

Flagship 2030 Final Report University of Colorado at Boulder Faculty Task Force September 2008

Introduction

The Faculty Taskforce has been studying how the university must modify the faculty makeup, and how we must modify our scholarly programs to confront and participate in solving the problems confronting our world. Our vision is of a research university committed to engaged scholarship and creative work. Three commitments create the foundation that frames our vision:

- (1) A commitment to excellence in research, creative work and education.
- (2) A balance among basic, applied or participatory, and problem-driven scholarship.
- (3) An intention to maximize international and national connections with a diverse world.

Faculty Task Force Members

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Designated Initiatives

Core Initiatives for Faculty Task Force to emphasize
Enhance Education and Scholarship
Learning for a Diverse World

Flagship Initiatives for Faculty Task Force to emphasize
Transcending Traditional Academic Boundaries
Alternative Degree Tracks
Year-Round Learning

Workplan

Three subgroups were formed, to devote specific attention to research, education, and diversity. Task Force members met alternatively in subgroups and in plenary session throughout the spring semester. Following presentation of our draft report to the Council of Deans in May, 2008, the Task Force invited chairs of other Task Forces (Research, Outreach, Undergraduate and Budget) to join our plenary meetings to discuss common concerns and to share ideas as we formulated our final draft.

Part 1: “Big Ideas” Emerging from Discussions

- Faculty hiring must be based on strategic and holistic planning, rather than on piecemeal decisions. Faculty view themselves as stewards of the university. It is our charge to determine the direction of the university, and to nurture and maintain the highest quality in all activities. Faculty involvement in campus wide planning and coordination will facilitate inter-unit strategic planning and multi-disciplinary cluster hiring initiatives.
- Engaged scholarship is an important faculty contribution to the world we live in. Engaged scholarship links theory with practice, research with action. It transforms our scholarship and creative work to interact productively in a diverse world and contribute to production of new knowledge and approaches to societal and technological improvement that will benefit everybody. Engaged

scholarship fosters reciprocal relationships between the university and broader communities. Engaged scholarship must be sustained, recognized, evaluated and rewarded. The administration must recognize and respect all types of scholarship, including research based in fundamental and applied science, creative work, social activism, and/or pedagogy, in merit, promotion and tenure decisions.

- Diverse educational environments and experiential learning provide important contexts to integrate and improve research, creative work and education. Faculty with expertise in scholarly and creative work are well-qualified to engage students in experiential and immersive educational opportunities, through field work, community involvement, international experiences and conventional classroom and laboratory learning environments. We acknowledge that this type of learning is time- and labor-intensive, and may not be feasible as a substitute for all coursework on campus.

Recommendations

Recommendation 1: The hiring of additional tenured and tenure-track faculty needs to be carefully planned to support our vision. We, therefore, recommend that the hiring of additional faculty must precede the student body expansion by four to six semesters. We also strongly recommend faculty recruitment targets that align better with AAU peer institutions, to reduce the student-faculty ratio from our present 27-1 to 24-1 or even 20-1. We make this recommendation our priority because we believe it must be implemented or other recommendations will not succeed.

It takes time for new faculty to establish themselves and their scholarly and creative work on campus. Faculty need to get their bearings, establish research programs, implement innovative teaching methods, and design engagement strategies that are well defined before they can offer entering students educational opportunities that are tightly coupled with research and creative work. In addition, new faculty must establish a national and international visibility for their research in order to successfully recruit graduate students.

In the appendix we tabulate staged scenarios for faculty increases that will lead, by the year 2030, to student faculty ratios 27-1, 24-1, and 20-1 in order to demonstrate potential hiring impacts as student admissions increase. If we want to engage all students in experiential activities then the lower ratio is imperative.

We also recommend that in this hiring process we remain vigilant to increase and retain our faculty from among under-represented populations. We acknowledge that previous and current recruiting efforts have not been successful. Diversity hiring must remain one of our highest priorities. The administration should undertake a careful review of the special opportunity hiring process and to expand support for faculty recruitment and hiring.

Criteria for hiring new faculty should be determined by a partnership among faculty and administrators, and implemented in a campus-wide collaborative exercise that runs on a 3-5 year repeating cycle. Establishing a cycle for cluster hires will encourage, interdisciplinary engagement and long-term planning. The cluster hires should reflect a combination of near-term opportunities and long-term, strategic planning. The partnership between faculty and administrators should be put in place to assist in this balancing and retain the focus on the Flagship 2030 overall goals.

