Creating New Communities of Learning at UCLA:

An Institutional Transformation in Progress, 1993-2002

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Foreword

This report is one in a series produced as part of a national project sponsored by the W.K. Kellogg Foundation entitled The Kellogg Forum on Higher Education Transformation (KFHET). The forum was a collaborative effort that brought together academic leaders, researchers, and higher education institutions in an attempt to enhance our understanding of institutional change and transformation. The Higher Education Research Institute (HERI) at UCLA was one of the partners in this collaborative effort and, as such, conducted research, carried out site visits to institutions that had undertaken various transformation projects, offered a year-long graduate seminar on institutional transformation, and organized a national research symposium.

Early on in our work with the KFHET project we recognized that a very interesting and challenging attempt at institutional transformation was taking place in our own backyard. Given the pioneering nature of this effort—to transform the general education program at a major public research university—we invited the authors to prepare this report to be included as part of our series of KFHET monographs on institutional transformation.

Faculty and staff at HERI became interested in this UCLA transformation project even before the advent of KFHET, and during the past four years we have come to see ourselves as partners and strong supporters of the effort. During the early planning stages, doctoral students from our Division of Higher Education and Organizational Change, under the guidance of Professor Helen S. Astin, conducted focus groups with UCLA undergraduates to record their experiences with the traditional general education program and to determine how freshmen might respond to the proposed changes. Subsequently, doctoral students enrolled in our

first general education clusters. In addition, Professor Astin was a participant in the Workgroup on General Education Assessment which conducted the evaluation of the first clusters.

Vice Provost Judith Smith was a guest presenter in our transformation seminar and provided us with many insights about the transformation process from the perspective of someone "in the trenches." Arianne Walker, who is currently working with the general education cluster evaluation project as a postdoctoral fellow, was a member of our original transformation seminar and later conducted her dissertation research on the impact of cluster participation. Finally, both Vice Provost Smith and Provost Brian Copenhaver were participants in the KFHET seminar on transformation research that we hosted here at UCLA during the summer of 2000.

We welcome this important contribution to our HERI series on transformation and hope that it encourages other large research institutions to undertake similar efforts.

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This paper is a collaborative effort by members of the general education administrative and assessment teams within UCLA's College of Letters and Science to reflect on a decade-long initiative to change the College's general education curriculum.^{1,2} Specifically, it is a response to an invitation by the directors of UCLA's Higher Education Research Institute, Alexander W. Astin and Helen S. Astin, to document and analyze the process of institutional change that accompanied this project of curricular reform. Given the fact that this endeavor is far from complete, what follows should be viewed as a study in-progress that explores the many factors which have informed one research university's attempts to change its lower division curriculum.

The authors have organized this study around a conceptual framework advanced by Alexander Astin (Astin & Associates, 2001). As such, it views institutional transformation as the development of new understandings of what needs to be changed and why, and the implementation of strategies for how such change can occur. A fourth element of transformation assesses what's happening throughout the change process.

¹ Leading these teams for UCLA's College is Judith L. Smith, Vice Provost for Undergraduate Education. She is joined by two members of an administrative team, Lucy Blackmar, Director of Undergraduate Education Initiatives, and M. Gregory Kendrick, General Education Cluster Instructional Coordinator, as well as by two members of the assessment team, Marc Levis, Director of Undergraduate Evaluation and Research, and Arianne Abell Walker, Postdoctoral Fellow.

² The authors wish to acknowledge the substantial contributions of the following individuals to our efforts to improve general education in the College: Brian P. Copenhaver, Provost, College of Letters and Science; Edward Berenson, former Chair of General Education; Mark Morris, Chair of the General Education Workgroup, Phase II; Paula Lutomirski, Associate Vice Chancellor, and Maryann Gray, former Special Assistant to the Executive Vice Chancellor and Chair of the Workgroup on General Education Assessment. In addition, we are grateful to the William and Flora Hewlett Foundation for their grant support of our efforts to improve general education at UCLA.

Accordingly, the discussion that follows begins with an historical narrative that examines the values and the vision underlying UCLA's effort to conceptualize a new approach to general education. This chronological account also includes an implementation section that explains the various plans and strategies employed by the College to institute desired changes in the university's general education curriculum. Finally, a section on assessment asks how well the effort has gone and suggests a method for investigating in greater depth what has actually changed at UCLA and whether these changes are having their intended effect.

This monograph concludes with a brief reflection on whether or not this process of general education reform points to a substantive institutional transformation at UCLA. In answering this question, we use a number of critical indicators suggested by Astin and his associates (2001). These include such considerations as the degree of systemic transformation experienced by UCLA as a result of its efforts to reform its general education curriculum; the resistance generated by that reform effort; changes to the original plan for curricular change; and the time taken to effect the changes in general education that actually occurred between 1993–2002.

Setting the Stage for General Education Transformation at UCLA

UCLA is a public research university in an urban setting enrolling over 25,000 undergraduates and 7,300 graduate students. The University received over 41,000 applications in the past year, more than any other college or university in the nation. In 2000–01, the admitted students had an average grade point of 4.05 (weighted for honors and advanced placement) and an average combined SAT I score of 1277. The College is the largest academic unit of UCLA enrolling 84% of the undergraduate students, with the remaining undergraduates distributed among the School of Engineering and Applied Science, the School of the Arts and Architecture, and the School of Theater, Film, and Television.

