The Creation of the Future: University Plan 3 2009-2014

Access, Excellence, Leadership

Office of Academic Affairs University of Wyoming

Approved by the University of Wyoming Board of Trustees 8 May 2009

University of Wyoming Mission Statement

The University of Wyoming aspires to be one of the nation's finest public land-grant research universities. We serve as a statewide resource for accessible and affordable higher education of the highest quality; rigorous scholarship; technology transfer; economic and community development; and responsible stewardship of our cultural, historical, and natural resources.

In the exercise of our primary mission to promote learning, we seek to provide academic and cocurricular opportunities that will:

- Expose students to the frontiers of scholarship and creative activity and the complexities of an interdependent world;
- Ensure individual interactions among students, faculty, and staff;
- Nurture an environment that values and manifests diversity, free expression, academic freedom, personal integrity, and mutual respect; and
- Promote opportunities for personal growth, physical health, athletic competition, and leadership development for all members of the university community.

As Wyoming's only university, we are committed to outreach and service that extend our human talent and technological capacity to serve the people in our communities, our state, the nation, and the world.

The primary vehicles for identifying the specific actions and resource allocations needed to accomplish this complex mission are the university's strategic plans, revised periodically.

This document is the University of Wyoming strategic plan for the period 2009-2014. Detailed plans for specific divisions, colleges, and departments are accessible on the World Wide Web, at

http://www.uwyo.edu/AcadAffairs/Univ_plan/.

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UNIVERSITY PLAN 3: ACCESS, EXCELLENCE, LEADERSHIP

The task of the university is the creation of the future, so far as rational thought, and civilized modes of appreciation, can affect the issue. Alfred North Whitehead

I. THE CONTEXT FOR UNIVERSITY PLANNING

The University of Wyoming has entered a pivotal stage of its history. Our state, having weathered prolonged economic stress at the end of the last century, has enjoyed unprecedented fiscal resources for much of the current decade. These resources, together with remarkable support for the university from state officials, have led to substantial growth in UW's budgets and to significant strengthening of its mission. The purpose of university planning is to build on this momentum, by identifying the areas and initiatives to which UW will assign the highest levels of priority in whatever resource-related decisions it makes during the coming years.

Even in the face of recent downturns in the world economy, Wyoming's leaders look to education as a key to the state's long-term advancement. As the state's only public baccalaureate-granting and research institution, UW is at the center of these discussions. Along with a talented faculty and dedicated staff, among the university's most important long-term assets are a refined set of academic foci and a solid commitment to the planning needed to advance them.

This document is the institutional plan (University Plan 3, or UP3) for the period 2009-2014. It is the product of a multistage process involving many stakeholders:

- Stage 1: Identifying the main issues and themes, through presentations to and feedback from college deans, department heads, the Faculty Senate and other faculty groups, the staff, Associated Students of the University of Wyoming (ASUW), Trustees, support service divisions and their directors, members of the President's Executive Council, and other interested parties. This process started in January, 2007, with a presentation to the Board of Trustees.
- Stage 2: Formulating specific ideas through a sequence of increasingly detailed position papers, entitled *Creation of the Future 1, 2,* and 3¹. These documents appeared in October, 2007; April, 2008; and August, 2008, respectively.
- Stage 3: Developing division-, department- and college-level plans that respond to the main issues and themes. These plans are accessible on the World Wide Web, at the address cited above.
- Stage 4: Formulating a university-level plan capturing elements that are overarching or that require coordination among several divisions. A draft of the plan appeared in January, 2009.

The current document is the culmination of stage 4. The remainder of the document has the following structure:

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III. Planning motif 1: building **depth**.

IV. Planning motif 2: reinforcing and refining areas of distinction.

V. Planning motif 3: **access** to higher education.

VI. Planning motif 4: fostering **excellence**.

VII. Planning motif 5: cultivating *leadership*.

VIII. Conclusion.

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¹ These documents are viewable on the web at http://www.uwyo.edu/AcadAffairs/Univ_plan/.

