

Minutes: Reinvention Center Regional Network Meeting
November 9, 2001

The second meeting of the western regional network sponsored by the Reinvention Center took place on November 9, 2001 at Stanford University in Palo Alto, California. It was attended by 39 faculty and senior administrators from 15 public and 2 private universities. Several others who had planned to attend were deterred by the events of September.

Catching Up

After all those present introduced themselves, Center Director Wendy Katkin gave a report on the Center's activities since the group's first meeting in March, 2001.

- A 13-member Advisory Board for the Center has been established. Among the members, there is good balance with respect to representation from public and private research universities, regions and academic disciplines. The Board membership is posted on the Center's Web site at <http://www.sunysb.edu/Reinventioncenter/who-we-are.html#board>. At its first meeting, on November 16, the Board charged itself to work with the Director to develop the Center's priorities and short- and long-term agendas and to play a leadership role in Center activities. It immediately acted on these responsibilities, first, by approving a document that outlines the Center's mission and strategies, and, second, by making plans for a national conference on undergraduate research. Information on both the Center mission statement and the conference will be forthcoming.
- Greg Bothun and Lucy Lynch from the University of Oregon have established an email list-serv for each of the Center's regional networks, as well as a Bulletin Board, so that members may exchange information with one another. Messages will be archived on an electronic bulletin board at: <http://darkwing.uoregon.edu/%7Ellynch/rclists.html>. All members of the western network are already subscribed to the list-serv. Members are also invited to subscribe to the list-servs for the other regions. Cross-regional interaction is welcomed and encouraged. Chuck Sternheim, Professor of Psychology at the U of Maryland, initiated discussion on the DC list serv with a question on whether student evaluations of courses are made public. Approximately 25 institutions responded within the first week, pointing to the potential value of the list serv. Center Director Katkin encouraged network members to take advantage of this very useful tool.
- The Reinvention Center Web site has a "Spotlight" feature that focuses attention on specific topics central to undergraduate education at research universities. The Spotlight consists of a short essay or "thought" on the subject being highlighted and examples of good "models" or practices drawn from different campuses. Spotlight topics change every few months. The initial Spotlight featured an essay on the importance of the first year of undergraduate study by Bruce Alberts, head of the National Academy of Sciences, and examples of different kinds of first-year initiatives offered at Cornell, Northwestern, UCLA and the University of Maryland. The current Spotlight is on undergraduate research and has two essays: one by Nancy Weiss Malkiel, Dean of the College at Princeton, on the value of undergraduates having a research experience, and the second, by Ellen Woods, Senior Associate Vice Provost for Undergraduate Education at Stanford, on developing a comprehensive strategy to increase student *and* faculty participation. Models are drawn from the University of Delaware, Princeton, Stanford, and UC Berkeley. A third, projected Spotlight will be on interdisciplinary education. Greg Bothun, Professor of Physics at the University of Oregon, will argue that the traditional departmental structure impedes progress in promoting interdisciplinary study by undergraduates. The Center is currently soliciting examples or

descriptions of experiences that support or refute this argument. It is also looking for strategies for overcoming departmental barriers.

Wendy Katkin urged attendees to check out the Spotlight and the accompanying Center Resource site out on a regular basis. The Spotlight highlights initiatives that have proved effective and can be readily translated to different institutions and contexts, and the Resource site provides references to a range of additional programs that are working on research university campuses. Network members are particularly encouraged to read the current Spotlight in light of the upcoming Center initiative on undergraduate research.

- The Center has begun to make contacts that hopefully will lead to grants to support Center-sponsored activities. The National Science Foundation has invited the Center to submit a proposal for the development of a Center-led consortium that will focus on the improvement of undergraduate science, math, and engineering teaching and learning at research universities. Although there is an existing NSF solicitation directed at K-12 teaching and learning, the NSF would welcome a proposal from a consortium of Center members that is directed at undergraduate teaching.

After careful consideration, the Board decided that the Center should not respond to this NSF invitation because of potential conflicts of interest. The Center does not want to place itself in competition with research universities that will be applying for these NSF funds or for a projected NSF solicitation for centers directed at undergraduate teaching and learning. Instead, the Center's role should be to gather information and serve as a resource for research universities that are submitting their own proposals. The Center can also play a critical dissemination role. Wendy and a small group of Board members will meet with program officers at the NSF to discuss different kinds of grants for that will further the Center's broad agenda and will benefit research universities generally.

- Judith Sunley, senior program officer in Mathematics at the NSF and previously Interim Assistant Director for Human Resources and Education, will be spending her spring sabbatical at Stony Brook, working with Wendy on Reinvention Center initiatives in science education.
- Interest and student opportunities for scholarship in the Humanities: things are on hold until the newly-named NEH head, Bruce Cole, assumes office in the spring. One idea is to engage library faculty in this activity, as well as in undergraduate research more generally. The Reinvention Center is encouraging participation by research library staff and is talking with colleagues at the Association of Research Libraries about possible collaborations.
- The Center is continuing its discussions with disciplinary societies and anticipates that several will participate in the projected national conference.