The decade chronicled in this narrative, from 1993 to 2002, coincides with a heightened national consciousness toward improving the quality of undergraduate education in the nation's large public research universities.3 In California, voters and their representatives in the late 1980s and early 1990s increasingly demanded greater accountability in higher education and a renewed focus on the mission of public universities to prepare undergraduates for their future roles as citizens, consumers, and workers in a multicultural democracy. University of California (UC) administrators and faculty were sensitive to these concerns, but attempts to launch initiatives aimed at improving undergraduate teaching and learning at UC campuses were stymied by the onset of a recession in the early 1990s that resulted in severe cutbacks throughout the UC system. As the state emerged from this recession, new resources again became available to the UC system for efforts aimed at reforming their undergraduate curricula. Collectively, these national, state, and institutional pressures created a climate that was favorable to general education reform at UCLA.

³ The decade of the 1980s was characterized by extensive debate on issues of undergraduate education in public research universities and produced a plethora of national reports as well as reports from committees within the UC System and locally at UCLA that called for reform in undergraduate education. Among these are the following: Involvement in Learning: Realizing the Potential of American Higher Education, presented to the Secretary of Education and the Director of the National Institute of Education, by the study group on the Conditions of Excellence in American Higher Education (1984); Integrity in the College Curriculum: A Report to the Academic Community. Washington D.C.: Association of American Colleges (1985); and Lower Division Education in the University of California, a report from the Task Force on Lower Division Education, University of California (1986).

Conceptualization Period: 1993 to 1996

Taking the Pulse of General Education at UCLA

Institutional change is often triggered by the confluence of a widespread perception that some aspect of an institution's life is in need of reform and with the hiring of an administrator who shares that conviction and tries to do something about it. In the case of UCLA in the early 1990s, many faculty members believed that the general education portion of the undergraduate curriculum was not providing students with a common body of skills, knowledge, and values that extended beyond their premajor and major courses. This perception was shared by the new Provost of the College, Brian Copenhaver, who was appointed in 1993 and charged, for the first time in UCLA history, with ensuring the quality of lower and upper division education for all of the University's undergraduate students. Towards this end, Provost Copenhaver met with the Concilium on

⁴ Prior to the events recounted in this paper, two other faculty committees examined general education at UCLA in the early 1990s. In the summer of 1992, Edward Alpers (Dean of Honors and Undergraduate Programs in the College) prepared a general review of general education for the Undergraduate Education Concilium in which he reviewed the history of the program and advanced ten recommendations for change. Vice Chancellor Richard Sisson then appointed a General Education Evaluation Committee, chained by Dean Alpers, which, in a report dated November 12, 1992, confirmed several of these recommendations. Though Dean Alpers proposed a set of specific steps aimed at implementing these recommendations in 1993, the Concilium declined to take action on them. A separate task force on general education was appointed in the summer of 1993 by Executive Vice Chancellor Andrea L. Rich to recommend ways of strengthening the relationship between general education and the professional schools. Chaired by Professor Robert Edgerton (Psychiatry), this group submitted a report on April 12, 1994.

⁵ Brian Copenhaver served as a Dean or Provost at a number of institutions prior to UCLA and played an instrumental role in reforming general education at all of them. His previous academic and administrative appointments were at Western Washington University (1971–1981), Oakland University (1981–1988), and the University of California, Riverside (1988–1993).

Undergraduate Education during the spring of 1994 to identify a number of topics critical to UCLA's efforts to improve undergraduate education.⁶ It was agreed that the Concilium should constitute five faculty workgroups charged with the task of making broad recommendations for improvement in the following areas: general education; the evaluation of teaching and learning; education in the sciences, math, and engineering; technology and teaching; and scale and delivery of instruction.

The workgroup dealing with general education concluded in April 1994 that a fresh look at UCLA's general education programs was warranted. Consequently, Provost Copenhaver, in consultation with Academic Senate Chair Carole Goldberg (Professor of Law), appointed a workgroup to undertake a first phase review of UCLA's general education program and to suggest improvements. The charge of the workgroup was to review the state of general education at UCLA and other research universities in the United States, and to explore broad approaches to improving UCLA's general education curriculum.

Workgroup Phase I (1994 -1995)

The workgroup membership included faculty from the College and the professional schools, as well as four undergraduate students from the College. Its first task was to undertake an extensive examination of the history, nature, and quality of general education at UCLA and throughout the country. During this fact-finding phase, the workgroup discussed the state of general education at UCLA with the University's Executive Vice

⁶ Chancellor Charles E. Young established the Concilium on Undergraduate Education in 1990 as a "single forum where faculty, students, and administrators representing the broad range of interests related to undergraduate education convene to discuss, coordinate, recommend and pursue courses of action to enhance the education we offer our undergraduate students" (Charge Letter of Charles E. Young to Concilium, September 15, 1992). Provost Copenhaver disbanded the Concilium in September 1995 following the establishment of the Undergraduate Council by the Academic Senate.

