, even when they are performing reasonably well and making marked intellectual strides as the year progresses. As one GSI lamented:

> *It's depressing to see the rate of attrition. We spend a lot of time mourning and wondering, 'What happened?' There's a lot of angst in the teaching team about the rate of attrition between the quarters.*

Through sharing with fellow focus group participants their respective "attrition" experiences, cluster GSIs identified several potential causes, including the "inability" of freshmen to grasp fully the "bigger picture" of what they can gain through the cluster experience. One experienced GSI, for example, commented:

> *I really don't think they realize the full benefits of the cluster. [As freshmen], they don't have enough experience to understand fully. I think by their senior year, they'll be like, 'Oh crap, it would have been really great to have stuck with it.' We try to say it every time, 'These are all the benefits….' We even talk about it in lecture, but I think they just don't know what it all means.*

GSIs projected that another reason for attrition throughout the year is the "difficulty" many students have adjusting to new expectations and the disconnect they experience between their own expectations and "reality," especially with respect to the grades their performance warrants. "They're just not used to

getting anything but an A" and they feel "entitled" to continue that tradition. When they don't readily receive the feedback and grades they anticipated, "everybody thinks their cluster is the hardest and their TA is the hardest." Some students also "definitely come in thinking this is going to be their easy course." When that turns out not to be the case, they may be inclined to find other options, especially if they are science students. One science cluster GSI explained:

> *Some [of the attrition] is due, I think, to college being a rude awakening in terms of grading. Especially with the science students, I think they expect the science classes to be hard, but not your GE classes. I think some of them expect easy grading or just expect to do well on things like this. Then when they don't, they drop out because they don't have a lot of other experience in college. They don't realize that their other classes are going to be like this as well because everyone they're together with now is a high achieving student.*

Based in part on comments made to them by freshmen who "enjoyed the cluster" but opted to leave the program after the first or second quarter, GSIs also attributed attrition issues to basic scheduling conflicts, again "especially for science students" whose "lab schedules and other things they have to take conflict with cluster scheduling and cannot be worked around." For example:

> *I think scheduling plays a big role. Last year, I had a lot of attrition from fall to winter just in my particular section, and this year I didn't have any. I don't think it's because I radically improved as a teaching fellow. I think it just happened that my section was scheduled at a more convenient time this year.*

Recent changes to the university seminar requirement, which prompted some students to determine that there were potentially "easier" ways to meet revised GE requirements coupled with the overall growth of the cluster program in recent years were also identified as potential contributors to cluster attrition. All in all, while acknowledging that it is sometimes difficult not to wonder what more could have been done to retain students who leave the program, GSIs accepted that there were many reasons "known and unknown" that students may leave. Most of which, they ultimately determined, likely have very little, if anything, to do with any widespread "failing" of the cluster teaching team or the broader program and that relate, instead, to personal and academic considerations that undergraduates must weigh.

Teaching Team Dynamics

Another "extremely valuable" cluster experience for GSIs is the "real-world experience" gained in "collaboratively working toward a common goal" with "dedicated faculty, staff, and hard-working students." As one GSI commented:

> *The fact that the class is team-taught, and that the teaching team met frequently to discuss the content and format of the discussion sections, allowed me not only to learn from experienced teachers with different styles, but also to exercise my personal initiative in shaping the sections*

Working within the teaching team also provided GSIs with important experience in "learning to adapt" in the midst of sometimes unexpected situations that arise during the quarter and throughout the year:

> *[Being a cluster GSI] gave me an appreciation for how much work goes into designing a class, and a taste of having to improvise a little once the class has started and things haven't gone exactly as you hoped. Realizing that the class could adapt and change*

> *throughout the quarter was very helpful, which I noticed in fall and winter quarters and then again in my spring seminar.*

As GSIs learned quickly, and "without a doubt," cluster teaching "requires a lot of coordinating" and "if one link is a problem, then you're in trouble." GSIs had overwhelmingly positive regard for the cluster faculty with whom they worked, noting in broad agreement that "the professors are great" and "the coordinator in particular does a really fantastic job of keeping everything organized." Positive sentiments regarding the competence and dedication of most GSIs with whom they had worked were also the norm:

> *It's nice to be outside of your department…and to have exposure to so many people in other departments and establish connections across campus. It's [also] nice to get to know people or learn more about how other departments do things or how people from very different disciplines teach. I think for someone who wants an academic position and wants to teach, this is an invaluable experience. You just learn so much about designing your own class and working as part of a team and how people in different departments across campus work.*

Not unsurprisingly, however, many of these experienced cluster GSIs had encountered at least one "problematic" GSI and/or faculty member during their cluster program involvement. For example:

> *The first year I did this, there was a problem teaching fellow (TF). The person didn't give feedback on writing drafts, for example. So the students were upset, and some went to other TFs to get comments on the writing since that's some of what they're supposed to learn. So we had to do the work the other TF wasn't doing. It can be really difficult when you have a TF who doesn't work hard, or take the job seriously. It messed the dynamic up with the other TFs and the faculty, but I really felt for the students. Also, as TFs, we had to take on the extra work that person wasn't doing. Apparently, it was nearly impossible to remove this person from the position, at least during the quarter, but after that they were able to fire them…or maybe they quit…I don't know for sure. Whatever happened though, that person was gone and replaced with someone great.*

As difficult as it can be when there is a "bum" GSI on the teaching team GSIs agreed that, comparatively, "it's much more difficult if you have a faculty member on the team who's a problem," including having to "deal with instructors who don't seem to be on the ball with getting things done for the course." Challenges can also ensue when a faculty member simply does not "relate well" to students or is otherwise "unclear" in expressing themselves. For example:

> *[One year], we had a particular faculty member that undergraduates did not respond to very well. Most of the students left [the lectures that faculty member delivered] highly confused. So that required a fair bit of work on the TF's part in section during the weeks that faculty member would lecture. Even as graduate students, we had a really difficult time knowing or understanding where that person was going with things. So we relied heavily on the TF whose field that was.*

Although some interpersonal experiences within the cluster teaching team were recollected as "negative," most lessons learned on this front stemmed simply from gaining "much appreciated" experience and confidence working as part of an academic team, including the necessary "give-and-take" that such ventures necessarily entail:

> *One of the important lessons of [participating in a] cluster, although it's a difficult thing to learn, is how to manage in a team. I think academics in general just like to talk and discuss stuff. It doesn't seem to matter what the topic or issue is. People just like to talk a lot and offer their opinions. We have meetings with seven academics every week, and learning how to adapt to their styles and deal with all the things [that go into working collaboratively] is one big benefit of the job, especially if you're going to be an academic and are going have to work in this type of environment, which I hope to. It's been good to learn how to cope with [the dynamics] and [make things work], although it hasn't always been a pleasant learning experience!*

For the most part, challenges related to team dynamics were perceived by GSIs to relate simply to how the personalities and "styles" of those involved meshed overall. As one focus group participant explained:

> *Faculty members are just all different. Some like to open up communications with students, and they're very responsive. For example, students can send emails simultaneously to faculty and teaching fellows and faculty will respond right away. Some faculty are just more hands on than others too; they really want to know what you're going to be discussing and how, whereas others are comfortable leaving it more to you to decide. It's the normal challenge of working in a team and figuring out how to make it work. Faculty are not going to change who they are…their attitudes and stuff. [As a teaching fellow], you just have to learn to deal with it.*

Other "tensions" arose simply due to the mix of differing intellectual perspectives, with an ensuring dynamic that was described as both "entertaining" and "educational" for GSIs and undergraduates alike:

> *[On our team], we have a lot of disagreements among the faculty as to what the course should [focus on] and things like that, but it hasn't been detrimental. It's just part of the process of trying to fit a lot of things together, and it's useful academically, I think, to show students 'there's no consensus here.'*

Another shared a similar perspective:

> *[Freshmen] are just entering academe, and it's good for them to see and deal with the fact that things don't always run smoothly. People don't always agree, and you're not necessarily learning the iron-clad truth.*

Considering cluster teaching team dynamics and their implications, more specifically, for the community-building aspect of the cluster program, focus group participants also underscored as "crucial" the involvement of at least one experienced cluster GSI on the teaching team. First, "repeat" graduate student instructors were perceived as being less "risky" with respect to "knowing what you're going to get" in terms of "reliability." Second, having experienced cluster GSIs as teaching team members is important for helping new GSIs learn "tricks of the trade" that faculty are not as well positioned to address. As one GSI with considerable cluster experience shared:

> *It definitely does help because if new TFs have questions, they can go [to those who are more experienced] and ask, 'how did this go?' or "how did you handle this or that?'*

The presence of repeat GSIs was viewed as especially important because, as noted earlier, the cluster teaching experience is "very different" than "regular TA'ing." To widespread agreement from his peers, one GSI explained:

> *When people come in, they're just bewildered…overwhelmed…for awhile by all the responsibilities and expectations. It takes some time, and usually the best advice they get is from TFs who are repeating and know all the nuts and bolts and stuff.*

Indeed, repeat GSIs were highly valued at least in part because they can offer recommendations for how to juggle the various responsibilities cluster GSIs have for what all agreed was a highly "time intensive" job, albeit one that becomes less "all consuming" with experience. Several GSIs commented that they "at least sort of knew what I might be getting into" when they were "warned" during their interviews that although students are compensated for 20 hours of work on the clusters per week, "this simply isn't a 20 hour a week job." For the most part, GSIs agreed that cluster faculty are sensitive to the fact that the workload can potentially consume many more hours, and GSIs expressed appreciation for such consideration. As one explained:

> *Our coordinator, on our very first meeting, said, 'you're only being paid for 20 hours and I really want you to monitor your time. If, at any point, you feel like you're working more than that, let me know because we can cut out whatever it is that's taking you over your hours.' I thought [that] was really fair and really respectful of our time.*

On some cluster teams, the faculty coordinator takes on nearly all administrative tasks, a circumstance that GSIs in those clusters sometimes perceive as "too much" for one person. As one GSI shared:

> *I'm close with the faculty coordinator and I see how that role functions. I would say that if you don't have a very involved teaching team, the coordinator has too much responsibility. That's a teamwork issue though and I don't have any control over how that works. I have seen though that the faculty coordinator bears too much of the brunt of the responsibility for the functioning of the cluster.*

That said, one clearly recognized "advantage" for GSIs on teams where faculty coordinators do handle all administrative responsibilities is that GSIs are able to focus only on teaching:

> *Administratively, [in our cluster] there's a total separation between GSIs and faculty. The GSIs don't deal with anything administrative, and whenever there's [an administrative] question or issue that the faculty have to deal with, they deal with it themselves and the faculty coordinator acts as a filter for us as GSIs. For example, we might say that we think something is wrong. She listens to our concerns and says, 'Okay, let me talk to the other faculty and I'll get back to you with a response.'*

In other clusters, however, GSIs are largely responsible for most administrative work. As one focus group participant explained:

> *There's a lot of work besides running sections…planning socials, reserving rooms if we need extra space or decide to do different things…there's a whole list of administrative jobs. Without having repeat GSIs, so much of that stuff would fall through the cracks [or not get done] as efficiently.*

Even in cases where GSIs are expected to assume many, if not most, of the administrative duties, the "cost" of doing so was perceived as worthwhile:

> *I don't love the administrative tasks…but if ordering rooms and doing whatever other administrative things are necessary is the byproduct of [the autonomy I enjoy] on the academic side of things, it's fine with me.*

All in all, perhaps the most unanticipated reward of cluster teaching for GSIs is "really enjoying the other teaching fellows in my cluster" and "establishing lasting connections and friendships with them." The following comments illustrate this sentiment well:

> *I find it rewarding from a personal standpoint that [fellow graduate students and I] have developed friendships. We can get together and gripe and compare departments, which is fascinating…very interesting, academically. If it weren't for [my involvement in the cluster program] I wouldn't have friends in other departments at UCLA.*

> *I really enjoy the other TFs. [Some of us who've taught together in previous years] still get together and talk about our work and what we're doing.*

Looking toward the future, GSIs remarked that "it sometimes baffles me that more people are not just clamoring for these positions" and presumed that the reason they are not is that "they don't know about it." Given that it seems "inequitable" that "people largely get involved because they know someone who is already involved," there was encouragement to "publicize the opportunity better," and to "interview" and otherwise "screen" applicants very carefully to ensure that "only those who are truly interested and can offer good contributions" are selected.

Some also strongly encouraged program administrators to reconsider the decision to compensate GSIs at the same rate they would be paid if teaching a four credit course since the cluster is a six credit course and, consequently, seems to them to warrant a higher compensation level. Finally, indicative of the overwhelmingly positive experiences cluster GSIs have had within their respective teaching teams, focus group participants also encouraged more future interaction across clusters, particularly since "they are so unique within UCLA but similar in so many ways to each other." As such, "it would be nice to encourage more inter-cluster interaction."

Conclusion

Overall, graduate student instructors viewed their cluster experiences as "overwhelmingly positive" and characterized the program itself as "great;" a "must keep." As detailed in earlier subsections, GSIs credited the program with offering a stellar professional development opportunity for those who intend to pursue academic careers, particularly if they value undergraduate teaching. Experiences in helping students build conceptual bridges to connect different disciplinary perspectives along with learning to manage the "day-to-day events of cluster teaching" were viewed as providing valuable guidelines for these would-be professors' emerging careers.