Network Activities and Issues

The major Center activity has involved the regional networks. Three of the networks have now met twice. The fourth network, in the midwest, was discontinued after one meeting because most prospective participants were from CIC institutions and were already meeting regularly. Campuses that were not part of the CIC were invited to join one of the other groups. Collectively, the seven regional meetings that have been held were attended by 200 faculty and senior administrators from 78 public and private research universities. An additional 32

individuals from 15 institutions have maintained contact with the Center. The distribution among public and private institutions participating (70 public and 23 private) parallels their representation in the total university population. The high level of response suggests the level of interest in an organization focusing on undergraduate education exclusively at research universities.

Discussions at all the network meetings have centered for the most part on the same issues and challenges, which are also listed in the grid distributed at the meeting. The common issues reflect recent efforts on virtually all campuses to bridge research universities' traditional emphases on research and graduate training with their new emphasis on undergraduate education and to re-shape the undergraduate experience so that it is synergistic with their research and graduate training missions.

The issues mentioned most frequently were: assessment; the first-year experience; faculty issues; engaging departments in efforts at change; general education; scaling up and sustaining successful initiatives; expanding interdisciplinary opportunity; shortages of financial resources; and especially increasing undergraduate participation in research. This last issue was based on the recognition across networks of the need for research universities to provide an educational experience in which their distinctive capability--research--plays a central role.

Although the original idea had been for each regional network to form sub-groups that would concentrate on specific issues, based on the strong interest across all networks on undergraduate research and infusing research and scholarly activity into the undergraduate education that research universities offer, the Board determined that the Center instead should take a more unified approach and undertake a major initiative focusing on this subject. This initiative will be carried out in two stages. The first will be at the network level and will focus on "nuts and bolts" issues and best practices. We have set March 22 as the date for the western network meeting; it will take place in Los Angeles at USC. The second stage will be a major national conference, in November, that will address basic over-arching issues that cut across all campuses. One day will be devoted to assessment: Determining the goals of undergraduate research and assessing its short- and long-term outcomes. The Center will be sending out information on both events in January. In the meantime, participants in western network meetings should mark March 22 on their calendars and check the Center Web site for further information.

General Discussion

Group discussion at the meeting focused primarily on three subjects:

General Education. Largely because of the strong departmental structure, many campuses are having difficulty in reforming general education so that it is truly interdisciplinary and provides foundational intellectual skills. Other factors that impede general education are faculty disinterest, lack of resources and lack of expertise. Greg Kendrick gave a brief history of UCLA's general education reform through learning clusters, emphasizing the slowness of the process and the many difficulties faced. What really made it happen was the creation of a strong central office that had both the expertise and the resources to support reform efforts. Funds, for example, were made available to departments for course release of faculty developing and teaching cluster courses. At present, learning clusters serve 1/3 of UCLA undergraduates. Greg and others argued for flexibility and diversity within general education and organizing efforts around faculty interests. Making general education innovations available to all students remains a persistent problem, particularly at public institutions that have growing enrollments. There is variability

among institutions and within institutions among units in counting general education seminars and other special courses as part of the normal teaching load.

Data Collection. Good data collection appears to be a problem on most research university campuses. Although various offices and units on campus collect all kinds of data, because other units are often unaware of it, the information is rarely shared, combined with other data being collected, or used as productively as it might. Institutions need to figure out what they already have and they need to create mechanisms for sharing.

Teaching Evaluation. Another problem that research universities are struggling with is peer evaluation of undergraduate teaching and the absence of criteria and good tools for measuring this. Stanford has adopted the "reflective memo" approach advocated by the AAHE in which faculty are asked to take a course they teach. In this memo, they indicate their goals for the course and give evidence of how they did or did not achieve them. Oregon's "Pathways" initiative encourages faculty to teach a course in another discipline. Washington State University requires every faculty member to fill out an annual Teaching Profile.

I-RITE Presentation

Michele Marinovich, Assistant Vice Provost and Director of the Center for Teaching and Learning, and Rick Reis, Director for Academic Partnerships, both of Stanford, gave a presentation on their I-RITE Program (Integrating Research Into the Teaching Environment: <http://sll-6.stanford.edu/projects/i-rite/index.html>).

The I-RITE program commissions Stanford PhD students, post-docs and faculty in all disciplines "to produce brief statements describing their research in ways that are understandable and compelling to novices in the field." These statements are made available through a Web site "to graduate students and post-docs exploring research in their own and related fields, to faculty who can use them as examples in their teaching, and to undergraduates who are considering majors or research opportunities." I-RITE encourages students to learn about the different kinds of research going on on campus, helps them to improve their writing skills, and uses peer evaluation as a tool for teaching and learning. It currently involves 110 students and 32 departments, and has the capacity to expand.

Break-Out Sessions

In the afternoon the group divided into three break-out groups to discuss the first year experience, assessment, and undergraduate research.