Chancellor, the deans and most department chairs in the College, as well as the deans and associate deans of the three professional schools with lower division students. Participation in the UCLA Forum on General Education, which was funded by the William and Flora Hewlett Foundation, also allowed members of the workgroup to engage in substantive discussions about the meaning and practice of general education with a number of notable educators.⁷

Following this extensive analysis of the history and practice of general education at UCLA and elsewhere, the workgroup concluded at the end of 1995 that the University's general education program was a large, overly complex set of departmental offerings that lacked coherence and a strong intellectual rationale. The group also noted that UCLA had failed to provide a systematic basis for ensuring that courses would complement each other and prepare their students for the intellectual challenges of a research university. In addition to identifying shortcomings in UCLA's overall general education program, the workgroup's phase I report recommended that general education requirements be simpler, fewer, more coherent, clearer in purpose to students and faculty, and designed specifically to achieve the aims of a common liberal education.

Workgroup Phase II (1995 - 1996)

Upon receipt of the first report, Provost Copenhaver enlarged the faculty-student workgroup and charged it to undertake a wide and thorough consultation with students, faculty, chairs, deans, and others with the aim of recommending a fundamental reform of the general education program at

⁷ The UCLA-Hewlett Forum on General Education was a two-year series of events (1994-1996) that featured lectures on the intellectual aims and consequences of general education by such scholars as Joyce Appleby (UCLA), Alexander W. Astin (UCLA), Leon Lederman (Fermi National Accelerator Laboratory), Richard Light (Harvard University), Elizabeth Neufeld (UCLA), Frank Rhodes (Cornell University), John A. Warden III (Venturist, Inc.), Cornel West (Harvard University), James Q. Wilson (UCLA), and Robert Winter (UCLA).

UCLA. During this second phase of its work, the members of the workgroup came to the conclusion that the University's patchwork of departmental general education offerings should be replaced at least in part by a common requirement for all undergraduates at UCLA. There was also some degree of consensus in the workgroup that this common core should be comprised of a series of three course sequences in each of three broad curricular areas such as the natural sciences, social sciences, and humanities. These sequences would be organized around broad themes of timely importance and would be designed to foster responsible citizenship, factual knowledge of a broad spectrum of subject areas, critical thinking, and strong communication skills. There was also agreement among the members of the workgroup that instruction in these sequences should provide students with a wide range of small class experiences, e.g., intensive discussion sections and first-year seminars.

By the summer of 1996, there was a growing consensus on the part of the workgroup with regard to the general aims and structure of a common general education requirement at UCLA. Two distinct, albeit related, challenges, however, continued to stymie the progress of the group. The first of these was concerned with the actual requirements and courses that would comprise a new sequential, university-wide general education program, and the second was related to the question of how such an ambitious program would be implemented at UCLA.

Initial Implementation and Review Period: 1996 to 1998

Administrative Restructuring and a Proposal for Change

To address the challenges posed by the creation and implementation of a new general education curriculum for UCLA, Provost Copenhaver appointed Professor Judith Smith, a distinguished scientist, teacher, and

former chair of the UCLA Academic Senate, to serve as the College's first Vice Provost for Undergraduate Education in August of 1996. The new Vice Provost was given authority to oversee and administer all educational initiatives aimed at improving undergraduate teaching and learning at UCLA. This charge included the reform of the University's lower division curriculum, which brought Vice Provost Smith into the deliberations of the general education workgroup.

During their initial discussions, both Vice Provost Smith and the members of the workgroup agreed on the need for a formal proposal outlining a plan for general education reform that could be shared with the campus community. To facilitate and oversee the production of this proposal, as well as the implementation of its recommendations, a member of the workgroup, Edward Berenson (Professor of History and Chair of European Studies), was appointed Chair of General Education during the fall of 1996. Following this appointment, Chair Berenson and Vice Provost Smith, with the assistance of Special Assistant Lucy Blackmar, worked throughout the fall of 1996 to complete a first draft of a proposal that could be shared with the College's departments and the professional schools of the University.

This first draft was circulated among the members of the workgroup, the College's deans, and the chairs of many of the College's departments. Feedback from these meetings (covered in Campus Review and Reaction) resulted in a second draft of the proposal that was also reviewed informally by many of the same groups that considered the first one. Out of these discussions, a third draft, which included a proposed budget prepared by Vice Provost Smith, and a letter of endorsement and promise of new funds from UCLA Chancellor Charles E. Young, was unanimously endorsed by the faculty/student workgroup and printed in June 1997 under the modest title, General Education at UCLA: A Proposal for Change.

In the *Proposal for Change*, the workgroup recommended that UCLA undertake a fundamental change of its general education curriculum by making its requirements "simpler, fewer, more coherent, and clearer in purpose than is currently the case" (Berenson et al., 1997). The proposal also called for courses that would strengthen the basic skills of first-year students (e.g., writing and critical thinking), introduce them to the research and ideas of ladder faculty, and expose them to such "best practices" in teaching as inquiry-based learning, seminars, and interdisciplinary study.

The centerpiece of the *Proposal for Change* was the "first-year cluster," a year-long, team-taught, interdisciplinary course that would be open only to entering freshmen. As envisioned, each cluster course would be devoted to a broad topic, such as the "global environment" or "interracial dynamics," and would be organized to demonstrate to freshmen how different disciplines working together address a common problem. During the fall and winter quarters, students would attend lecture courses and small discussion sections/labs taught by faculty and advanced TAs from different disciplines.