As this new faculty implementation takes place resources to strengthen the faculty infrastructure must be put in place early on and continue concurrently with new faculty hires. Present infrastructure is clearly insufficient for our present level of faculty. In particular, we refer to increasing the number of staff directly interacting with faculty at the various departmental levels, to expanding available physical space, and to continuing the expansion of library resources.

The ability of faculty to undertake their research and teaching responsibilities is clearly impacted by a lack of physical space and support staff. These resources must be available if we want to carry out an outstanding research and educational program as described above. A Tier 1 outstanding research institution is dependent on its faculty to continuously develop innovative research and educational ideas, but these faculty, in turn, are dependent on the university administration to provide the tools and infrastructure that allow these ideas to flourish.

Recommendation 2: All future tenure-track faculty positions should be created with the expectation of international involvement. The university should develop active faculty exchange programs with a number of universities in other countries in order to structure opportunities for CU faculty to carry out scholarly activities abroad and for international faculty to engage in similar opportunities here. It is imperative that the faculty participate in developing the plan by which the university identifies exchange university partners

We recommend that the university immediately target development of comprehensive partnership programs with non-US universities. International exchange is critical to global innovation. The university has more than twenty international student exchanges but no formal programs for international faculty exchange. We support an increased emphasis on formalized programs for exchange with universities around the world. This development has to be carefully targeted to properly align with our multi-faceted research and educational priorities. Comprehensive partnership programs should include faculty exchanges, undergraduate and graduate student exchanges, joint research activities, jointly approved curricula and degree programs.

In order to ensure that the number of international faculty on our campus is adequate to affect favorably the mission of our university, we recommend that the number of visiting international faculty grow in proportion to the growth of the student (or faculty) body.

To support internationalization, the university must create a structure that addresses the impact of time away from home departments and that assists in the incorporation of international visiting faculty in the university community. A simple example of the latter is an increase in the staff of our International Student & Scholar Services.

Recommendation 3: Varied and dynamic balancing among research, teaching and creative work must be acknowledged and respected, where any one may dominate at points in time and career stage. We encourage all schools and colleges to develop guidelines for promotion that acknowledge different paths and priorities for research and experiential education.

Emphasizing and rewarding multi-disciplinary work and experiential education on this campus is critical to our ability to innovate, educate, and problem-solve. The campus should develop a system for better defining the role of faculty in individualized and experiential instruction as part of determining teaching loads. For example, faculty should be encouraged and rewarded for supervising interdisciplinary 'Individually Structured Majors' (with thesis or final project portfolio). These rewards are crucial if we are to challenge the "silo" effect caused by rigid division of disciplines into which faculty are currently apportioned.

In the context of redefining learning and discovery in a global environment and setting new standards in research, creative work, and education that will benefit the state of Colorado and the world, we emphasize that hiring, tenure, and promotion policies should reflect a commitment to, and support of, faculty who understand the intersection between scholarship and teaching.

Recommendation 4: The university must place a priority on developing multi-disciplinary research activities on campus. Actions that will facilitate this recommendation include establishment of opportunities for faculty to diversify their research and teaching interests through avenues that include short- or long-term exchanges of faculty among departments, schools or colleges. Increased faculty involvement in programs that aid our international vision, for example, in languages, forms another facilitating action.

The emerging problems in the world are increasingly complex and multi-disciplinary in nature. Issues such as energy, protection of the natural environment, globalization, etc. can not be addressed and solved by a single discipline. Research and associated teaching are, by necessity, going to include a broader coalition of disciplines in the form of centers, institutes, and individual collaborations. The university should actively support these collaborations by reducing barriers between schools and departments and increasing support staff focused on multi-disciplinary activities.

Recommendation 5: We recommend enhancing the sense of faculty community on campus. We propose two ways to accomplish this. One is the adoption of a global village concept in the living quarters of our campus. The intent is to ensure that students and faculties from different backgrounds work and live in proximity to each other so that they can further learn and grow socially. Visiting and resident faculty should be provided with the opportunity to live on or near the campus in settings that further encourage faculty community involvement and engagement with students.

With regard to visiting faculty, especially international, the university must create options for housing on or near campus that would make living here feasible and allow visitors to be active members of the university community. Additionally, the university must consider the needs of tenured and tenure-track faculty in developing housing on or near campus and explore opportunities to build subsidized housing.

A second recommendation is to foster a culture on campus where resident faculty feel they belong to a community. Formal and informal venues and activities for faculty social interactions should be explored. Faculty must be involved in the planning and implementation of these suggestions and ideas.