SECTION FOUR

THE CLUSTER EXPERIENCE OF FACULTY

As elaborated earlier in this report, one of the major aims of the cluster program is to give UCLA freshmen an opportunity to meet and become familiar with the ideas and work of the campus' ladder rank faculty and other scholars. Bringing together groups of distinguished scholar-teachers in collaborative venues that aim to show freshmen how different disciplines address a common problem is a challenging venture that calls upon faculty to:

- Design and deliver a cohesive, integrated course that clearly conveys to a freshman audience the ways in which different disciplines approach a shared subject matter,
- Develop assignments and class activities that encourage students to improve certain academic skills necessary for learning in a research community, and
- Engage in a collaborative teaching process that provides the opportunity to become learners as well as teachers in a community of scholar-teachers.

To facilitate addressing the many considerations and potential challenges that these collaborative teaching ventures pose, the cluster model relies on the expertise of two groups of scholar-administrators. Within each cluster teaching team, a designated faculty coordinator is responsible for guiding the direction of the overall course. Responsibilities include providing intellectual leadership and facilitating team building as well as playing a managerial role to ensure that all aspects of the cluster course—ranging from guest lecturer arrangements to scheduling changes and field trip planning—function smoothly.

An additional small team of coordinators provides broader administrative and instructional oversight of the program. Responsibilities include identifying and recruiting faculty to design and teach cluster courses, facilitating the Senate approval process of cluster proposals, and training and mentoring graduate student instructors (GSIs) so they are prepared to supervise cluster discussion sections and teach spring seminars. The doctoral-level, discipline-based scholars who provide this programmatic leadership have significant teaching experience and are also engaged in giving cluster lectures, supervising discussion sections, and designing and offering spring seminars.

This section provides a demographic profile of UCLA's cluster faculty, along with reflections from faculty coordinators on the rewards and challenges of cluster teaching. Thoughts on the future of the cluster program are also included.

PROFILE

Over the last eight years, 51% of those who participated in cluster teaching were ladder faculty, ranging from a low of 44% in 2005-06 to a high of 68% in 2010-11 (Table 4.1). These aggregated proportions reflect responsibilities for fall/winter lecture and discussion sections and/or spring seminars. During this eight-year period, an average of 37% of cluster faculty who hold ladder-rank appointments were women; 12% were under-represented racial/ethnic minorities. The demographic composition of non-ladder cluster faculty, which

includes academic administrators, adjunct professors, postdoctoral scholars, and others, reflected comparatively higher proportions of women (50%) and fewer under-represented racial/ethnic minorities (7%).

Ladder faculty involvement in cluster teaching is most prominent within the fall and winter lecture courses. These courses are designed to help entering freshmen develop the foundational academic skills (e.g., critical thinking, problem solving, rhetorical effectiveness, creative expression) that will enable them to complete a substantive project of their own during the spring seminar and, more broadly, to succeed in college and beyond. Over the past eight years, ladder faculty taught an average of 62% of these courses. As the cluster program has expanded to serve more incoming freshman, additional spring seminars taught by non-ladder faculty or graduate student instructors have been added to accommodate increased enrollments. Over the past eight years, ladder faculty taught an average of 9% of the spring seminars offered. When those with non-ladder appointments are also included, the average percentage of faculty-taught spring seminars increases to 37%.

Table 4.1: Demographics of Cluster Faculty

Overall Cluster Faculty Population						
		Appointment Type	Women		Under-Represented*	
	N	% Ladder	% Ladder	% Non-Ladder	% Ladder	% Non-Ladder
2003-04	51	47	25	41	17	7
2004-05	50	52	31	54	8	8
2005-06	48	44	33	59	10	0
2006-07	57	47	37	57	15	7
2007-08	55	51	39	52	14	7
2008-09	54	52	43	46	14	8
2009-10	52	54	43	42	11	8
2010-11	40	68	44	46	7	8
Average %		**51**	**37**	**50**	**12**	**7**

*Includes individuals who identify as African-American, Latino/Chicano, or Native American.

Faculty who participated in clusters during the eight-year span that is the focus of this self study represented a significant cross-section of UCLA's academic units (Table 4.2). Departments with the largest representations of ladder faculty were among the largest units on campus (History, Sociology, English). Despite its comparatively smaller size, Asian Languages and Cultures also provided significant ladder faculty contributions. The largest portion of non-ladder faculty were affiliated with the Center for Labor Research and Education and the Institute of the Environment and Sustainability (IoES), as these units take responsibility for the cluster on "Work, Labor, and Social Justice" and "The Global Environment," respectively. The Cluster Program's home unit, "Undergraduate Educational Initiatives", is officially listed as the non-ladder faculty's academic unit if he or she is fully employed by the program during a teaching term.

As noted previously, a number of faculty have taught in the cluster program for more than one year. Consequently, the unadjusted totals reflected in Table 4.2 exceed the number of "unduplicated" or distinct individuals who participated. Adjusting for those who taught more than once, 67 ladder faculty and 88 non-ladder faculty participated in clusters during this eight-year period. A complete list of these faculty members is provided in Appendix B. Sustained faculty commitment to cluster teaching since the program's inception in the 1997-98 academic year is evidenced by the fact that 79% of ladder faculty (and 74 percent of non-ladder faculty) who participated for at least one of the past eight years also taught fall/winter lecture/discussion courses and/or spring seminars prior to the 2003-04 academic year.

Table 4.2: Departmental and Unit Affiliations of Faculty in Each Program Year

Primary Departmental Affiliation:	Academic Year								
Ladder Faculty	**03-04**	**04-05**	**05-06**	**06-07**	**07-08**	**08-09**	**09-10**	**10-11**	**Total***
History	2	2	6	5	7	8	7	5	42 (10)
Sociology	4	2	2	3	3	3	3	4	24 (6)
Asian Languages & Cultures	3	3				6	5	1	18 (8)
Political Science	2	3	1	2	2	3	2	2	17 (5)
English	3	4	3	1	1	1	1	2	16 (7)
Ecology & Evolutionary Biology	1	2	1	2	2	2	1	1	12 (5)
Civil & Environmental Engineering	1	1	1	1	1	1	1	1	8 (1)
Physics & Astronomy	1	1	1	1	1	1	1	1	8 (3)
Urban Planning	1	1	1	1	1	1	1	1	8 (1)
Theater	2	3	1						6 (3)
Atmospheric & Oceanic Sciences		1	1	1	1			1	5 (1)
Music	1	1	1	1	1				5 (1)
Musicology				1	1	1	1	1	5 (1)
Communication Studies				1	1		1	1	4 (1)
Dentistry	1	1	1	1					4 (1)
Earth & Space Sciences			1	1	1			1	4 (2)
Genetics				1	1		1	1	4 (1)
Integrative Biology & Physiology				1	1		1	1	4 (1)
Chicana and Chicano Studies	1	1			1				3 (1)
Institute of the Environment & Sustainability	1						1	1	3 (1)
Ethnomusicology				1	1				2 (1)
Law					1	1			2 (1)
Anthropology				1					1 (1)
Art History								1	1 (1)
Information Studies								1	1 (1)
Philosophy				1					1 (1)
Scandinavian							1		1 (1)
All Ladder Faculty	**24**	**26**	**21**	**27**	**28**	**28**	**28**	**27**	**209 (67)**
Primary Unit Affiliation:	**Academic Year**								
Non-Ladder Faculty	**03-04**	**04-05**	**05-06**	**06-07**	**07-08**	**08-09**	**09-10**	**10-11**	**Total***
Educational Initiatives	6	7	8	7	10	6	6	4	54 (25)
Labor Research & Education	3	2	2	4	2	2	1		16 (7)
Institute of the Environment	3	2	2	1	3	2		1	14 (9)
Pathology	1	1	1	1	1	2	1	1	9 (2)
Social Welfare	1	1	1	1	1	1	1	1	8 (1)
Writing Program	1	1	1	1	1	1	2		8 (2)
Geography				1	1	2	1	1	6 (3)
History	1	1	1	2			1		6 (4)
Sociology			1	1		1	2	1	6 (2)
Molecular, Cell, and Developmental Biology	1	2	1	1					5 (2)
Theater	1	1	1	1	1				5 (1)
Epidemiology		1	1	1	1				4 (1)
Geriatrics	1					1	1	1	4 (1)
Microbiology, Immunology, & Molecular Genetics	1	1	1	1					4 (1)
Music			1	1	1	1			4 (2)
World Arts and Cultures			2	1	1				4 (2)
Academic Advancement Program	1	1				1			3 (1)
Atmospheric & Oceanic Sciences						1	1	1	3 (1)
Center for Society & Genetics					1		1	1	3 (1)
Institute of Geophysics		1		1			1		3 (1)
Anthropology						1	1		2 (1)
Asian Languages & Cultures						1	1		2 (1)
Biological Sciences	1	1							2 (1)
Core Curriculum Program	2								2 (2)
Earth & Space Sciences	1					1			2 (1)
Ecology & Evolutionary Biology	1		1						2 (1)
European Studies			1		1				2 (1)
Genetics				1		1			2 (1)
Institute for Genomics & Proteomics			1	1					2 (1)
Law				1	1				2 (1)
Political Science				1	1				2 (1)
University Extension-Education						1	1		2 (1)
Academic Counseling								1	1 (1)
Dentistry	1								1 (1)
East Asian Studies		1							1 (1)
Housing Central Services							1		1 (1)
International Institute							1		1 (1)
All Non-Ladder Faculty	**27**	**24**	**27**	**30**	**27**	**26**	**24**	**13**	**198 (88)**
TOTAL FACULTY	**51**	**50**	**48**	**57**	**55**	**54**	**52**	**40**	**407(155)**

*The number in parenthesis represents the number of "unduplicated" faculty members who participated from each department over the past eight years of the cluster program.

FACULTY COORDINATOR PERSPECTIVES

To understand coordinators' cluster experiences, a researcher in UCLA's Division of Undergraduate Education conducted two focus group interviews. One group was comprised of faculty who were currently serving as coordinator for their respective cluster teaching teams and who, with the exception of one participant, had multiple years of cluster teaching experience. The second was with the team of coordinators who have broader administrative and instructional oversight of the program.

A total of 15 faculty coordinators participated in these two 90-120 minute conversations, both of which were audio-taped and subsequently transcribed. An interview guide (see Appendix I) provided general structure for the conversations, but participants were encouraged to prioritize talking about the issues that they perceived to be most relevant as they reflected on their cluster experiences.

Focus group participants offered insights on their motivations for participating in the program, as well as their views on cluster teaching and learning. Contextual considerations and thoughts on the program's continuing evolution were also addressed. The subsections that follow highlight the perspectives they expressed.

Motivations

In keeping with sentiments shared by faculty who recounted their perspectives and experiences for inclusion in the previous self-study report, those currently teaching cluster courses highlight common motivations to engage. The two most common attractions to cluster teaching among current coordinators are: (a) opportunities to collaborate with colleagues across academic disciplines on "big issues" and "topics you just can't handle as well on your own," and (b) the joys of teaching "enthusiastic" freshmen who are intellectually "open" to the "interdisciplinarity" and "breadth" of cluster topics.

Cross-disciplinary Collaboration

In talking with cluster coordinators, a recurrent motivational theme both for initial engagement and sustained involvement relates to the unique intellectual challenges and opportunities for professional growth that cluster teaching affords. For many, cluster participation provides a "distinctive," and much appreciated, collaborative forum for sharing existing scholarly interests, exploring emerging areas of inquiry, integrating different disciplinary perspectives, and establishing creativity-inspiring connections with colleagues. Illustrative of this dynamic, one faculty member commented:

> *I'm teaching a course that I don't think should be taught anywhere other than in the cluster program. If it were taught in [any particular department], that would limit the range of students who would take it. It's not really a fault of the subject; it's just the way courses in departments are set up here. This course simply requires a team to teach it in the way it needs to be taught.*

Agreement with this sentiment was broadly shared. Indeed, cluster team teaching serves to broaden faculty members' existing frames of reference by exposing them to new intellectual, disciplinary, and pedagogical perspectives. Reflecting on how her own and her cluster teaching partners' approaches to addressing course content have evolved over time, one coordinator remarked:

> *Within each faculty member, I'm noticing a lot more interdisciplinarity now. Each of us, within our own lectures, is bringing in…and integrating…and otherwise showing…that the other perspectives are important, and that you have a fuller understanding if you can*

> *bring several disciplinary perspectives to bear. I feel a real difference [relative to when we started teaching together].*

Not unexpectedly, cluster teaching has had sometimes unanticipated effects on other aspects of faculty coordinators' work. For example, having experienced first hand that students "like to see how things fit together between disciplines," many have found that their cluster teaching experience has made them both more inclined, and more readily able, to incorporate interdisciplinary perspectives within their other, non-cluster courses. The "understanding and appreciation of research in other fields" that faculty gain through cluster teaching also enables them to be more "nuanced" in their discussion of other areas as well as more adept at helping students "establish meaningful connections" across disciplines.