During the spring quarter, these same students would enroll in one of a number of small satellite seminars (limited to 20 students each) dealing with topics related to the overall theme of their cluster. In these small learning forums, cluster students would be able to expand the knowledge and skills acquired during their first two quarters by intensively engaging subjects, issues, and questions that were the actual focus of research by UCLA faculty and advanced graduate students. Moreover, these seminars would also provide first-year students with yet another set of opportunities to engage in intensive discussion, debate, research, and writing.

In addition to exposing first-year students to a whole range of best practices, the workgroup also envisioned the clusters as a means of establishing a learning community that would bring together students, TAs, and faculty in a common intellectual enterprise throughout the whole of an academic year. Towards that end, the workgroup recommended situating

the proposed clusters in the residence hall area of campus and training counseling assistants, peer facilitators, and others responsible for student support to work directly with cluster participants. Other recommendations for cluster-centered residence hall events included presentations and debates by journalists, political leaders, artists and UCLA students; visits to museums and other cultural centers; and trips to concerts, plays, and films, as well as social events such as dinners.

Finally, 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, the workgroup recommended that some kind of campus-wide general education "authority" be established. This authority would be comprised of faculty who would be responsible for the monitoring of general education courses at regular intervals. To assist this body in its task, the workgroup recommended the establishment of a systematic means of assessing the new general education curriculum. As envisioned in the proposal, information gathered from such an assessment would provide useful feedback and guidance for the improvement of courses, as well as to inform the ongoing campus discussion and decision-making about general education reform.

Campus Review and Reaction to the "Proposal for Change"

As previously mentioned, faculty reviewed the different iterations of the workgroup's proposal in College departmental meetings and in the Faculty Executive Committees for the professional schools. This review process also included undergraduate student focus groups and conversations with alumni, Academic Senate committee chairs, and national experts on general education. During this period of campus-wide deliberation, it soon became evident that the idea of requiring all first-year University students to enroll in year-long cluster courses was the most contentious of the proposals

put forth by the workgroup. Of particular concern to faculty were a number of economic, pedagogical and logistical issues.

Many of the economic issues grew out of a concern that departments, particularly small humanities departments, would be adversely affected by a first-year curriculum that was largely focused on interdisciplinary cluster courses. In particular, these units were concerned that a cluster-based curriculum would force them to reduce or even eliminate their general education offerings, which would subsequently reduce the departmental teaching workloads that provided the funds to support graduate students with teaching assistant appointments. Additionally, there was considerable angst about using new funds for an unproven program that many considered unrealistic when departments lacked funds to sustain excellence and innovation in their own premajor and major courses of study.

Most of the pedagogical concerns—which were often secondary to the aforementioned fiscal issues—were rooted in skepticism about the idea of teaching interdisciplinary material to incoming freshmen lacking any substantive foundation in a particular discipline. Even among those faculty who endorsed the idea of exposing incoming students to interdisciplinary work, there was a concern that cluster teaching teams might not be able to provide freshmen with coherent, well-integrated courses that clearly demonstrated how different disciplines working together address common problems. There was also concern that interdisciplinary teaching and the reduction of departmentally-based general education courses would reduce the exposure of freshmen to discipline-based instruction and substantially reduce the breadth of general education in the College.

The proposed clusters also raised a host of logistical questions and concerns. Some faculty argued that the teaching teams of the new clusters

would never be able to attract the necessary complements of tenured faculty or experienced graduate students. Others were concerned that these courses would draw away many departments' best faculty members and negatively impact their programs of study. In the College's science divisions, faculty members argued that clusters would occupy too much "curricular space" during the freshman year when their students were required to take a considerable number of pre-major courses. And finally, there were questions raised about first-year student demand exceeding the enrollment capacity in the new cluster courses.

From a Proposed Requirement to an Elective Pilot Program

The seriousness of these concerns might well have doomed the workgroup's first-year cluster proposal to the landfill of well-intentioned university committee reports and recommendations. However, a number of developments ensured that this would not be the case. The first of these was a joint decision by Chair Berenson and Vice Provost Smith during the summer of 1997 to establish a College-based, five-year pilot cluster program that would be optional for students and aimed at gauging the feasibility of this kind of lower division interdisciplinary teaching.

Two considerations figured prominently in the decision to launch an experimental cluster program. The first of these was the fact that a pilot cluster course was already in the process of being developed and organized during the spring quarter (1997) by UCLA's newly organized Institute of the Environment. The Institute needed to develop general education courses to fulfill its mission as a center for interdisciplinary instruction, and the faculty responsible for developing the Institute's lower division courses believed that

a year-long cluster for first-year students perfectly suited their needs. With the support of the College, faculty of the Institute presented this pilot cluster to the Academic Senate at the end of spring 1997 and secured that body's approval to offer it in 1997-98.8

Provost Copenhaver and Vice Provost Smith were also successful at this time in obtaining funding for the purpose of launching a larger five-year cluster pilot program. On June 30, 1997, the last day of his 29-year tenure as Chancellor of UCLA, Charles E. Young formally pledged an annual allocation of new permanent money (up to three million dollars) that would be available at the beginning of the 1999-2000 fiscal year for the specific purpose of supporting the College's new general education program. Vice Provost Smith arranged to borrow against these pledged funds to pay for the inaugural cluster courses during the two intervening years.