Recommendation 6: After examining the issue of year-round learning, including implementing a survey of CU faculty with over 700 responses, studying our peer institution's experiences, and discussing the issues with other taskforces, the Faculty Taskforce concludes that this concept is not workable under current conditions. We recommend that the summer period be enhanced to expand current programs for pre-collegiate students and to provide professional development opportunities for teachers, thus participating in the preparation of students who will be well-qualified to enter the university programs in subsequent years. We recommend that existing programs be expanded to engage a larger fraction of under-served populations. Besides improving their chances of success in a university program it will improve our visibility in that community.

Part 2: Re-Accreditation Questions

1) Describe how your recommendations help advance UCB's mission as a comprehensive graduate research institution with selective admission standards.

The first five recommendations ensure that UCB faculty will be outstanding participants in addressing and solving the problems that are affecting our world. Knowledge is often best acquired through research and other experiential educational activities. We are proposing a new paradigm of faculty activity which is more in tune with the complex world we are living in and which should aid us in discovering solutions to our problems.

Faculty scholarship will be balanced between basic, applied or participatory, problem-driven research, and creative work. Faculty will be involved in international and multi-disciplinary activities. Engaging our students, graduates and undergraduates, in these activities will enhance our mission. In our opinion, this is the definition of a comprehensive graduate research institution totally engaged in the world we live in.

We anticipate a faculty prepared to move towards a model whereby all students are engaged not only in a classroom education but in research, creative work, and experiential education.

2) Discuss how your recommendations affect the allocation of campus resources (personnel, financial, facilities, etc.) in order to allow us to fulfill our mission, improve the quality of education, and respond to future challenges and opportunities.

To carry out this vision we will need to have a major influx of funds to improve current and develop new infrastructure in our campus. In our Appendix we have approximated some of the cost increases that we will incur in bringing this vision to reality. The majority of the costs are associated with the expansion of the student body and, therefore, the faculty. It describes the costs associated with the increase in faculty; namely, associated faculty offices, laboratories, staff support, and some of the new infrastructure, like residence halls. Clearly many costs have still to be discussed and have not been included, for example, an increase in the number of classrooms, libraries, and housing associated with “creating a village”.

3) Describe how your recommendations improve student learning and effective teaching.

The combination of learning through multi-disciplinary research, creative work, and experiential activities along with the traditional model of classroom-based education has been shown already, through, for example, the UROP program, to enhance student learning. Involving more students in these experiences will clearly enhance the quality of student learning at UCB.

4) Describe how your recommendations help foster the acquisition, discovery and application of knowledge and promote a life of learning for faculty, staff and students.

Faculty view themselves as educators and also as learners and stewards of the university. Engaging both faculty and students in basic, applied or participatory, and problem-driven research fosters the acquisition of knowledge and leads to the discovery of solutions to the problems affecting our world. Carrying out this activity in an international milieu is fundamental to its success. This has already been demonstrated, for example, in the discovery of “Global Warming” and in the proposals for solutions to this problem.

5) Discuss how your recommendations impact the university's internal and external constituencies and serve their needs and expectations.

These recommendations will alter the faculty make-up and encourage engaged and multi-disciplinary scholarship. We have discussed the idea of cluster faculty hiring, for example, in areas of critical need such as languages or bio-technology. The composition of the faculty has to be carefully planned to align itself with core programs that are already being successfully addressed on our campus and to be nimble enough to react to new major initiatives in the future. The ability to attract major influx of international faculty and students must be part of this planning. Our external constituency is the state of Colorado, the nation, and the world at large. Our ability to carry out research and education at the highest level will spur our ability to help solve the problems besetting this constituency.

Conclusion

Summarize the key points of your report.

We provide the vision of a faculty prepared to confront the anticipated and unanticipated challenges of the future. We are presenting a program that will enhance faculty leadership in research, creative work, and education. We emphasize the following points:

1. The timing and process of faculty hiring relative to student growth, staff, space, and resources to support faculty is critical to the success of our vision.,
2. Internationalization is key to our successful engagement in a diverse world. It will lead to a major

change in our involvement in the solutions of problems besetting the world we live in and prepare our students to successfully participate in these activities.

3. The university needs to recognize multiple paths for merit, promotion and tenure (improve balance of recognition for work in research, immersive/experiential education, and community engagement).
4. Adoption of our recommendations will result in an expansion of educational opportunities through involvement in basic, applied or participatory, problem-driven research, and creative work.