Additional benefits have accrued from observing colleagues teach and otherwise interact with students. As one coordinator explained, such experience often sparks valuable self-reflection regarding one's own pedagogical strengths and weaknesses:

> *[Participating in a cluster] has definitely improved my teaching. In part, just observing three other faculty members lecture…we don't typically have an opportunity to do that. Watching their style and seeing what works and what doesn't…you pick up ideas. My whole lecture style has changed. I like to say I was a good lecturer before, but I think I've picked up a lot of things that have made me better.*

For another coordinator, cluster teaching prompted more intentional consideration of her pedagogical perspectives and practices:

> *[Before teaching in the cluster program], I never really articulated pedagogy. I never really thought about ways of teaching. I guess I did [in some form]…but I had never written a teaching statement, for example. Recently though, we wrote an article about the cluster and used student-centered learning [as the conceptual basis]. There were things from Education that I had never really grappled with myself, but that I thought about in writing that piece.*

Other "direct scholarship" benefits derived through cluster teaching ranged from co-authoring conference presentations and articles that highlight the cluster as a "unique way to teach my subject matter" to initiating new research collaborations with fellow faculty or graduate students.

Engaging Freshmen

Another equally compelling motivation for faculty to participate in cluster teaching is the opportunity to engage freshmen intellectually at the very outset of their undergraduate careers. Having, simultaneously, the "privilege" of introducing new college students to subject matter about which they, as faculty, are particularly passionate offers added incentive. As one focus group participant commented:

> *[Freshmen] are a very dynamic group. They come in very enthusiastic, and I teach topics that they've never had exposure to before. That's just a mind twisting, bending sort of thing to watch 200 heads turn sideways. It's fun.*

Another added:

> *It's wonderful to have freshmen who are not yet jaded…who have not yet learned to game the system…and who have not yet learned that they 'ought' to be gaming the*

> *system. They're open to all sorts of things, including the cross-disciplinary enterprise, because they haven't been located into any one area yet. It's just a wonderful experience.*

From a pedagogical standpoint, coordinators lauded the cluster program's capacity to provide a "safe haven" for freshmen to "adjust to college," "get rid of their high school mentality," and develop "critical thinking and writing skills." In keeping with these sentiments, there was widespread agreement with the comment that the clusters offer "a wonderful introduction to university life and a different way of thinking" which is "not otherwise readily available" to freshmen who take more "traditional" courses. The remarks of two faculty members captured especially well both the inherent enthusiasm associated with engaging freshmen in scholarly discourse and the cluster program's overall capacity to facilitate students' intellectual growth and development:

> *What I find most exciting is teaching the spring seminar where you have kids who have two quarters of preparation and they're now in a seminar that fits the discipline or topic they've gotten to be most interested in. What they can accomplish in the spring as a kind of research and writing and working seminar is so substantially different. That's where they shine in ways that are so far superior to the senior seminars we have in our department. They've really had all this focused preparation and then, in the seminar, they can accomplish a lot.*

> *Depending on what GE fulfillment [your cluster] offers, you're going to have different clientele [than you would in your home department]. It's a different experience than I'm used to, and it's delightful. It's fun to see [freshmen] expectations and assumptions, especially when you ask them what they'd like to major in. Then you see how that develops and ripens…even changes…over the course of the year.*

Cluster coordinators enjoy interacting with freshmen and welcome opportunities to introduce them to new ways of thinking. They also find "working in different ways with different colleagues" to be professionally and personally enriching. Not unexpectedly though, as detailed in the next subsection, these interactions can be challenging for students and faculty alike.

Cluster Teaching and Learning

Focus group participants engaged in lively discussion of their cluster teaching and learning experiences. Highlighted here are snapshots of their teaching teams' efforts to determine "what works (and what doesn't)" in helping freshmen embrace new perspectives. Insights on establishing cluster learning communities and perspectives on the role of graduate student teaching fellows are also offered.

Creative Pedagogy

Among the greatest challenges for cluster teaching teams is developing curricula that reflect a shared vision of what students are expected to learn. From there, teaching teams must determine how best to integrate material from across disciplines so that students can most readily process the "multiplicity" of new information and intellectual perspectives that are introduced. As one faculty member explained:

> *[The interdisciplinarity] makes students really nervous, especially the first quarter. They're nervous about the breadth of the material. In some ways, they have to unlearn what they've learned in high school because not only are they moving across disciplines and trying to get a handle on them, they also have very strong notions [about] particular disciplines.*

Considering the challenges associated with effectively introducing students to multiple, and sometimes competing, disciplinary perspectives, focus group participants underscored the importance of thinking creatively, maintaining "flexibility," and being "open" to making adjustments when seemingly promising approaches are revealed to be less effective than anticipated. One coordinator, for example, described how he and his colleagues re-evaluated their approach of having multiple faculty members lecture, and react to each others' lectures, during the same class period. This approach, which the teaching team found to be intellectually stimulating and that, by extension, they anticipated would also enhance student learning, ultimately required rethinking, given students' readiness:

> *Reading the evaluations at the end of the year, we realized that students were probably more confused than they had been in the years when we'd separated the lectures out and they weren't hearing constant conversations and debates. In retrospect, it was probably too advanced for them and we probably didn't handle it as well as we might have because it sounded [to a lot of the students] like, "he said, she said." I think the best students got a lot out of it, but those who struggled with the material were probably completely lost and thought, "this is crazy." It was an important experience, but we abandoned [that approach] because the amount of work that went into it simply didn't pay off in terms of what we thought the students were getting out of it.*

Others concurred that most freshmen aren't developmentally ready to "choose" between the sometimes dramatically divergent perspectives expressed by multiple faculty co-teaching the course, all of whom are recognized experts in their respective fields. Indeed, coordinators realized relatively quickly that, for incoming freshmen, simply processing the often complex material presented during lectures is challenging enough. As one focus group participant noted:

> *Faculty and graduate students enjoy a lot of dialogue and find that intellectually very stimulating. Sometimes we assume that the undergraduates will also be as excited as we are. Actually, especially if it's a bit confrontational, it makes them very anxious. So now, [while acknowledging there are going to be] opposing views, we tend to downplay that aspect and emphasize integration and complementarity. It makes the students feel less anxious and allows them to [learn] the material without feeling like they have to choose which perspective is "correct."*

Reflecting on particularly effective approaches to helping students grasp "the bigger picture" and ease the inherent "nervousness" many students initially experience when asked to apply different disciplinary lenses to a particular topic, one focus group participant offered:

> *This is a big challenge. [In my cluster], we haven't solved it because [the students] are still anxious about [the expectations]. Partly, though, it depends on how you structure your lectures. We basically have blocks that are identified with one of the four faculty members, but we inject all the other three into the blocks deliberately in a variety of ways…either a vignette at the end of the lecture or in other ways we bring in to remind them we're a team and that there's more than one perspective, or view, on a topic.*

Another coordinator detailed an approach that has worked especially well for her team:

> *Rather than jumping right into the material with the first lecture from one disciplinary perspective, which is what we had done in the past, we used the first lecture this year to give a series of mini lectures. We weren't tag teaming in terms of speaking off each other, but we were each giving them a preview of what they were going to be doing over the*

> *quarter…and even over the two quarters…and why it was exciting. So from that first class, they had a sense of the whole course as opposed to getting one, and then the second, and then the third, and fourth perspectives. That worked really well. In the beginning, there was some skepticism [about taking that approach] among some within our teaching team but, in the end, they've become completely sold and we're going to try and replicate that again next year.*

Considering "what works" in cluster teaching, focus group participants identified a variety of instructional strategies that, through trial and error, have revealed themselves to be particularly effective in helping students adapt to new ways of thinking. The importance of all instructional team members being "flexible" and "willing to experiment" with different approaches was also consistently stressed. Because successful cluster teaching requires faculty to "talk to everybody else in a way they wouldn't have to if they weren't teaching this sort of class," it can be more time-intensive than initially imaginable to those who are new to cluster teaching. As one coordinator shared:

> *For some [faculty] I've talked to, the nice thing they anticipate about cluster teaching is that you really give four lectures a quarter instead of twenty. And that's perceived as a good thing [from a workload standpoint]. One person who is teaching with us for the first time this year said that they're working harder though on those four lectures, though, because the standards are higher.*

Time invested engaging collaboratively with fellow faculty members and graduate student instructors to design and, over time, refine cluster courses contributes in important ways to creating the "sense of community" that is central to the cluster program model. The next subsection highlights faculty perspectives on establishing strong cluster learning communities.

Learning Communities

Clusters are different from most other undergraduate courses at UCLA because students typically remain part of a cluster community for a full academic year. A core goal of the cluster program is to develop among first-year students a sense that they and their instructors are part of a common intellectual community, which encompasses both in-class and out-of-class teaching and learning experiences. In association with their teaching team colleagues, coordinators are responsible for establishing collaborative learning communities.

Among focus group participants, there was widespread agreement that, in many respects, the dynamics that characterize teaching team members' relationships with each other play a significant role in establishing cohesive cluster learning communities. As one coordinator noted:

> *I think one of the biggest things you can do to build community in these classes is the tone you set as the teaching team. [As the coordinator], I work really hard to make sure our teaching team looks like a community. [Students] see that we know and like each other. We encourage faculty and students to ask questions during lecture. On field trips, they see us laughing and talking outside of class. They know we all get together and grade the exams and papers. I think it's important they see that because then they're more comfortable with us as a group. They see that we're people…and we're friends with each other…and that they can be part of that too.*

Coordinators concurred, too, that students enjoy seeing "faculty actually interact with each other," even when those exchanges highlight "alternative perspectives" and may even contain "elements of rivalry."

Appreciating that appropriately managed intellectual tensions can enrich the learning experience, focus group participants also underscored the importance of creating a "cohesive" cluster teaching team where faculty personalities generally mesh well:

> *You've got to have…with all these egos in the room…people who are not overly competitive with each other. You've got to be able to work with the people who are on the team personality-wise. That's very important.*

The significance of enjoying teaching, possessing good collaborative skills and, as one coordinator framed it, "being willing to abandon your authority in the classroom…not entirely…but recognizing that there are other authorities in the classroom as well" was also commonly echoed. For example:

> *It's really important to get people who like to teach, because these freshmen are right out of high school. They're used to hands on. They like to have a face they can know and talk to, and if you have someone on the team who doesn't like to teach…who feels isolated and alienated from the students…then it doesn't work very well with the students. You have to have a commitment of 'I like to teach' from everyone on the team.*

Another coordinator added:

> *It's not just that you like to teach but that you're flexible in teaching…because you can have someone who is really trying and puts together a good lecture and everything…but if they're only seeing their own perspective, then that person is always this incredibly weak link…and everyone else struggles.*

Focus group participants also highlighted the benefits, pedagogically and interpersonally, of having continuity in teaching team composition, "even for just one or two years" or "even if some have to go on and off the team" on a regular cycle, given other commitments. Coordinators agreed that having "at least some repetitiveness" within the teaching team ultimately allows for better integration of key topics. For example, one coordinator who has been part of a team where the same faculty remained intact for five years and on another where members have been constantly "revolving" commented:

> *Being able to teach with people where you've heard and understand their lectures allows for a different kind of organization and synthesis that helps the students. When you're bringing in one or two new people each time, it's a different kind of negotiation entirely.*

Those who have been part of the same cluster team over time also commented on what they have observed as "distinct changes" in team members' instructional approaches as trust within the team grows. For example:

> *We are really working more as a team now as opposed to, 'Now it's my turn to present [my disciplinary] view.' It was more antagonistic at the beginning. We had never taught together and we didn't know what the next faculty member was going to say. There was some suspicion and concern as well because ours are not disciplines that typically work together.*
>
> *Over time, in the best-case scenario, you develop trust…you develop rapport. I'm noticing in myself, and perhaps in my co-teachers as well, that I'm less concerned about getting my perspective across. [My perspective] is important for them to understand, but*

> *I'm thinking more now in terms of [the students] appreciating the value of all the approaches, and the integration.*

Faculty coordinators also recognized the importance of team members working together to help students make conceptual connections:

> *If people know each other and if they're able to, in some ways, complement each others' lectures…that assures students that there's some sort of connection to be made rather than creating stress and anxiety [in students' minds] that, "There's something at stake here that I'm not understanding" or making students feel that there's a critical debate that needs to be fleshed out that they're not prepared to engage in.*

Without question, cluster teaching engages UCLA faculty in new ways of thinking about teaching and learning and challenges them to partner with colleagues in new ways. Some coordinators described teaching team relationships as akin to a "family dynamic," with graduate student instructors (GSIs) playing integral roles. There was also widespread agreement that "strong," "highly competent" GSIs are the "backbone" of the cluster program, providing critical support within the teaching team and serving as important community-building liaisons for freshmen. As one focus group participant commented:

> *Community really starts in the TA sections themselves because they're small groups and they talk to each other every week for substantial periods of time. So there are "mini" communities [formed] that then fold back into the larger group.*

In keeping with the value placed on having "returning" faculty colleagues, coordinators also highlighted the value in having "at least one repeating" graduate student as part of the teaching team:

> *[Apart from anything else], there are lots of logistical things that experienced TAs will remember and maybe that faculty don't even know because they're things happening in the discussion section. The instant memory of what works and what doesn't in various exercises is very valuable. If I don't have someone who has an institutional memory, I'm in trouble with the new TAs.*

Coordinators acknowledged that the primary "students of focus" in the cluster program are the undergraduates. However, they also concurred that a "frequently overlooked," yet "crucial," aspect of their teaching roles and responsibilities as cluster faculty is the "considerable mentoring" they do with graduate student instructors. In large part, these efforts focus on helping GSIs "get their heads around" unfamiliar subject matter and ensuring that GSIs understand "what the material is about" and "what approaches one could take" in facilitating discussion. As one coordinator explained:

> *The amount of time it takes for training GSIs and interacting with them…the weekly meetings and getting them started ahead of time…is really critical to making this work. They're learning to be fairly skilled in 'discipline x' and suddenly they're teaching [something very different].*

Coordinators were also mindful that many cluster GSIs aspire to become faculty members. As such, the cluster teaching experience takes on added professional development significance for these would-be professors. Toward that end, faculty strive to provide opportunities for GSIs to gain experience that will serve them well:

> *When we map out the first two quarters, we make sure that each GSI does a lecture, both so [they] feel empowered and so the students realize these are not just people handling the second tier; they're also part of the team. I think this makes the experience more enjoyable for the GSIs as well. Sometimes we sort of probe into that [approach] and think, 'Well, I could have done that myself better.' But [that sentiment] is balanced out by the fact that the GSI always finds it a good, positive learning experience. The students in that GSI's [discussion] section are also very proud; they think the GSI did a great job. So, of course, there is going to be a little bit of roughness to it, but I think the positive outweighs any negative.*

Conversations with coordinators revealed that cluster teaching and learning is an imprecise art that is constantly evolving. That said, a clear cornerstone for establishing and sustaining effectiveness are the relationships that are cultivated among cluster community members. As addressed in the next subsection, contextual factors including logistic, philosophical, and economic considerations also impact the cluster program and its participants.