One final development that proved critical to the launching of the cluster pilot program was the decision in 1997 by UCLA to choose general education as one of three topics (along with diversity and performance indicators) to test a new method of reaccreditation by the Western Association of Schools and Colleges (WASC). During the WASC review sessions on general education, there were intensive discussions about the proposed pilot cluster program among College administrators, members of the general education workgroup, faculty engaged in cluster development, and Academic Senate leaders. This interaction helped to heighten institutional awareness of and support for the College's plan to develop and offer a number of cluster courses aimed at exploring the strengths and weaknesses of first-year interdisciplinary courses for freshmen students.

⁸ Entitled The Global Environment: A Multidisciplinary Perspective, this year-long cluster course was designed by faculty from Civil Engineering, Geography, Atmospheric Sciences, History, and Biology, with an eye toward introducing freshmen over the course of a year to the ways in which a number of different disciplines address the problem of environmental degradation.

The final report by the WASC team praised UCLA's efforts to improve general education. In particular, they singled out the proposed cluster program as an example of the ways in which the College was moving in directions recommended by the Boyer Commission in its report Reinventing Undergraduate Education: A Blueprint for America's Research Universities:9

It is impressive to see how much UCLA's new model of undergraduate education has anticipated the recommendations of the Boyer Commission Report, *Reinventing Undergraduate Education*. Both that report and the UCLA proposal focus on the importance of a strong freshman foundation of interdisciplinary courses taught by teacher-scholars. Both also emphasized the need for teaching undergraduates critical thinking and writing and the importance of engaging in active learning with strong academic communities (Rawlings, 1998).

In addition to providing important external validation for the College's efforts to launch a pilot cluster program, the WASC report urged the Academic Senate to implement the workgroup's recommendations for a general education governance body and some way of integrating assessment into the reform effort. With these recommendations in hand, Vice Provost Smith was able to convince the Undergraduate Council of the Academic Senate to approve the formation of a General Education Governance Committee on May 8, 1998. During this same period, Vice Provost Smith also established a workgroup on cluster assessment (see Assessment of the Pilot Cluster Program).

⁹ Members of the WASC team who focused on general education at UCLA were Frederick Campbell, Vice Provost and Dean of Undergraduate Education at the University of Washington; Louis Albert, Vice President of the American Association for Higher Education; and Sandra Kanter, Director of the College of Education at the University of Massachusetts, Boston.

The First Years of the Pilot Cluster Program: 1998 to 2002

Four Inaugural Cluster Courses (1998 - 2000)

Following the launching of the Global Environment cluster in the fall of 1997, General Education Chair Ed Berenson solicited proposals from faculty for a series of clusters to be offered on a pilot basis during 1998-99. The faculty response was enthusiastic, and from the twelve proposals submitted, three cluster courses, in addition to the Global Environment cluster, were selected. By the spring of 1998, the Academic Senate had approved a total of four cluster courses, and the official pilot cluster program was inaugurated in 1998-99.

Each of these courses enrolled an average of 120 students during the two initial years of the pilot, spanned three quarters (with a five-unit course each quarter), were interdisciplinary in nature, and were taught by teams of three to four faculty members and an equal number of experienced TAs. The four clusters, their subject matter, and the number of faculty, TAs, and students who participated in them are summarized in the following table.¹⁰

The Four Inaugural Cluster Courses: Data from 1998-1999 and 1999-2000

Cluster	Description	Students	TAs	Faculty
The Global Environment	An introduction to the ways in which different disciplines address problems of environmental degradation.	235	7	7
Interracial Dynamics	A multidisciplinary introduction to the nature and meaning of of race in American society.	251	8	6
The History of Modern Thought	A "great books" course that introduces students to the major works that have shaped western intellectual history over the last 400 years.	309	12	8
Evolution of Cosmos and Life	An introduction to the ways in which the earth, the solar system the universe, and biological organisms have evolved from primitive early states to the complexity they reveal today.	290	6	7
Totals		1085	33	28

¹⁰ For additional information on these courses and other aspects of the pilot cluster program, see the following web site: http://www.college.ucla.echu/ge/

The average annual cost of one of these cluster courses was about \$180,000. Nearly 80% of the costs of mounting one of these courses directly supported TA salaries and reimbursements to departments for faculty teaching in the clusters. The remainder covered administrative expenses, including staff salaries, supplies and expenses, assessment activities, and TA training.

Ξ

The Development of Additional Cluster Courses (1999 - 2002)

Vice Provost Smith planned to develop at least 10 cluster courses during the five-year pilot program. This was to ensure that at least half of the College's entering freshman class would have the opportunity to take a cluster course, as well as to guarantee that when cluster courses were phased out there would be new clusters to take their place.

The development of these cluster sequences has proven to be a challenging task involving at least a two-year process. During this period, faculty interested in developing a cluster must identify colleagues from different departments and schools to explore a topic of mutual interest that might lend itself to a collaboratively taught course. Once these faculty "affinity groups" are assembled, cluster course proposals have to be drawn up and vetted by Academic Senate committees. Following Senate approval of the proposed cluster, a teaching team is selected for the course and the TAs responsible for the cluster's discussion sections and seminars are hired and trained during the spring quarter before the course is offered.