First year experience

The goals of first-year courses and other experiences, including orientation, are to:

- Increase retention
- Reduce impersonality of large classes
- Increase connection to institution
- Increase student exposure to research
- Improve key skills
- Help students manage transition to college and independent learning
- Introduce students to a discipline
- Meet the needs of at-risk students

- Build a sense of community
- Increase opportunities for students to make contact with faculty members

Given the multiplicity of goals, it is important to make sure that the goals of any particular program are (a) compatible and (b) consistent with assessment structures. It is important to be cognizant of differences in audience. Programs designed for honors students are probably not compatible with those that offer intervention to at-risk students. The first-year program should be developed in the context of the educational experience as a whole. Bridge programs prior to the first-year or intermediate programs that ease the transition to sophomore year may be just as important as first-year programs. More importantly, it is critical to put efforts into years 2-4 to ensure that students do not feel abandoned after year 1.

Among the programs ongoing at individual campuses are:

- Block schedules
- First-year seminars of various types: regular courses, 3-4 credit hours, graded, sometimes with as an introduction to the university, or to a discipline; 1-credit hour courses on a topic of interest to the faculty member.
- Integrated Learning Center at the University of Arizona: Integration is facilitated through a new building which has different types of classrooms and is dedicated to classes in which first-year students are heavily enrolled
- University of Utah: Seminars for transfer students that introduce students to the major
- University of Utah: LEAP program uses TAs who are graduates of the program as instructors. They help with advising and, by their participation, foster the creation of community outside of the classroom
- UCL Learning Clusters: A 3-quarter sequence in which first-year undergraduates study a subject from the perspectives of different disciplines (ie. Aging, the 60's). The first two quarters are taught in large lecture/discussion section format; the third quarter course, which is more focused, is designed and taught by a TA and includes a research component. The Clusters are one option for general education on the UCLA campus. The goal is to involve 50% of the first-year students.
- Stanford: The "Introduction to Humanities sequence consists of a first-quarter course that is team-taught by faculty and focuses on five texts, followed by two one-quarter courses taught by post-docs. The course is capped at 16-19 students. The emphasis throughout is on good teaching.
- Stanford: Freshman and Sophomore seminars that are outside general education and determined by individual faculty members; Although they are optional, by the end of the sophomore year, most students have taken at least one seminar.
- Sophomore College at Stanford: Three-week courses offered during the month of September that provide an introduction to a discipline; courses are capped at 12 students.

Maintenance of faculty commitment is a serious problem. At most institutions, the educational initiatives are undertaken by a gang of "the usual suspects." Institutions need to retain these individuals and build the community beyond them. Departmental pressures and promotion and tenure criteria sometimes discourage faculty participation. One institution undertook interviews with faculty members involved in a first-year curriculum; the interviews suggested that when a tenured faculty member from a large department participated, the department was "neutral," but in the case of junior faculty, the department often put pressure on the faculty member not to get involved because such activity does not play a role in promotion and tenure.

Assessment

Many faculty are trying to understand where the push for assessment is coming from and how it relates to their more traditional activities surrounding assessment in either the classroom (in which they conduct the evaluations) and in research (in which their peers evaluate their work). Faculty are not prepared or trained for this new kind of assessment and need guidance or guidelines on how to do it. The group recommended a future Spotlight on institutional assessment programs that addresses the question of what faculty in research universities need to know in regard to undergraduate education. The Spotlight might lead also to workshops and training materials. By developing something in this area, the Center and network members might be able to address the topic at an academic level and hold campus conversations around it, which would remove it from the punitive perspective in which it is often viewed.

In order to develop a picture of assessment efforts on campuses and the interrelationships, we could develop some sort of multi-dimensional matrix that takes into account the purposes of assessment (needs assessment, program improvement, program or project continuation, reallocation, resource allocation, etc.); the audience for the assessment (university administration, boards of regents, legislatures, etc.), the unit to be assessed (individual, course, major, school, department, campus, etc.), and the methods that might be applied (testing, survey, self-assessment, portfolios, interviews, etc.) We spent some time talking about the importance of goals and how the process of assessment can provide institutions with a way to synchronize their internally and externally imposed mandates. Current accreditation activities indicate that the agencies are not prescribing an institution's goals, but are asking them to define their own and asking for assessment evidence that demonstrates how the institution is meeting its goals. A related topic is the trade-off between the costs for conducting evaluations and the outcomes or benefits derived from them. In addition, the terminology needs to be clarified -- what do we mean by assessment vs. evaluation?

Undergraduate research

This group's observations addressed the ways in which undergraduate research is administered and publicized on individual campuses. Public exhibit space, such as the library and departmental hallways, can be used to show student work, as can both print and web journals of undergraduate research. Lab and technical staff can help integrate research into large classes. For programs to be successful, they need a dedicated program coordinator and adequate funds. Keeping track of undergraduate research can be difficult since there are numerous ways for students to participate, including research as independent study for credit, working with the professor in a lab, and "research across the curriculum initiatives" such as the I-Rite program.