Clusters in Context

Cluster program engagement challenges faculty to think in new ways about general education and to work collaboratively to create cluster learning communities that help enable freshmen to thrive academically and socially. At UCLA, of course, those pursuits necessarily occur within the context of a large, public research university and the realities of life therein. This subsection focuses on two contextual considerations highlighted by coordinators during focus group discussion. One, the cluster program's "residential life design," relates to the sheer size of the UCLA campus and its associated geographic challenges, given the location of residence halls relative to the "main" campus. The other consideration points, more fundamentally, to "research university culture."

Education on the Hill

As noted earlier, one of the cluster program's core programmatic goals is to cultivate a learning community environment, particularly in and around the student residence halls (located on "the Hill"). Yearlong academic and social experiences occurring both in and out of the classroom are designed to create a community of learners among cluster faculty, GSIs, and freshmen. As illustrated by the following comments, faculty coordinators largely applauded the concept:

> *I think it's great that senior faculty actually come to where the students are. That's something unique about this big university because students often feel really isolated from their faculty. It's not like being at a small liberal arts college. [With the cluster program], you have senior faculty…really distinguished people in many instances…going close to where freshmen are living. I think that's fabulous.*

> *It's kind of cool when we're up there. When we go to lunch, we always run into our students from the year before and they come and have lunch with us. I also run into students from my other [non-cluster] classes, and they're like, 'Oh, faculty eat lunch?' 'Well, yes we do and sometimes we eat lunch here with you guys.'*

One coordinator, whose cluster was scheduled for two previous years on the "main academic" part of campus due to scheduling conflicts, but is now located in the residence halls, commented:

> *I do feel a difference this year being on the Hill. It does feel more like a community. It's a gut feeling more than anything concrete. But I do definitely feel a different vibe in the lecture hall, which is positive.*

Some faculty expressed concern over the logistic challenges of teaching cluster courses in the residence hall region of campus:

> *I think the symbolism [of teaching on the Hill] counts. Not just for us, but for the students. I do think it makes the program unique. It adds to the specialness of the program, so I like that. But I also think it's a major drawback that the students have a hard time making it in 10 minutes to wherever else they have to go.*

> *My sense is that [teaching on the Hill] does make the clusters at least a little bit special for the students because we actually go to their space and they're all together there, and they're just freshmen. The big negative though is that the whole rest of the academic life happens at another place on campus and that creates a logistic problem for them getting back and forth. I hear that from them all the time.*

> *My sense is that the clusters do not have much of an impact [in the students' minds] of being "education on the Hill." I mean, they're something different. There's a sense of convenience, especially for morning classes. But sometimes [classes taught on the Hill] are really less convenient for students because they have to come down to campus, then run back up for the cluster, then run back down for another class. And it's really not easy to do that quickly.*

Overall, coordinators acknowledged their understanding of, and appreciation for, the intentions associated with teaching clusters "on the Hill." They also agreed that, overall, "the benefits likely outweigh the limitations." Certainly, at times, geographic considerations and "bureaucratic" processes that add, for example, to inherent scheduling complexities can create frustrations for faculty and students alike. However, a more fundamental contextual hurdle for advocates of cluster teaching and learning relates to the "longstanding biases" against making significant and sustained departmental investments to general education curricula.

General Education and the Research University

Those who are invested in cluster teaching are quick to tout its wide-ranging merits. However, coordinators also expressed broad recognition that the cluster program most definitely "goes against the grain" of the research university culture, where "strong departments are key to a research university's success" and "incentives to share resources across departments are minimal," especially when it comes to general education. As one coordinator remarked:

> *I think UCLA and most other research universities are in serious trouble [on this front] in relation to more broad-based liberal arts institutions. They're so focused on the research mission of the university because that's where most of the prestige comes from, for faculty anyway. That's pretty hard to break.*

Especially in these challenging economic times, tensions between maintaining loyalty to one's department and investing in broader educational initiatives like general education are often exacerbated. For example, to widespread agreement from their colleagues, coordinators shared these comments related to current "shortages" in covering departmental courses:

> *[In our department], it's very difficult to come up with teachers. We're very short. We're not replacing our retirees. Slowly, our teaching manpower is dwindling. Providing someone to teach a GE cluster at less than [what used to be] the normal compensation is a big problem. I have to approach my chair again in another couple of weeks to find out if I can do one quarter again next year…forget about the whole year.*
>
> *I've had people in our cluster tell me that they have to leave because they're considered good teachers and the department wants them back.*
>
> *I've had to do overloads and, despite doing that, I feel like I'm asking for a favor to be able to continue in the cluster. The biggest problem in our department is simply staffing the required courses.*

One coordinator summed up the situation as follows:

> *As everybody knows, it's all about resources. If you're going to put more and more resources into the cross-disciplinary enterprise, you're going to have to withdraw resources from the disciplinary enterprise and, at the moment, that's pretty tough to do. We need more incentives to make it worthwhile for departments to allow us to do our thing.*

Not surprisingly, departmental "resistance" to enabling faculty participation in the clusters is often experienced most intensively by untenured ladder rank faculty who must weigh personal motivations for engaging in cluster teaching against concerns about sacrificing time needed to establish research agendas as well as suffering the potentially damaging career effects of not being perceived as "good departmental citizens."

In many cases, coordinators felt that their own cluster participation has led them to "rethink" the purposes, and potentially powerful educational impacts, of general education instruction. As one faculty member remarked:

> *[In these courses], we're not trying to turn students into [disciplinary specialists], so what are we trying to do? We really have to set a goal as far as what they're supposed to get out of it. We want them to learn to question information that's coming in…to become better citizens…to be more informed about scientific issues that come up. You really have to refocus on <u>why</u> are we teaching these kids…what are the purposes of GE?*

All in all, coordinators endorsed the notion that cluster involvement tends to favorably shape faculty members' impressions of general education's inherent value and its potential to impact undergraduates positively. However, coordinators concurred that general education remains a particularly "tough sell" at research universities, including UCLA, not only because of the centrality of departments within the broader institutional enterprise, but also because "many, if not most" research university faculty view general education curricula as "typically [having] very little rigor or consistency." Thus, GE's perpetual rank as the "lowest departmental priority" is solidified, and efforts to "re-educate" can take considerable time and energy.

Given this dynamic, there was widespread agreement that UCLA's cluster program fills a "vital role" with respect to the importance of general education that "did not exist" prior to the program's establishment and that "would not exist" today in the program's absence. As such, faculty coordinators

voiced passionately their perspectives on key points of emphasis for ensuring the cluster program's continued success.

Looking Ahead

As the "visionary" behind the Freshman Cluster Program, UCLA's Dean and Vice Provost for Undergraduate Education, Judith Smith, received high praise from coordinators for the masterful ways in which she has shepherded the program's evolution from inception to the present. Looking ahead to the program's next chapter, which will include Vice Provost Smith's retirement after more than forty years of service to the university, focus group participants discussed the importance of sustaining efforts to create a campus culture where general education and interdisciplinary pursuits are embraced broadly.

Sustaining Cultural Change Efforts

Faculty coordinators underscored the importance of continuing to work toward creating a culture at UCLA where "general education is valued" and there is a "clear commitment" to promoting interdisciplinary teaching and learning at the undergraduate level. As one coordinator noted:

> *If you want students to take GE seriously, then departments and faculty have to take it seriously first.*

In the eyes of coordinators, a critical next step toward that end is creating a "unified message for the campus" about the merits of both general education and interdisciplinarity, with the cluster program serving as a key mechanism to link the two. As one coordinator explained:

> *We need more support for doing this, both within our departments and within the general UCLA culture which still, despite all the talk and so forth, is not very supportive of taking an interdisciplinary approach and doing things that are good beyond the department.*

Acknowledging the important strides UCLA has made in establishing and sustaining the cluster program, but lamenting that there is not a stronger, widespread commitment within the university to cross-disciplinary teaching and learning, another commented:

> *We aren't going to make a lot of additional progress in this enterprise until there is change in the culture of the university more generally. The emphasis [currently] is put on the discipline and on training students in just exactly the discipline that their professors occupy. That has to change if we're ever going to have any serious commitment to cross-disciplinary training at the undergraduate level.*

Coordinators expressed that necessary cultural change is dependent, at least in part, on helping UCLA faculty at large expand their perspectives on how their own scholarly interests and activities intersect with those of colleagues from different disciplinary backgrounds. As one coordinator remarked:

> *Let's face it. Most of our colleagues…if you told them, "Let's set up an interdisciplinary class"…not all of them…but most of them...wouldn't have a clue how to go about it or even what interdisciplinary course they could generate.*

Toward facilitating cultural change, coordinators also emphasized the importance of "sustained support" from the vice provost's office that is also reinforced more assertively by deans:

> *The question is getting departments to play ball and getting departments to realize, for example, that they are not controllers of their budgets. The deans are. It should be made clear to departments by the deans that [contributing to the cluster program] is part of their duty. This is part of the payback for whatever they're getting. Departments have to allow this to happen.*

To be sure, and as was well acknowledged by focus group participants, cultural change is a complex and "never quick" process that, at least on this front at UCLA, is far from complete. Nevertheless, the cluster program is thriving. Its continuing successes in socializing students to academic life and in providing instructional team members with intellectually stimulating teaching and learning opportunities prompted coordinators to share their perspectives on possibilities for expansion.

Cluster Program Expansion

From the clusters' inception, UCLA's goal was to mount and support a program capable of providing up to 40% of entering freshmen with the opportunity to enroll in a cluster. That goal has been surpassed, with the cluster program currently serving 52% of the freshman class. This proportion reflects slightly more than double the proportion of freshmen (25%) served just five years ago. Should the cluster program continue to grow? Making clear his personal perspective on the matter of expanding cluster availability, one coordinator commented:

> *If we want to expand [the cluster program], how are we going to find the people to do it? How are we going to establish a culture here where people get to know people in other fields so we can at least put together these teams? It's a daunting challenge. That's one of the areas though that I just refuse to say we can't do any more. We have to just keep pushing.*

Others concurred, endorsing the view that:

> *Even if we don't want all students enrolled in cluster courses, there should be a larger repertoire than there is. Not all of them have to be offered in the same year, but it would be good to have more in the stable.*

Members of the broader coordinating team placed particular emphasis on "establishing at least one more science cluster" which, given resource-related considerations, tend to be "the most difficult to launch and maintain." To facilitate science cluster administration, "employment of an additional academic administrator" was also viewed as critical. Other expansion interests related to ensuring broader enrollment access across freshman orientation groups. As one coordinator commented:

> *[Those who get in the clusters] are just the ones who are lucky enough to get in. There are probably very good people who could do great work in the clusters who can't get in.*

Another colleague continued:

> *We had a lot of very sad people at the beginning of this quarter because they wanted to do this and couldn't. There was just no space for them.*

Coordinators explained further that while cluster enrollment is indeed "self-selective to at least some extent," there is seemingly greater opportunity to enroll for incoming freshmen who participate in one of the early new student orientations. "The message is to sign up for a cluster once your [enrollment] pass comes along." Consequently, despite the fact that "some spots are held open" for students with later

enrollment passes, there was a shared sentiment that if early orientation session students act on the encouragement they receive to enroll, most cluster courses will be nearly filled very early on, leaving comparatively little opportunity for others who may also want to enroll.

Acknowledging that "in some ways it's a separate expansion issue," some coordinators felt it would be "wonderful" to offer cluster experiences for third-year transfer students. One of these proponents explained the rationale:

> *So many students we encounter in their third or fourth year are really struggling. The clusters are a good way to train people about what UCLA is like…what the standards are…what the expectations are. Yet you have this huge contingency [of transfer students] who can't even avail themselves of this opportunity which could be of great value to them.*

Finally, cluster coordinators acknowledged that "clusters aren't for everyone," and there was widespread agreement that any efforts to expand the program must include safeguards to ensure the continued high quality of cluster teaching and learning. As the program has stretched to accommodate more students in the midst of ongoing fiscal crisis, enrollment in fall and winter lecture courses has grown from 180 to 240 students, creating an inherently "different feel" within those courses. Toward helping all entering freshmen make proactive and well-informed decisions about their educational options, coordinators also underscored the importance of communicating "early," "clearly," and "consistently" to newly admitted freshmen the longer-term benefits of cluster participation with respect to preparing them for life at UCLA and beyond.