This cluster course development and implementation process requires a considerable measure of systematic and ongoing support for the faculty and graduate students engaged in it. This support was provided by a cluster administrative team that included two full-time career staff members, a full-time academic administrator serving as instructional coordinator for cluster

courses, and two part-time graduate research assistants. In addition to this administrative support, funds from a Hewlett Foundation grant were used to support the activities of the aforementioned faculty affinity groups.¹¹

During the period of 1999-2001, 161 scholar-teachers participated in 14 of these Hewlett-sponsored affinity groups. As a result of this effort, four additional cluster courses were developed: The United States 1963-1973: Politics, Society, and Culture; Perception and Illusion: Cognitive Psychology, Literature, and Art; The Frontiers of Human Aging: Biomedical, Social, and Policy Perspectives; and Towards a World Economy - The Perils and Promise of Globalization. Approaching the beginning of year four of the five-year pilot program, the College continues to develop new cluster courses, with the expectation that some of the original ones will drop out for a period of time (or be permanently retired). In this way, the College can continue to offer 8 to 10 clusters to entering students.

While the College's administrative and financial support made implementation of a pilot cluster program possible, it was the largely positive experience of the program's participants that ultimately ensured the ongoing interest in and support for these unique courses over the last four years. In the following section, we turn to the College's efforts to assess some of the particulars of that experience and what that assessment tells us about the impact of clusters on the students, faculty and TAs who have participated in them.

¹¹ Chair Berenson left UCLA at the end of the summer of 1999 to take a position at New York University. Instead of appointing a new General Education Chair, Vice Provost Smith opted to assemble an administrative team. Services provided by this team include: budget and personnel management; assistance to faculty in course development; orientation and training of cluster TAs; assessment; and class scheduling.

Assessment of the Pilot Cluster Program

Assessing the general education clusters was always regarded as a central element of the College's efforts to reform its general education curriculum. Both the WASC review team and the authors of the *Proposal for Change* called for some kind of assessment process that would inform UCLA about what was happening in the clusters and also would address the aims and assumptions of the proposal. To achieve these ends, Vice Provost Smith established the Workgroup on General Education Assessment in 1998 and invited Special Assistant to the Executive Vice Chancellor, Maryann Gray, to serve as its chair.

This workgroup was asked to initiate a five-year assessment plan aimed at assessing the experiences of cluster freshmen, TAs, and faculty. After lengthy deliberations, the group elected to focus on seven areas. Of these, four are specifically addressed in this paper:

- 1. Who elected to participate in the clusters and why did they do so?
- 2. How demanding and rigorous was the workload of these courses?
- 3. Did these year-long courses facilitate a sense of community among participants?
- 4. To what extent did clusters employ best practices?

The methodology that the workgroup adopted to answer these questions included the use of surveys, individual interviews, focus groups, and an analysis of a student database.¹² To date, two of the five-year assessment reports have been published and discussed by Academic Senate groups charged with the oversight of general education.¹³

¹² The student database captured demographic information about each cohort of freshmen (cluster and non-cluster), such as gender, major, and GPA.

¹³ For a more detailed account, see the assessment report for year one (Gray et al., 2000) and year two (Levis et al., 2001). For year two (1999-00), responsibility for the cluster assessment was transferred to the College's new Office of Undergraduate Evaluation and Research, which was established in 1999 by Vice Provost Smith. The transfer coincided with Dr. Gray's taking a new position at the University of Southern California.

Assessment Findings for the First Two Years

Participation. With regard to the question of who elected to participate in clusters, the initial assessment found that these courses attracted UCLA's best-prepared freshmen. Cluster students boasted exceptionally good high school grades and SAT scores, ¹⁴ and almost half were enrolled in College Honors. Of the 1,083 first-year students enrolled in the clusters, about half were undecided with regard to a major, while the remainder were divided between those who had declared a natural science major and those who had opted for a concentration in humanities or social sciences. ¹⁵

Students identified several reasons for enrolling in a cluster. Aside from being able to satisfy a number of general education requirements, students were drawn by the fact that these courses offered honors credit. Interest in the course topic and the opportunity to participate in a year-long class were also frequently cited reasons for enrolling in the cluster program.

Clusters also attracted some of UCLA's most distinguished faculty and advanced graduate students. Members of the cluster teaching teams noted a variety of reasons for electing to participate in the cluster program. The two major incentives for TAs were the opportunity to teach a seminar in the spring quarter and the offer of year-long employment. TAs were also

¹⁴ Cluster students' mean high school GPA was 4.19 (weighted) and mean combined SAT I score was 1301.

¹⁵ Nearly 47% of first-year students in the College enter as 'undeclared'; students must declare a major by the end of their sophomore year. At the end of the freshmen year, 14% of the cluster students surveyed agreed that the "taking a cluster has helped me select a major" (Table 15 in Levis et al., 2001).

drawn to these courses because they offered them the opportunity to work with distinguished faculty and exceptional first-year students. For faculty, these courses held out the prospect of intellectual stimulation and the opportunity to collaborate with their colleagues in other departments. The excitement of designing a new course and the prospect of working on interdisciplinary issues were also given by faculty as reasons for their decision to engage in cluster teaching.

Workload. On the question of workload, the overwhelming majority of students felt that the clusters required more work than other courses in their first year. Not only did they report that clusters required more time and effort than their non-cluster courses, but students also noted that these classes engaged them in more discussions, writing exercises, and group projects. Students also indicated that they interacted considerably more with TAs outside of class than in other courses during their freshman year.

TAs and faculty reported that the workload for cluster teaching was high compared to more traditional general education courses. In particular, they noted the need to devote more preparation time to clusters than to non-cluster courses because of the interdisciplinary nature of the material they were addressing and the collaborative teaching format. Furthermore, since these were new courses, everything from course syllabi to reading lists and assignments had to be created from scratch.

Sense of Community. Clusters were envisioned to be a kind of academic community that would bring together students, TAs, and faculty in a year-long common intellectual enterprise. The initial assessment indicated that all of the participants in these courses did indeed feel that they were part of a unique communal enterprise. Students in particular felt that cluster courses offered a sense of community that was lacking in the other courses they took in their freshman year. They reported that they not only

had more opportunities to work with one another in the clusters, but also enjoyed more contact with their cluster TAs than with the teaching assistants that they encountered in other courses. Furthermore, in their focus group discussions, TAs also confirmed that there were more community building activities and far more student involvement in clusters than in other general education courses they had taught.¹⁶

Best Practices. Clusters were intended to introduce students to a wide range of best practices in teaching such as inquiry-based learning, intensive writing, discussion, and seminars. The initial assessment indicated that this goal was achieved. A majority of students reported that clusters engaged them in more class discussions, writing, research, and seminars than other courses they took during their freshman year. They also felt that these practices strengthened their writing, analytic thinking, library skills, and understanding of current events. TAs concurred with these findings, reporting that their cluster students improved in a variety of areas such as writing, scientific knowledge, and critical thinking throughout the year.

Both TAs and faculty noted that they gained insight into curriculum development and classroom pedagogy as a result of their experience in the clusters. TAs, in particular, were impressed by the fact that their ability to teach writing and to explain terms and ideas improved as a result of their involvement in guiding cluster discussion sections. The spring seminars also proved to be a particularly rich intellectual experience for the faculty and TAs who designed and taught these courses.

¹⁶ Several of the clusters have included social events such as dinners, academic-related events, and a film series in the residential halls where most of the freshmen reside. Cluster lectures, however, have been conducted on the main campus because the construction of a cluster lecture room in the new commons building in DeNeve Residential Hall has been greatly delayed. The lecture hall was to be available by the fall of 1999, but due to construction problems and litigation, the lecture hall is not expected to be available until 2002.

In summary, the initial assessment efforts have provided a summative¹⁷ report of what's happening in the clusters. The data suggest that clusters are a positive experience for their students, TAs, and faculty. While workload is heavy for all participants, there appears to be a sense that the benefits from the clusters justify the additional effort. The assumptions of cluster proponents that these courses would encourage the development of an academic community among their participants also appear to have merit, as does the idea that they would introduce students to best practices. Finally, fears that experienced TAs and distinguished faculty would not participate proved unfounded.

The initial assessment has also been formative in that it has been used by the College to improve the quality of the cluster courses. Based on feedback from the participants, for example, the cluster administrative team changed TA training from the early fall to the spring so as to give teaching assistants more time to prepare themselves for the unique challenges posed by cluster courses. Faculty have involved TAs more in course development and organization as a result of assessment reports which indicated that this would be a good way of building more cohesive cluster teaching teams. Assessment data have also helped to identify and eliminate logistical problems that proved particularly burdensome for the faculty and TAs mounting these courses.

¹⁷ Summative evaluation is "designed to present conclusions about the merit or worth of an intervention" (http://www.nsf.gov/search97cgi/vtopic).

¹⁸ Formative evaluation is "designed and used to improve an intervention, especially when it is still being developed" (http://www.nsf.gov/search97cgi/vtopic).

A Comparative Study

While the annual assessment of student experience is designed to document whether cluster students perceived differences between cluster courses and non-cluster courses, it does not consider the experiences and perceptions of non-cluster students. This kind of assessment requires both comparative and longitudinal studies. One promising approach in this area comes from a recent doctoral dissertation by Arianne Abell Walker (2001) who analyzed survey responses from a matched sample of cluster and non-cluster students.¹⁹

Walker found that cluster participation was positively associated with a change in students' individual beliefs about and expectations of their own abilities. Specifically, students' self-reported growth in critical thinking and analytical skills, as well as problem solving, reading, and writing abilities was significantly greater if they participated in a cluster. These findings help support some of the assumptions set forth by the *Proposal for Change* about students' increased academic abilities being fostered through a year-long cluster experience that emphasized best academic practices.

Second, Walker's work investigated how cluster participation affected student engagement in academically-centered activities outside of the classroom. She found that spending increased amounts of time discussing

¹⁹ Walker (2001) used data from two surveys. The first was a freshman survey (Student Information Form-SIF) which has been administered across the nation to incoming students since 1966. This survey is part of the Cooperative Institutional Research Program (CIRP) that is sponsored by the Higher Education Research Institute at UCLA. At UCLA, the SIF is administered to incoming students during the Freshman Summer Orientation Program. The second survey was the College Student Survey (CSS), which Walker administered to the students at the end of their freshman year. The CSS asks students about their perceptions of and experiences in college; it also provides a post-test for many items on the SIF, which makes it possible to study changes in student's values, attitudes, goals, self-concept, and career aspirations. Cluster and non-cluster students were matched on high school GPA, SAT scores, and gender. These particular matching variables were selected to ensure that cluster students were not better prepared (as defined by GPA and SAT scores) than the non-duster students and so there would not be a significant gender imbalance between the groups. Students were unaware that their responses would be used to investigate the impact of clusters.

course content with peers was positively affected by cluster participation. Cluster participation, however, was not associated with increased interactions with faculty nor with the amount of time students spent studying.