Conclusion

Throughout conversations with coordinators, there was a palpable sense of pride associated with being part of the cluster program. There was also a clearly expressed sentiment that cluster teaching, although challenging in many respects, is highly enjoyable. As one faculty member offered, "teaching in the clusters is the most fun thing I do." Overall, focus group participants endorsed the cluster program as providing a "great" opportunity for students to learn about topics that are "central to a college education" and that "people should know about." Cluster teaching also offers a "unique combination of opportunities" that engage faculty intellectually and challenge them professionally. As such, coordinators welcomed what they described as "unfortunately, too rare" an opportunity to talk "across clusters" about their experiences, insights, and shared interests.

SECTION FIVE

KEY ACHIEVEMENTS AND ONGOING CHALLENGES

Section Five summarizes the key achievements of the Freshman Cluster Program and discusses the ongoing challenges facing the program.

KEY ACHIEVEMENTS

The preceding sections noted the objectives that were established for the administrators, faculty, graduate student instructors, and freshman students who participate in the Freshman Cluster Program. The following summarizes the ways in which these different groups have achieved these goals over the last eight years.

Administration

The cluster program administrative team is charged with supporting a collection of yearlong courses with mixed instructional cohorts and a highly ambitious agenda of pedagogical aims. Specifically, this support function includes working with faculty and the Academic Senate to develop new cluster courses sufficient to allow nine to ten clusters to be offered each year; administering a program capable of providing 40% of the incoming class with the opportunity to enroll in a cluster; and engaging faculty and graduate student instructors across campus in cluster instruction. Since the 2003 cluster review, the program's administrators have:

- Developed, despite severe budget cuts, three new cluster courses—Sex: From Biology to Gendered Society; Los Angeles: The Cluster; and Neverending Stories: Multidisciplinary Perspectives on Myth—and offered between nine and ten clusters each academic year.

- Insured that 40% of all university first year students and 47% of all College freshmen have had the opportunity to enroll in a cluster course. Of the 13,967 UCLA incoming students who signed up for a cluster, over 80% of these students (11,291) completed the entire yearlong three-course sequence.

- Engaged 67 of UCLA's most distinguished faculty members and 277 of the university's most qualified graduate students in cluster course development and instruction. These instructors were drawn from all four of the College divisions and eight of the eleven professional schools (Art and Architecture, Dentistry, Engineering and Applied Sciences, Law, Medicine, Public Health, Public Policy & Social Research, and Theater, Film, and Television).

Faculty

Over the eight-year span treated in this report, the Freshman Cluster Program has sustained the support of 67 ladder faculty representing a significant cross-section of UCLA's academic units. Nearly 80% of these faculty members have taught in their clusters for multiple years, serving as instructors for fall/winter lectures and spring seminars.

The charge of these faculty members is to design and deliver cohesive, integrated courses that demonstrate to freshmen how different disciplines approach a shared subject matter. To achieve this end, they must not only develop interdisciplinary assignments and class activities aimed at improving student academic skills, but also engage in a collaborative teaching process where they become learners as well as teachers. As demonstrated in Section Four of this report, faculty:

- Find cluster teaching to be both demanding and rewarding. They learn from their colleagues, improve their teaching, broaden their thinking about the subject matter of their clusters, and often consider new approaches to their scholarship.

- Develop something akin to a "family dynamic" with fellow cluster faculty members and graduate student instructors in their efforts to create lectures and assignments that promote critical thinking, rhetorical effectiveness in writing and discussion, problem solving, and information literacy.

- Take seriously the charge to create a community of learners through a variety of academic and social activities planned throughout the year. As such, they organize social events, field trips, guest lectures, and other experiences that invite interaction among teaching team members and students beyond the lecture hall.

Graduate Student Instructors

Over the last eight years, the cluster program has employed an average of 51 graduate student instructors per year. Adjusting for those who taught more than once, a total of 277 graduate students participated in clusters during the period covered by this report, and 34% of them were involved in their cluster courses for at least two years. As Section Three demonstrates, these GSIs hail from 39 different departments, 23 of which are in the College and 16 in the professional schools.

These graduate student instructors work closely with the faculty in their clusters as teaching apprentices and provide an important link between freshmen and the instructional teams. In this capacity, they play a major role in shaping the courses and their assignments. Cluster GSIs also lead the clusters' weekly discussion and/or laboratory sections during the fall and winter quarters, and, in the spring, they teach a seminar of their own design in which they work intensively with students to develop their writing, critical thinking, quantitative reasoning, and logical argumentation skills. In Section Three of this report, GSIs reported the following:

- They grew intellectually while helping freshmen understand connections between the disciplinary perspectives of cluster faculty.

- Their pedagogical repertoires expanded as they observed the diverse interdisciplinary teaching approaches of their faculty and graduate student colleagues.

- Engaging students in discussion sections/labs during the fall and winter quarters prepared them to teach their own classes during the spring quarter.

- The spring seminar—63 % of which are taught by GSIs—was their first opportunity to design and teach a course of their own from start to finish. For most, this experience was the highlight of their cluster year and was also "by far" their "best professional development experience."

- They enjoyed the close camaraderie of working not only with cluster faculty from different disciplines, but also with peers and with freshman students, many of whom they worked with throughout the year.

Freshmen

Clusters were initiated to assist UCLA's incoming freshmen with their transition from high school to college. As such, these courses aim to provide their students with a cornerstone experience that will help them consider complex issues from diverse disciplinary perspectives; strengthen their critical thinking, communication, and problem solving skills; and encourage them to think of themselves and their instructors as members of a common intellectual community that encompasses both in- and out-of-class experiences.

As previously reported, during the period covered by this report, 40% of all incoming freshmen and 47% (in some years, over 50%) of all College first year students have enrolled in a freshman cluster course. On average, during the last eight years, over 80% of these students completed the entire yearlong three course cluster sequence. With the exception of a higher preponderance of Honors students, the gender and racial/ethnic backgrounds of these cluster freshmen has been consistent with those of their non-cluster peers. Section Two of this report, which documented the experience of cluster freshmen over the last eight years, noted the following:

- The overwhelming majority of former freshman cluster students believe that the interdisciplinary approach and team-taught lectures of their courses were important. These course elements helped them to "see a topic from alternate perspectives, aided their ability to synthesize knowledge from disparate fields, and increased their understanding of the similarities and differences between disciplines."

- More than three-quarters of former cluster students found their clusters challenging and intellectually stimulating. They also reported that these classes had pronounced effects on their critical thinking skills, capacity to present ideas effectively, and abilities to write clearly and work collaboratively with other students. These students also noted that their involvement in a cluster improved their information literacy, knowledge of contemporary affairs, and time management skills.

- Students valued the sense of community they felt in the clusters, both with one another and with their instructors. Substantial majorities agreed that their yearlong experience in these courses improved their academic and social self-confidence, made UCLA seem a less intimidating place, and provided the framework for lasting friendships with their peers.

- The spring seminar experience remains the highlight of the cluster year for most former cluster students. They report that these courses provided them with an academic and social space that allowed them to explore course material in greater depth, as well as to relate it back to what they had learned over the two previous quarters.

ONGOING CHALLENGES

Although freshman clusters remain a vital part of the undergraduate experience at UCLA, valued by undergraduates, faculty, graduate students, and staff, the program faces a number of issues that must be

addressed if it is to continue to thrive. These include: budget pressures related to the state's ongoing fiscal crisis, the need to keep faculty members engaged in the program, student attrition, and program expansion. This section concludes with a discussion of these challenges.

Budgetary Pressures

Declining state support for the University of California and the need to levy permanent budget cuts across UCLA units will continue to challenge the financial health of the UCLA Freshman Cluster Program. To date, mandated budget reductions have been sustained largely by reducing the buy-out rate for ladder faculty who participate in the program. No further reductions in this area are possible and many have argued that the program should restore its original buyout rate. Currently, salary increases for GSIs, lecturers, academic administrators, and staff must be covered by the existing budget; the same is true for benefits and retirement contributions for cluster employees. As these costs escalate, funds to develop and mount cluster courses will continue to decrease.

The program's permanent budget is slightly more than $1.9 million dollars. For 2011-12, the Provost provided temporary money (called Undergraduate Academic Incentive Funds) of $290,283 to hire additional Graduate Student Instructors to accommodate 280 more freshmen. As a result, the program will accommodate about 45% of the College's largest ever entering class, which increased by 34% from ~3500 freshmen in fall 2010 to ~4700 (expected) for fall 2011.

Given a recent expectation that the College freshmen class will stabilize between 4500 and 4800 freshmen, in the near future, the program will need to mount ten clusters annually to serve at least 45% of the entering class. Given this, and the expected increased costs for GSI and staff salaries—as well as increased costs for staff benefits and retirement contributions—the Dean/Vice Provost is requesting the cluster budget be increased permanently from $1.9 to $2.4 million over the next few years. This $500,000 increase will make it possible to enroll about 45% of the incoming freshmen by mounting ten clusters with an average of 220 students per cluster.

Engaging Faculty

Over the course of the last eight years, the Freshman Cluster Program has enjoyed the support of a faculty constituency drawn from a wide array of academic units—College departments, interdepartmental programs, centers for interdisciplinary instruction, and professional schools. Most of these faculty members played a role in the original development of their clusters and have taught in them for multiple years. Indeed, even when sabbaticals, departmental duties, or retirement have compelled these individuals to rotate out of the program, they have remained engaged in their cluster courses by teaching spring seminars, recruiting younger faculty to teach in their place, mentoring new cluster graduate students, and assisting in efforts aimed at assessing the program's educational effectiveness.

Given the centrality of faculty in developing, organizing and teaching clusters, maintaining their interest in and engagement with the program is essential. In Section Four, cluster faculty coordinators noted the following challenges confronting those who wish to participate in freshman cluster teaching:

- Clusters go "against the grain" of a department-centered research university culture that provides few incentives for extra-departmental interdisciplinary collaboration.
- General Education curricula are viewed by faculty as "having very little rigor or consistency" and are often relegated to the "lowest departmental priority."

- Cuts in instructional funding make it difficult for departments to release their faculty members to teach in campus-wide educational programs such as the clusters.

- Untenured faculty members are leery of engagement in a program that requires them to teach outside of their departments and sacrifice time needed for research.

The faculty section of this report also offered a number of recommendations aimed at addressing these challenges. Among them were:

- Continuing the efforts of the last two decades to create a culture at UCLA where "general education is valued" and there is a "clear commitment" to promoting interdisciplinary teaching and learning at the undergraduate level.

- Developing and implementing initiatives aimed at educating departments and their faculty about the many benefits of cross-disciplinary teaching and learning.

- Sustaining current levels of support for the Undergraduate Education Division and its Vice Provost.

- Securing an unequivocal statement by the Chancellor and Deans that departments are obligated to support general education at UCLA, and that this support includes, among other things, allowing their faculty to participate in the Freshman Cluster Program.

In the coming years, the cluster administrative team will work with its faculty constituency to implement these recommendations.

Student Attrition

In 2003, the year of the last cluster program review, the annual enrollment in clusters was nearly 1200 freshmen or roughly 30% of UCLA's freshman class. Over the last eight years, an increase in both the number of cluster courses offered annually and their enrollment caps has allowed an average of 1800 first year students, or 40% of the university's incoming class, to enroll in a cluster course. From 2007 to 2010, this number has actually been closer to 2000 students with over 50% of the College's freshman class choosing to enroll in one of the clusters offered during these years.

During the period covered by this report, the overwhelming majority of freshmen (roughly 80%) who enrolled in clusters completed the entire yearlong experience. An average of 19% of cluster students did not complete the full cluster course sequence over the last eight years. This population ranged from a low of 12% in 2003-04 to a high of 26% in 2008-09 and 2009-10. As noted in Section Two, the spike in attrition rates from 2008 through 2010 was likely due to a change in general education requirements that eliminated the necessity to complete a lower division GE seminar, thus reducing the number of course credits cluster students received for completing the cluster year from five to four. An attrition study conducted in 2010 revealed that 42% of freshmen who drop out of their clusters do so because they believe there are "easier" ways to satisfy their GE requirements; 37% cite dissatisfaction with their course; and 22% experienced scheduling conflicts that necessitated their leaving the program.

In Section Three of this report, graduate student instructors who work closely with cluster freshmen also offered the following observations as to why some of these first year students do not complete the cluster year:

- A limited university experience that does not allow them to fully appreciate the benefits of finishing the full cluster course sequence.
- Difficulty adjusting to the requirements of college-level work, and the shock of receiving lower grades than expected.
- An expectation that GE courses in general, and clusters in particular, will be "easy."
- Basic scheduling conflicts, especially for science students, where the times of various major pre-requisite courses conflict with the schedule of the cluster lectures.

While an average attrition rate of 19% in a first year general education course that requires a yearlong commitment and substantial work is not altogether shocking, the cluster administrative team would very much like to see a decline in the number of students not completing their clusters. It is likely that the recent decision by the Academic Senate to increase the unit value of clusters and to award an additional GE course credit for completion of the entire cluster year will serve as an incentive for most students to stay the course. Better efforts can also be made to avoid scheduling conflicts between cluster meeting times and those of certain key science pre-req. courses such as Chemistry 14, Math 31A and Math 3A. Furthermore, the program will also work more closely with university summer orientation counselors, College and departmental advisers, and cluster instructional teams to better advise cluster students about both university expectations for student work and the many benefits of completing their cluster year.

Program Expansion

Given current enrollment pressures, it is imperative that the Freshman Cluster Program continue to offer nine to ten clusters a year capable of enrolling at least 40% of the incoming freshman class and 47% to 50% of College first year students. These courses provide the university with a pedagogically sound and economically efficient way of delivering general education and intensive writing instruction to approximately 2000 students annually. Without the cluster option, UCLA and its departments would have to use their scarce instructional resources to expand GE offerings and/or class sizes and also develop some 90 Writing II classes.[3]

There is also agreement between both cluster administrators and faculty coordinators (See *Cluster Program Expansion* in Section Four) that the program needs to continue developing new clusters. In part, this harkens back to the enrollment issue addressed above (i.e., cluster courses periodically go on hiatus and the gaps they leave in the yearly cluster lineup need to be filled to ensure that freshman demand for GE and Writing II classes is met.) Further, while the program enjoys a healthy array of North Campus clusters that introduce students to the ways of knowing that are unique to the social sciences and humanities, there is still a need for more South Campus, or science-centered cluster courses, particularly in such critically important areas as biotechnology and neuroscience.

Given the budgetary challenges, it will be difficult in the coming years for the Freshman Cluster Program to both maintain its current cluster offerings and develop new clusters in the sciences (as well as a

[3]Writing II courses are currently capped at anywhere from 20 to 22 students. Accommodating the roughly 2000 students who satisfy their second writing requirement in clusters would require roughly 91 additional WII offerings (2000 ÷ 22=90.90).

possible offering on the visual arts). This said, the program's administrative team is committed to finding ways to continue offering at least nine clusters a year addressing the widest possible array of topics in humanities, social science, and the natural sciences. Among these are:

- Requesting an increase in the program's permanent budget from $1.9 to $2.4 million over the next few years. This $500,000 increase will make it possible to mount ten clusters yearly enrolling ~45% of the incoming class.
- Seeking additional sources of funding from non-profit educational foundations and private donors.
- Negotiating better cost-sharing partnerships with departments and interdepartmental programs whose faculty and curricula are closely linked to a cluster's subject matter.

Concluding Remarks

Since its 2003 review, the Freshman Cluster Program has, in the face of an ongoing fiscal crisis, met and surpassed the challenges outlined at the end of that self-study report. It has grown from seven clusters that served 1200 freshmen (about 30% of UCLA's freshman class) to an annual lineup of nine to ten clusters that accommodate nearly 2000 students (equivalent to 40% of all university freshmen and 47% to 50% of the College's first year students). The program has also sustained the support of a substantial cohort of ladder faculty who hail from all four of the College's divisions and most of the university's professional schools. Financial support and professional development opportunities for considerable numbers of graduate student instructors have also been provided. Perhaps most importantly, cluster students past and present continue to tell us that their experiences in these unique courses eased their transition from high school to college, familiarized them with the mission of a research university, introduced them to senior faculty and graduate students, taught them the value of interdisciplinarity, markedly strengthened their academic skills, and provided them with a strong and enduring social network of peers. Indeed, the "pilot" program, initiated in 1997-98, has been successful beyond most expectations.

Despite these achievements, the program faces a challenging future. It must continue to find its way through the continuing budgetary turbulence that has plagued California and the University of California for the better part of two decades. Important topics, as well as groundbreaking developments in the sciences, must be addressed in future clusters. And new cohorts of freshmen, graduate students, and faculty will need to be excited by, and engaged in, the cluster enterprise. Despite these challenges, the Freshman Cluster Program will undoubtedly endure, and remain a signature program of UCLA's first year experience for students entering from high school.

APPENDICES

APPENDIX A TO I

APPENDIX A: PROFILE OF THE FRESHMAN CLUSTERS TAUGHT FROM 2003-04 TO 2010-11

Number	Cluster Program	Academic Year 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-Year Total	Distinct Individuals
	All Cluster Programs										
	Freshmen Enrolled as of Fall	1,505	1,482	1,604	1,780	1,846	1,893	1,967	1,890	**13,967**	13,967
	Ladder Faculty	24	26	21	27	28	28	28	27	**209**	67
	Non-Ladder Faculty	27	24	27	30	27	26	24	13	**198**	88
	Graduate Student Instructors	36	45	44	58	61	52	63	60	**419**	277
M1A	The Global Environment: A Multidisciplinary Perspective										
	Freshmen Enrolled as of Fall	174	149	179	177	174	176	153	168	**1,350**	1,350
	Ladder Faculty	3	4	3	4	3	3	3	4	**27**	6
	Non-Ladder Faculty	3	2	4	3	4	5	3	3	**27**	14
	Graduate Student Instructors	4	4	4	4	4	4	5	4	**33**	24
20A	Interracial Dynamics in American Culture, and Society and Literature										
	Freshmen Enrolled as of Fall	200	183	201	205	205	240	240	251	**1,725**	1,725
	Ladder Faculty	4	4	4	4	3	5	3	3	**30**	9
	Non-Ladder Faculty	4	3	2	2	2	2	3	3	**21**	7
	Graduate Student Instructors	5	6	7	7	8	7	9	7	**56**	33
21A	The History of Social (or Modern) Thought										
	Freshmen Enrolled as of Fall	169	162	205	201	195	202	232	233	**1,599**	1,599
	Ladder Faculty	2	3	4	4	4	4	4	4	**29**	10
	Non-Ladder Faculty	4	3	3	3	1	1	1	1	**17**	8
	Graduate Student Instructors	3	4	4	6	8	8	8	8	**49**	35
23A	Inside Performing Arts: Interdisciplinary Explorations of Performance										
	Freshmen Enrolled as of Fall	120	126	132	125	124				**627**	627
	Ladder Faculty	3	3	2	2	2				**12**	4
	Non-Ladder Faculty	1	1	3	4	4				**13**	4
	Graduate Student Instructors	4	4	4	4	4				**20**	14
M24A	Work, Labor, and Social Justice in the U.S.										
	Freshmen Enrolled as of Fall	128	123	168	168	198	210	183		**1,178**	1,178
	Ladder Faculty	2	1	1	2	2	2	2		**12**	4
	Non-Ladder Faculty	4	4	5	7	6	3	3		**32**	12
	Graduate Student Instructors	3	4	4	5	4	7	6		**33**	21
25A	Politics, Society, and Urban Culture in Modern East Asia										
	Freshmen Enrolled as of Fall	119	119				194	177		**609**	609
	Ladder Faculty	4	5				6	4		**19**	9
	Non-Ladder Faculty	1	2				2	2		**7**	4
	Graduate Student Instructors	2	2				5	5		**14**	12
30A	Never-Ending Stories: Multidisciplinary Perspectives on Myth										
	Freshmen Enrolled as of Fall							193	204	**397**	397
	Ladder Faculty							3	2	**5**	3
	Non-Ladder Faculty							2	1	**3**	2
	Graduate Student Instructors							5	5	**10**	7
60A	America in the Sixties: Politics, Society, and Culture, 1954 to 1974										
	Freshmen Enrolled as of Fall	163	210	208	204	199	239	237	241	**1,701**	1,701
	Ladder Faculty	3	3	3	2	3	3	3	3	**23**	5
	Non-Ladder Faculty	1	1	1	2	3	1	1	1	**11**	3
	Graduate Student Instructors	6	10	8	7	7	9	9	10	**66**	47
66A	Los Angeles: The Cluster										
	Freshmen Enrolled as of Fall					202	241		232	**675**	675
	Ladder Faculty					3	3		4	**10**	5
	Non-Ladder Faculty					3	3			**6**	3
	Graduate Student Instructors					7	5		8	**20**	18
70A	Evolution of the Cosmos and Life										
	Freshmen Enrolled as of Fall	162	160	202	201	198	216	195	208	**1,542**	1,542
	Ladder Faculty	2	2	3	3	4	2	2	3	**21**	8
	Non-Ladder Faculty	3	2	1	1	2	3	3	1	**16**	7
	Graduate Student Instructors	3	4	5	7	7	6	7	5	**44**	31
71A	Biotechnology and Society										
	Freshmen Enrolled as of Fall	142	124	140	138					**544**	544
	Ladder Faculty	1	1	1	1					**4**	1
	Non-Ladder Faculty	7	5	5	5					**22**	11
	Graduate Student Instructors	3	4	4	6					**17**	11
72A	Sex from Biology to Gendered Society										
	Freshmen Enrolled as of Fall				196	195		195	203	**789**	789
	Ladder Faculty				5	4		4	4	**17**	5
	Non-Ladder Faculty				2	2		1	1	**6**	2
	Graduate Student Instructors				7	7		9	9	**32**	21
80A	Frontiers in Human Aging: Biomedical, Social, and Policy Implications										
	Freshmen Enrolled as of Fall	128	126	169	165	156	175	162	150	**1,231**	1,231
	Ladder Faculty										
	Non-Ladder Faculty	5	4	3	3	3	6	5	3	**32**	11
	Graduate Student Instructors	3	3	5	5	5	2	3	4	**30**	17

Note: A small portion of instructors are associated with more than one cluster program per year. Therefore, the sum of cluster program counts does not perfectly align with the 'All Cluster Program' total.

APPENDIX B: CLUSTER FACULTY, 1998 TO PRESENT

Joel Aberbach (Political Science)
Joyce Appleby (History)
Arthur Arnold (Physiological Science)
G. Balakrishnan (History)
Richard Baum (Political Science)
Ali Behdad (English)
Michael Bourdaghs (Asian Languages & Cultures)
Karen Brodkin (Anthropology)
Christopher Brown (Geography)
Rogers Brubaker (Sociology)
Frederick Burwick (English)
King Kok Cheung (English/Asian American Studies)
Robert Chi (Asian Languages & Cultures)
K.C. Cole (College Letters and Science/LA Times)
Brian Copenhaver (Philosophy)
Randall Crane (Urban Planning)
Kimberly Crenshaw (School of Law)
JoAnn Damron-Rodrigue (Social Welfare)
Jon Davidson (Earth & Space Sciences)
Jeff Decker (English)
George Dutton (Asian Languages & Cultures)
Frank Dwyer (Theater)
Rita Effros (School of Medicine)
Rebecca Emigh (Sociology)
Nicholas Entrikin (Geography)
Robert Fink (Musicology)
Graham Forrester (Ecology & Evolutionary Biology)
Anthony Friscia (Physiological Science)
Geoffrey Garrett (Political Science)
Sally Gibbons (Philosophy)
Tara Gruenewald (School of Medicine)
Michael Hackett (Theater)
T.C. Harmon (Civil & Environmental Engineering)
Cheryl Harris (School Law)
T. Mark Harrison (Earth & Space Sciences)
Patricia Harter (Theater)
Martie Haselton (Communication Studies)
N. Katherine Hayles (English)
Kelly Lytle Hernande (History)
Henry Hespenheide (Ecology & Evolutionary Biology)
Tobias Higbie (History)
Robert Hill (History/African American Studies)
Gregor Hodgson (Institute of the Environment)
Paul Hsu (School of Public Health)
John Hummel (Psychology)
Lynn Hunt (History/French & Francophone Studies)
Ted Huters (Asian Languages & Cultures)
David Jackson (Earth & Space Sciences)
David Jacobs (Ecology & Evolutionary Biology)
Margaret Jacob (History)
Russell Jacoby (History)
Stephanie Jamison (Asian Languages & Cultures)
Jack Katz (Sociolgy)
Phil Kellman (Psychology)
Douglas Kellner (School of Education)
Christopher Kelty (Society & Genetics)
M. Gregory Kendrick (History)
Namhee Lee (Asian Languages & Cultures)
Rachel Lee (English)
Lene Levy-Storms (School of Public Policy)
Jeffrey Lew (Atmospheric Sciences)
T. R. Longcore (Institute of the Environment)
Matthew Malkin (Physics & Astronomy)
Roberta Malmgren (School of Public Health)
Michael Mann (Sociology)
Kirstie McClure (Political Science)
Kevin McKeegan (Earth & Space Sciences)
Ruth Milkman (Sociology)
Stephen Mojzsis (Earth & Space Sciences)
Mark Moldwin (Earth & Space Sciences)
Mark Morris (Physics & Astronomy)
Geraldine Moyle (Writing Programs)
Joseph Nagy (English)
Thu-huong Nguyen-Vo (Asian Languages & Cultures)
Ichiro Nishimura (School of Dentistry)
Jennifer Cully Nordby (Institute of the Environment)
Vilma Ortiz (Sociology/Chicano Studies)
Sule Ozler (Economics)
Suzanne Paulson (Atmospheric Sciences)
Vincent Pecora (English)
Rafael Perez-Torres (English/Chicano/a Studies)
Ted Porter (History/Statistics)
L. Jean Perry (Molecular, Cell & Developmental Biology)
Jeffrey Prager (Sociology)
A. Jihad Racy (Ethnomusicology)
Janice Reiff (History)
David Rigby (Geography)
Ralph Robinson (Microbiology, Immunology, & Molecular Genetics)
Abigail Saguy (Sociology)
Mark Sawyer (Political Science/African American Studies)
William Schopf (Earth & Space Sciences)
Carol Sorgenfrei (Theater)
Peter Stacey (History)
Brenda Stevenson (History/African American Studies)
Keith Stolzenbach (Civil & Environmental Engineering)
Ivan Szelenyi (Sociology)
Timothy Tangherlini (Scandinavian Languages & Cultures)
Mary Terrall (History)
Emma Lewis Thomas (World Arts & Cultures)
Richard Turco (Atmospheric Sciences)
Dell Upton (Art History)
Abel Valenzuela (Chicano/a Studies)
Blaire Van Valkenburgh (Ecology & Evolutionary Biology)
Richard Vance (Ecology & Evolutionary Biology)
Lynn Vavreck (Political Science)
Mike Vendrasco (Earth & Space Sciences)
Eric Vilain (Human Genetics)
Richard Von Glahn (History)
Robert Watson (English)
Samuel Weber (Comparative Literature)
Robert Winter (Music) γ Norton Wise (History)
Robert Wohl (History)
Kent Wong (Institute for Industrial Relations)
Richard Yarborough (English/African American Studies)
Henry Yu (History/Asian American Studies)
Dahlia Zaidel (Psychology)
Jonathan Zasloff (Law)
Min Zhou (Sociology/Asian American Studies)