Third, the study explored the impact on students' collective values and beliefs about the college experience for students participating in clusters as compared to non-cluster students. At this early stage (end of the freshman year), perceptions about faculty, the institution, and social issues generally did not show effects. However, there was an indication that cluster participation strengthened the belief that faculty were intellectually stimulating and challenging.

Finally, Walker looked at the issue of whether clusters expose students to best practices more often than do other first-year courses. Cluster students reported being exposed more to best practices; specifically, cluster students were more likely to report working on group projects, taking interdisciplinary courses, and enrolling in seminars.

Overall, Walker's results suggest that the cluster experience enhances involvement and a perception of learning among highly prepared students during their first year at UCLA. These findings indicate the beginning of a transformation of the student experience. However, there is a need to include additional variables in future studies to understand better why the clusters have the impact that they do.²⁰

²⁰ For a discussion of the mediating variables in the study, see Walker, 2001.

Is Institutional Transformation Occurring at UCLA?

In this concluding section, we reflect on what this account tells us about our process of general education reform and address the question, Is institutional transformation occurring at UCLA? Astin and Associates (2001) indicate that a critical indicator of institutional transformation is the degree to which the overall system of an organization has been changed by a particular reform effort. A truly systemic transformation is one in which changes in an institution affect its governance, allocation of resources, and cultural attitudes and values. Based on the evidence presented in the foregoing narrative, we submit that UCLA is undergoing a systemic transformation.

During this period, substantial University resources were specifically allocated to the improvement of general education. Curricular change in the form of a series of highly experimental, year-long, interdisciplinary, and collaboratively taught clusters was initiated. Faculty members who had never taught freshman students elected to participate in these courses and were enthusiastic about their experiences. New structures of academic governance and oversight were established to administer and evaluate lower division programs and courses at UCLA. An Office of Undergraduate Evaluation and Research was instituted for the purpose of assessing both clusters and other efforts to improve the undergraduate curriculum. And finally, universities inside and outside of California have shown considerable interest in UCLA's effort to reform general education.²¹

²¹ The Reinvention Center at SUNY Stony Brook—a national center inspired by the Boyer Commission Report, Reinventing Undergraduate Education: A Blueprint for America's Research Universities (1998)—featured UCLA's cluster program in the inaugural conference hosted by the Center and it is now featured on the Center's Spotlight web page (http://www.sunybb.edu/reinventioncenter/spotlight.html). The Center sponsors studies, programs, web sites, and research focused on the improvement of undergraduate education.

Our account also indicates that a number of factors appear to have played a critical role in effecting UCLA's readiness for institutional transformation. Among these were a fortuitous confluence of events that included:

 a national, state, and local climate conducive to the reform of general education; E

- a shared perception among academic administrators and faculty that general education was in need of substantial reform;
- an upturn in the state economy that made new resources available for undergraduate education reform initiatives; and
- a willingness on the part of the academic leadership at UCLA to address the issue of general education reform, and most importantly, to commit funds and other resources to achieve that end.

The implementation section of this narrative also attests to the validity of a number of observations by Astin and his associates (2001) with regard to institutional transformation. This process is time-consuming, painful, contentious, and requires not only considerable patience, but also a marked willingness by all the involved parties to compromise. Indeed, even though the cluster initiative at UCLA has proven to be remarkably successful, critics still voice concerns about this approach to undergraduate education. Nevertheless, as a result of the process that has been outlined in this paper, those voices are fewer in number and have less of an emotional edge.

By the end of 2002, the College will have substantially changed its general education curriculum. In addition to the clusters, the College has launched an innovative Writing II program in 1999-2000,²² and is currently seeking approval for a new general education curriculum that will go into effect in 2002-2003.²³ While we believe that all of these initiatives have improved the College's general education program and transformed many aspects of UCLA's institutional life, we have also learned over the last decade that curricular reform is an ongoing, continually evolving process. In the end, both the effort to create new communities of learning for lower division students and the institutional transformation that accompanies that endeavor remain works-in-progress.

²² The Proposal for Change recommended that a new writing program be vested in each cluster-course sequence. Because the cluster program was developed as an option (not a requirement) for first-year students, Vice Provost Smith appointed a faculty group to design a requirement for an additional writing course that all students would take. Writing II, the College's version of a "writing-across-the-curriculum" program, was approved in the spring of 1999 and implemented for freshmen in 1999-2000.

²³ Vice Provost Smith worked with the General Education Governance Committee to propose a new system of general education electives. In the spring of 2001, the Faculty Executive Committee of the College and the Undergraduate Council approved a new plan that closely reflects several of the recommendations advanced by the Proposal for Change. The proposed requirement for general education electives is simpler and more coherent; it also features some of the best practices employed by cluster faculty and TAs. The faculty is slated to take a final vote on these changes in the fall of 2001; if approved, the new general education curriculum (which includes clusters as one of its cornerstones) will be initiated in the fall of 2002.

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