APPENDIX C: FACULTY COURSE RELEASES AND STIPENDS BY UNIT

CAMPUS UNITS	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-yr Total
Humanities									
Art History	-	-	-	-	-	-	-	*$9,000*	*$9,000*
Asian Languages & Culture	-	-	-	-	-	*$48,000*	*$30,000*	-	*$78,000*
English	*$60,684*	*$71,639*	*$53,754*	*$24,292*	*$18,734*	-	*$19,000*	*$29,000*	*$277,103*
Indo-European Studies	-	-	-	-	-	-	*$14,000*	*$10,000*	*$24,000*
Musicology	-	-	-	*$18,292*	*$9,367*	*$8,000*	*$10,000*	*$10,000*	*$55,659*
Philosophy	-	-	-	*$9,146*	-	-	-	-	*$9,146*
Scandinavian Section	-	-	-	-	-	-	*$14,000*	-	*$14,000*
Writing Programs	*$62,370*	*$31,125*	*$31,125*	*$38,161*	*$42,396*	*$42,632*	*$47,394*	-	*$295,203*
Total	**$123,054**	**$102,764**	**$84,879**	**$89,891**	**$70,497**	**$98,632**	**$134,394**	**$58,000**	**$762,111**
Life Sciences									
Ecology & Evolutionary Biology	*$29,279*	*$20,546*	*$17,918*	*$27,438*	*$37,468*	*$8,000*	*$5,000*	*$19,000*	*$164,650*
Integrative Biology & Physiology	-	-	-	-	*$41,026*	-	*$10,000*	*$5,000*	*$56,026*
Microbiology, Immunology, Molecular Genetics	*$8,582*	*$8,582*	*$11,458*	*$29,854*	-	-	-	-	*$58,476*
Molecular, Cell & Developmental Biology	*$15,234*	*$15,234*	*$11,662*	*$9,359*	-	-	-	-	*$51,489*
Psychology	-	-	-	-	*$9,367*	-	*$8,000*	-	*$17,367*
Society and Genetics	-	-	-	-	-	-	-	*$ 5,000*	*$5,000*
Total	**$53,095**	**$44,362**	**$41,038**	**$66,651**	**$87,861**	**$8,000**	**$23,000**	**$29,000**	**$348,007**
Physical Sciences									
Earth & Space Sciences	$30,195	$51,386	$21,918	$27,438	$18,734	$24,907	$0	$15,000	$189,578
Institute of the Environment & Sustainability	$0	$0	$26,877	$27,438	$28,101	$12,000	$25,000	$25,000	$144,416
Physics & Astronomy	$30,195	$20,546	$35,836	$24,357	$28,101	$8,000	$10,000	$8,000	$165,035
Total	**$60,390**	**$71,932**	**$84,631**	**$79,233**	**$74,936**	**$44,907**	**$35,000**	**$48,000**	**$499,029**
Social Sciences									
Anthropology	$0	$0	$0	$9,146	$0	$0	$0	$0	$9,146
Asian American	$20,546	$20,546	$8,789	$0	$0	$12,000	$10,000	$0	$71,882
Cesar E. Chavez Dept. of Chicana & Chicano	$20,546	$20,546	$0	$0	$18,734	$0	$0	$0	$59,827
Communication Studies	$0	$0	$0	$22,292	$9,367	$0	$8,000	$16,000	$55,659
History	$66,639	$66,639	$112,549	$86,168	$136,138	$56,000	$60,000	$50,000	$634,133
Institute-Industrial Relations	$30,820	$20,546	$17,918	$36,584	$28,101	$24,000	$15,000	$15,000	$187,969
Political Science	$20,546	$30,820	$17,918	$31,438	$37,468	$32,000	$20,000	$20,000	$210,190
Sociology	$76,912	$32,260	$35,836	$77,168	$65,569	$24,000	$31,000	$70,000	$412,746
Total	**$236,010**	**$191,358**	**$193,010**	**$262,796**	**$295,377**	**$148,000**	**$144,000**	**$171,000**	**$1,641,552**
Professional Schools									
Arts and Architecture	$15,411	$16,500	$16,544	$22,544	$34,811	$0	$0	$0	$105,810
Law	$0	$0	$0	$7,000	$25,734	$8,000	$0	$0	$40,734
Medicine/Dentistry	$77,862	$61,640	$80,872	$100,982	$79,932	$8,000	$73,554	$73,554	$556,396
Public Policy & Social Welfare	$30,820	$30,820	$30,820	$34,381	$30,820	$30,820	$30,820	$33,820	$253,120
Theater, Film & Television	$30,820	$20,546	$26,877	$9,146	$0	$0	$0	$0	$87,389
Total	**$154,912**	**$129,506**	**$155,113**	**$174,053**	**$171,297**	**$46,820**	**$104,374**	**$107,374**	**$1,043,448**
Grand Total	**$627,461**	**$539,923**	**$558,671**	**$672,623**	**$699,968**	**$346,359**	**$440,768**	**$413,374**	**$4,299,147**

APPENDIX D: GSIs BY COLLEGE DIVISION OR PROFESSIONAL SCHOOL AFFILIATION

	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	8-Yr. Total
TOTAL GRADUATE STUDENT INSTRUCTORS[2]	**36**	**45**	**44**	**58**	**61**	**52**	**63**	**60**	**419**
L&S HUMANITIES	**7**	**10**	**7**	**8**	**12**	**15**	**19**	**15**	**93**
ENGLISH	3	5	4	2	5	3	7	7	36
ASIAN LANGUAGES & CULTURES	2	3				5	4	3	17
MUSICOLOGY		1	1	2	1	4	2	2	13
PHILOSOPHY	1	1	1	3	2	1			9
DEPT OF COMPARATIVE LITERATURE					2	1	2	1	6
ART HISTORY			1	1	1	1			4
APPLIED LINGUISTICS					1		1	2	4
INDO-EUROPEAN STUDIES							2		2
GERMANIC LANGUAGES							1		1
SLAVIC LANGUAGES & LITERATURES	1								1
L&S LIFE SCIENCES	**1**	**4**	**2**	**4**	**6**	**2**	**5**	**8**	**32**
PSYCHOLOGY			1	3	4	1	3	6	18
ECOLOGY & EVOLUTIONARY BIOLOGY	1	4	1	1		1	2	2	12
MOLECULAR BIOLOGY					1				1
MOLECULAR, CELL & DEVELOPMENTAL BIOLOGY					1				1
L&S PHYSICAL SCIENCES	**3**			**3**	**2**	**2**	**2**	**1**	**13**
PHYSICS & ASTRONOMY	1			2	1	1	2	1	8
EARTH & SPACE SCIENCES	2					1			3
ATMOSPHERIC & OCEANIC SCIENCES				1	1				2
L&S SOCIAL SCIENCES	**17**	**24**	**23**	**29**	**28**	**28**	**32**	**28**	**209**
HISTORY	7	7	12	11	10	11	11	9	78
SOCIOLOGY	3	6	6	11	8	7	7	5	53
POLITICAL SCIENCE	6	7	4	4	3	7	9	8	48
GEOGRAPHY	1	4			2	2	1	3	13
DEPARTMENT OF WOMEN'S STUDIES				3	3		2	3	11
ANTHROPOLOGY			1		2	1	2		6
INTERNATIONAL INSTITUTE								**1**	**1**
ISLAMIC STUDIES								1	1
ARTS & ARCHITECTURE	**1**	**2**	**2**	**2**	**4**	**2**			**13**
MUSIC	1	2	2	2	2	1			10
ETHNOMUSICOLOGY					1	1			2
DEPT OF WORLD ARTS & CULTURES					1				1
EDUCATION & INFO STUDIES			**1**	**1**	**1**				**3**
EDUCATION			1	1	1				3
ENGINEERING & APPLIED SCIENCES					**1**				**1**
CIVIL & ENVIRONMENTAL ENGINEERING					1				1
MEDICINE			**1**	**2**			**2**	**2**	**7**
HUMAN GENETICS				1			2	1	4
BIOLOGICAL CHEMISTRY				1				1	2
NEUROSCIENCE IDP			1						1
PUBLIC AFFAIRS	**4**	**2**	**4**	**6**	**3**			**1**	**20**
SOCIAL WELFARE	2	2	3	5	2			1	15
URBAN PLANNING	2		1	1	1				5
PUBLIC HEALTH		**1**	**2**	**1**	**3**	**3**	**3**	**3**	**16**
PUBLIC HEALTH		1	1		2	1	2	2	9
HEALTH SERVICES					1	1	1	1	4
ENVIRONMENTAL HEALTH SCIENCES				1		1			2
EPIDEMIOLOGY			1						1
THEATER, FILM & TV	**3**	**2**	**2**	**2**	**1**			**1**	**11**
THEATER	3	2	2	2	1			1	**11**

[2]Departmental assignments were derived via majors. A small number of GSIs declared two majors.

The unduplicated, or distinct number of Graduate Student Instructors who have taught in GE CLST courses from 2003-04 to 2010-11 is 277 individuals.

APPENDIX E: FRESHMAN CLUSTER LECTURE EVALUATION FORM

UNIVERSITY OF CALIFORNIA, LOS ANGELES
EVALUATION OF FRESHMAN CLUSTER LECTURE INSTRUCTION

FORM G GE LECTURE

COURSE INFORMATION

Cluster Coordinator

Course

Date

COURSE ID NUMBER

MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the circle completely.
- Erase cleanly any mark you wish to change.
- Make n

USE NO. 2 PENCIL ONLY

CORRECT MARK ● INCORRECT MARKS ⊘ ⊗ ◒ ⊙

Please fill out this survey based c … uring the current academic quarter. Your answers are confidential. The informatio… onses from other participants and reported in the form of summary statistics and … ary and you may skip any questions you would prefer not to answer. If you hav… e of Undergraduate Evaluation and Research at ouer@college.ucla.edu. Thank yc…

GE Cluster LECTURE Evaluation

Part 1. Course Objectives and Format

Please indicate the extent to which you agree with each of these statements. (Mark one in each row.)

	Not Applicable	Disagree	Disagree Somewhat	Agree Somewhat	Agree
1. The purpose of this cluster course was clear to me.	○	○	○	○	○
2. The major themes that underlie this cluster course were clear to me.	○	○	○	○	○
3. Lectures were well-prepared and organized.	○	○	○	○	○
4. Lectures by different faculty were well-connected to one another.	○	○	○	○	○
5. Lecture material was presented at a manageable pace.	○	○	○	○	○
6. Discussion sections/labs were well-prepared and organized.	○	○	○	○	○
7. Discussion sections/labs reinforced material presented during the lectures.	○	○	○	○	○
8. Guest speakers provided information that furthered the overall objectives of the course.	○	○	○	○	○
9. Cluster instructors made effective use of instructional technology.	○	○	○	○	○
10. Extracurricular activities (field trips, film nights, social events) were well-organized.	○	○	○	○	○
11. Extracurricular activities provided me with valuable information and experiences.	○	○	○	○	○
12. Instructors encouraged questions and class discussions during class lectures.	○	○	○	○	○
13. Instructors made students feel welcome in seeking help in or outside of class.	○	○	○	○	○
14. I felt a greater sense of community among the students in this course than in my other courses.	○	○	○	○	○
15. The winter quarter course content builds on material from the fall quarter (answer in winter quarter only).	○	○	○	○	○
16. The required readings were relevant to my learning.	○	○	○	○	○
17. On average, I could complete the weekly required readings and writing assignments within the ten hours of out-of-class time allocated to this course.	○	○	○	○	○
18. Writing assignments seemed relevant to the objectives of the course.	○	○	○	○	○
19. I received adequate feedback on my writing.	○	○	○	○	○
20. Writing assignments helped me understand the content of the course better.	○	○	○	○	○
21. Library and web assignments were clear and related to the course.	○	○	○	○	○
22. Examinations were appropriately related to the course material.	○	○	○	○	○
23. The grading policy was fair.	○	○	○	○	○

Continue on back side.

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Part 2. Skills

Please indicate the extent to which this cluster strengthened your skills or knowledge in the following areas. (Mark one in each row.)	Not Applicable	No Improvement	Somewhat Stronger	Stronger	Much Stronger
24. Writing skills	○	○	○	○	○
25. Analytic skills	○	○	○	○	○
26. Library skills	○	○	○	○	○
27. Research skills	○	○	○	○	○
28. Communication skills	○	○	○	○	○
29. Knowledge of contemporary issues and events	○	○	○	○	○

Part 3. Overall Rating

	Very Low	Low	Average	High	Very High
30. Your overall rating of the instructional team.	○	○	○	○	○
31. Your overall rating of the course.	○	○	○	○	○

Part 4. Open Questions

32. Would you recommend this cluster course to other students? Why or why not?

33. In your opinion, how could this cluster be improved?

APPENDIX F: FRESHMAN CLUSTER SEMINAR EVALUATION FORM

UNIVERSITY OF CALIFORNIA, LOS ANGELES
EVALUATION OF FRESHMAN CLUSTER SEMINAR INSTRUCTION

FORM H GE SEMINAR

COURSE INFORMATION

Seminar Instructor

Course

Date

COURSE ID NUMBER

MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the circle completely.
- Erase cleanly any mark you wish to change.
- Make no stray marks.

CORRECT MARK ● INCORRECT MARKS ⊘ ⊗ ◒ ⊙

Please fill out this survey based on your experiences in this cluster seminar. Your answers to this survey are confidential. The information you provide will be combined with responses from other participants and reported in the form of summary statistics and group totals. Your participation is voluntary and you may skip any questions you would prefer not to answer. If you have any questions about this survey, please contact the Office of Undergraduate Evaluation and Research at ouer@college.ucla.edu. Thank you very much for your participation in this important survey.

Part 1. Seminar Objectives and Format

Please indicate the extent to which you agree with each of these statements *(Mark one in each row).*

	Not Applicable	Disagree	Disagree Somewhat	Agree Somewhat	Agree
1. The purpose of this seminar was clear to me.	○	○	○	○	○
2. The major themes of this seminar were clear to me.	○	○	○	○	○
3. This seminar builds successfully on material from the fall and winter quarters.	○	○	○	○	○
4. Weekly class meetings were well-prepared and organized.	○	○	○	○	○
5. The instructor encouraged questions and open discussion during class meetings.	○	○	○	○	○
6. The discussion furthered my understanding of the material in this seminar.	○	○	○	○	○
7. Student presentations provided information that furthered the overall objectives of the seminar.	○	○	○	○	○
8. The seminar prompted me to think critically and analytically.	○	○	○	○	○
9. The instructor made students feel welcome in seeking help in or outside of class.	○	○	○	○	○
10. The seminar format helped me to get to know other students.	○	○	○	○	○
11. Technological tools used in the seminar were substantively valuable (e.g., films, audio-visual materials, websites).	○	○	○	○	○
12. Extracurricular activities (field trips, film nights, social events) provided me with valuable information and experiences.	○	○	○	○	○
13. Guest speakers provided information that furthered the overall objectives of the seminar.	○	○	○	○	○
14. The required readings were relevant to the objectives of the seminar.	○	○	○	○	○
15. Writing assignments were relevant to the objectives of the seminar.	○	○	○	○	○
16. Presentation assignments were relevant to the objectives of the seminar.	○	○	○	○	○
17. I received adequate feedback on my written assignments.	○	○	○	○	○
18. Library and/or web assignments were clear and related to the seminar.	○	○	○	○	○
19. On average, I could complete the weekly required readings and writing assignments within the twelve hours of out-of-class time allocated to this seminar.	○	○	○	○	○
20. The grading policy was fair.	○	○	○	○	○

Continue on back side.

Part 2. Skills

Please indicate the extent to which this cluster strengthened your skills or knowledge in the following areas. *(Mark one in each row).*

	Not Applicable	No Improvement	Somewhat Stronger	Stronger	Much Stronger
21. Writing skills	○	○	○	○	○
22. Analytic skills	○	○	○	○	○
23. Library skills	○	○	○	○	○
24. Research skills	○	○	○	○	○
25. Communication skills	○	○	○	○	○
26. Knowledge of contemporary issues and events	○	○	○	○	○

Part 3. Overall Rating

	Very Low	Low	Average	High	Very High
27. Your overall rating of the instructor.	○	○	○	○	○
28. Your overall rating of the seminar.	○	○	○	○	○

Part 4. Open Questions

29. a) What did you find most interesting about this seminar?
    b) What did you find most valuable?

30. In what ways did your final paper or project enhance your learning in this seminar?

31. In your opinion, how could this seminar be improved?

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APPENDIX G: GRADUATE STUDENT INSTRUCTOR FOCUS GROUP INTERVIEW PROTOCOL

(1 hour)

Facilitator introduces himself/herself and offers context for the discussion:

As you know, the eight-year review for the Freshman Cluster Program is upcoming, which provides a terrific opportunity to talk with faculty, graduate student instructors, and students who are involved with the program about their experiences and to learn from all of you what's working well and what should be the focal points for future improvement. Today, I'm looking forward to having a conversation with you that builds, in part, on aspects of the cluster program which graduate student instructors have remarked on previously and that also addresses your current perspectives and experiences.

The topical areas we'll use to structure the conversation are: (1) Roles and Responsibilities (2) Perspectives on Interdisciplinary and Team Approaches to Teaching First-Year Courses, and (3) Perspectives on Student Learning, Experience, and Performance. From there, we can focus on other topics or issues that haven't been addressed and that you would like to ensure are addressed in the self study report. Of course, you're also welcome to contact me later with any additional thoughts. Also, please be assured that neither your names nor any other identifying information will be associated with the comments you make today. Our goal is to be able to offer summative GSI impressions as well as to capture the range of insights and experiences you've had, whatever they might be.

Before we begin, does anyone have any questions?

Focus group participants introduce themselves, including how long they've been involved in the cluster program and what role(s) they've had.

Conversation begins:

I. Roles and Responsibilities

Given that Graduate Student Instructors supervise the weekly discussion sections and/or lab sections and invest considerable time in class prep work, grading, student advising, and other responsibilities, you serve as an important link between faculty and students; it's been said that you're the "glue" that often holds these courses together. You also have tremendous responsibility with respect to developing and teaching the spring capstone seminar. So let's begin today by talking about the role you play in Cluster Program and the thoughts you have about your work.

- How would you describe your GSI work within the Cluster Program to someone who is unfamiliar with the program? How does that description compare with any other TA work you've done?

- How do you and your colleagues handle the cluster workload?

- Among your many responsibilities, which do you find the most challenging? Why? What have you found to be the most rewarding aspects of this work? Why?

- Despite the workload issue, the overwhelming majority of cluster GSIs have rated their experiences highly over the years. From your vantage point, why is this kind of challenging teaching attractive?

- How might the program make your jobs easier? Is there anything the program might do to help you better prepare for the spring seminar?

- Does anyone have any other thoughts on this topic to add?

II. Perspectives on Interdisciplinary and Team Approaches to Teaching First-Year Courses

Let's move now to talking about two specific aspects of the Cluster Program: the interdisciplinary focus and the team approach to teaching.

- How has the interdisciplinary, team-taught structure influenced your experience as a GSI?

- How well do you feel the course brings together the multiple disciplines?

- Relative to other courses you may have TA'd or taught, how would you characterize your relationships with cluster faculty?

- How does working with multiple faculty on one course impact you? What works well? What could be improved?

- For those of you who are planning to become faculty yourselves, has this experience impacted the way you're inclined to approach your work? If so, how? If not, why?

- Based on your observations and other experiences, are their any "best practices" you'd like to share? Any recommendations for what "not" to do?

- Does anyone have any other thoughts on this topic to add?

III. Perspectives on Student Learning, Experience, and Performance

Let's move now to talking a bit about the undergraduates who participate in the Freshman Cluster Program and your perspectives on their learning, experience, and performance:

- What are your perspectives on the value of the cluster experience for freshmen?

- What are some of the major priorities in terms of what students are expected to learn?

- Do you feel freshmen are better able to take advantage of the spring seminar format because of their two previous quarters?

- On the whole, how would you characterize students' development over the course of the year?

- In what areas do you observe the most notable positive changes?
- Are there specific aspects of the cluster experience that your believe contribute most substantially to those changes?
- Any areas in which you would expect to see more progress? Do you have ideas for how student learning in those areas may be enhanced?
- Have your observations of student performance affected how you've approached your teaching or other aspects of your work? If so, how?
- Does anyone have any other thoughts to add on the topic of enrolled students?

IV. Other Topics

Okay, just a couple of final questions for you:

- Based on your experiences as a Cluster GSI, what advice do you have for other graduate students who may aspire to serving in this capacity?
- Are there other aspects of the cluster experience we haven't talked about today that you'd like to address or any other recommendations you'd like to make?
- Facilitator offers contact information in case focus group participants have additional thoughts to contribute and thanks participants for attending.

APPENDIX H: CLUSTER GSI QUESTIONS, 2004-05 AND 2005-06

I. How did your participation as a teaching team fellow contribute to your preparation for your role as a future faculty member? (As appropriate, include information related to the preparation workshops, your experiences as a teaching fellow during fall and winter quarters, your experiences teaching your seminar in spring, and any other relevant experiences.)

II. What would you consider as your most important learning experience while you were a teaching fellow?

III. What barriers or challenges did you experience as a teaching fellow?

APPENDIX I: FACULTY COORDINATOR FOCUS GROUP INTERVIEW PROTOCOL

(1 hour)

Facilitator introduces himself/herself and offers context for the discussion:

As you know, the eight-year review for the Freshman Cluster Program is upcoming, which provides a terrific opportunity to talk with faculty, graduate student instructors, and students who are involved with the program
about their experiences and to learn from all of you what's working well and what should be the focal points for future improvement. Today, I'm looking forward to having a conversation with you that builds, in part, on aspects of the cluster program which faculty have remarked on previously and that also addresses your current perspectives and experiences.

The topical areas we'll use to structure the conversation are: (1) Engaging Freshmen in New Ways of Thinking and Learning, (2) Composing a Coherent Cluster Storyline, (3) The Collaborative Process, (4) Thinking about Teaching in New Ways. From there, we can focus on other topics or issues that haven't been addressed and that you would like to ensure are addressed in the self study report. Of course, you're also welcome to contact me later with any additional thoughts. Also, please be assured that neither your names nor any other identifying information will be associated with the comments you make today. Our goal is to be able to offer summative faculty coordinator impressions as well as to capture the range of insights and experiences you've had, whatever they might be.

Before we begin, does anyone have any questions?

Focus group participants introduce themselves, including how long they've been involved in the cluster program and what role(s) they've had.

Conversation begins:

I. Engaging Freshmen in New Ways of Thinking and Learning

As I understand it, the cluster program was initiated to provide freshmen with a cornerstone experience that provides them with the skills and general knowledge they will need to succeed at UCLA and beyond. Among the priorities are helping freshmen grasp complex interdisciplinary material, understand the contributions of distinct disciplinary perspectives to a particular subject matter, and strengthen academic skills such as critical thinking, problem solving, and the like. Another key component, of course, is creating learning communities. So I'm interested to begin our conversation today by hearing your experiences with engaging freshmen in new ways of thinking and learning as well as your perspectives on their development over the course of the year.

- What is it like to teach today's freshmen?
- How do freshmen typically grapple with the interdisciplinary approach to various subject matters?

- How have you approached building a learning community for students in your clusters? What has worked and/or not worked?

- On the whole, how would you characterize students' development over the course of the year?

- In what areas do you observe the most notable changes?

- Are there specific aspects of the cluster experience that your believe contribute most substantially to those changes?

- Any areas in which you would expect to see more progress? Do you have ideas for how student learning in those areas may be enhanced?

- Any closing perspectives on the value of the cluster experience for freshmen?

II. Composing a Coherent Cluster Storyline

Let's turn now to focusing on your own process of designing these clusters. At the time of the last freshman cluster program review in 2003, cluster faculty concurred that one of the most daunting challenges they faced in mounting these courses was coming up with a way to organize and integrate their different interests and disciplinary perspectives into a coherent storyline that made sense to the faculty, GSI, and student participants in the course. When we talked with faculty then, we heard a variety of approaches that they had taken in attempting to compose a coherent and engaging storyline. I'd like to hear about your experiences:

- Have you found composing a coherent cluster storyline challenging?

- How have you addressed this issue in your different courses? What has worked and/or not worked?

- What could the program do to better assist faculty in meeting this challenge?

- Does anyone have any other thoughts on this topic to add?

III. The Collaborative Process

Another challenge faculty raised in the last self-review discussions was the challenge of collaborating on the organization and teaching of the course. I imagine too that with new faculty and GSIs rotating into your courses, this could contribute to the potential challenge.

- Has this been an issue for you? If so, how have you addressed it?

- What are your perspectives on the roles/contributions of GSIs?

- How might the program better facilitate collaborative teaching among cluster instructional teams?

- Does anyone have any other thoughts on this topic to add?

IV. Thinking about Teaching in New Ways

When we talked previously with faculty back in 2003, there was unanimous agreement that clusters are hard work and require faculty to think about teaching in new and challenging ways. I'm curious to hear your perspectives on the associated difficulties and rewards you've experienced:

- Why do you think many faculty keep returning to cluster teaching on a regular basis? What are the most rewarding aspects of participating in the program?
- Have you experienced difficulties in recruiting new faculty to cluster teaching? If so, why?
- Are there things the program could do to help facilitate faculty engagement and experience?
- Does anyone have any other thoughts on this topic to add?

V. **Other Topics**

Are there other aspects of the cluster experience we haven't talked about today that you'd like to address?

Facilitator offers contact information in case focus group participants have additional thoughts to contribute and thanks participants for attending.