Because academics constitute the core of UW's mission, academic planning lies at the core of UW's plans. Complementing the academic dimensions of planning, however, are those associated with support and infrastructure — facets of the university without which the academic enterprise cannot function. In contrast to Academic Plan 1 (AP1, 1999) and Academic Plan 2 (AP2, 2004)², the plan for 2009-2014 integrates the institution's academic plan with plans for support services and capital facilities, to ensure that all of these facets of the university mesh effectively with its major academic directions. We hope that this integration builds on the cross-departmental and cross-college intellectual ties nurtured throughout the institution during the implementation of AP1 and AP2.

The Office of Academic Affairs has incorporated a vast amount of thoughtful and insightful feedback, from sources both internal to and external to the university, in developing this plan. This feedback has included comments about issues that did not appear in the *Creation of the Future* documents, suggestions for reframing issues that did, and critiques that led us to abandon proposals that appeared earlier. We hope that this process has helped refine and gel the ideas needed to guide UW through the next five years.

II. A VISION FOR THE UNIVERSITY OF WYOMING

Alone among society's institutions, universities both imagine the future and create it. And alone among states in the U.S., Wyoming entrusts this duty to a single public, land-grant, research university.

The University of Wyoming is a community of scholars, learners, and leaders committed to two institutional hallmarks. The first is our mission to explore, create, and share knowledge, in areas that are meaningful to our constituencies and at a level of accomplishment that garners international recognition. The second is a culture that advances the intellectual and ethical capacities of our students and employees, with a degree of effectiveness that is exemplary among public universities.

The University of Wyoming is also an institution with a distinctive character. Counting among its assets a remarkable geographic setting, unparalleled statewide presence, and a heritage of strong public support, the university embraces both its historic sense of place and its mandate to create the future. We prize the institution's stature as a national model for *access* to higher education, *excellence* in areas of inquiry that are relevant and important to the state and region, and the cultivation of *leadership* for a civil society. We take pride in possessing the will to focus energy and resources on endeavors that build what Wallace Stegner envisioned as "a society to match its scenery."

III. PLANNING MOTIF 1: BUILDING DEPTH

UW has many academically distinguished programs. Few, however, enjoy the faculty depth, numbers of graduate assistantships, or other resources to which they aspire. Planning is a vehicle by which the university can build genuine depth in elements of our mission in which we have struggled to do so for decades.

There are three keys to building depth. The first is to set priorities. This key has become imperative with the emergence in 2008 of difficulties in the world's economy. Since the adoption of AP1, the University of Wyoming has had the privilege of articulating its priorities largely through requests for budget increases. And for the past year we have enjoyed a fiscal cushion against the worst effects of

²AP1 and AP2 are viewable at http://www.uwyo.edu/AcadAffairs/Univ_plan/. Appendix B contains a list of acronyms used in this document.

the worldwide downturn. Nevertheless it is unrealistic — and irresponsible — to rely solely on increasing state wealth to meet the institution's highest needs.

To prepare for the period covered by UP3, it is prudent for the UW community to begin a discussion about how institutional priorities bear on our future budget decisions. If our fiscal cushion outlasts the downturn, UW will be a better institution for having asked the questions. If not, at least we will be better prepared than our sister institutions for the conversations that must ensue.

Action Item 1 University budget planning. During the first half of 2009, the Office of Academic Affairs will lead a university-wide discussion of institutional budget priorities, to help establish principles and priorities to be used in managing UW's budgets during the 2009-2014 planning period.

Two ground rules will govern the discussion. First, we must not frame any conversation about budgetary restraint in a way that causes UW to lose ground. The institution has made remarkable strides since the turn of the millennium, largely through a combination of favorable state revenues and a level of credibility established through focused planning and follow-through. It is unacceptable to envision budget measures, such as across-the-board reductions, that dissipate this progress and diminish UW's distinctiveness. Second, we must bear in mind the vision articulated in Section II. UW's learning-oriented missions — teaching, research, and service — lie at the core of this vision, and they should be the last of our endeavors to suffer from budget reductions, should we ever have to manage them.

The second key to building depth is to temper the ever-present impetus to increase the number of degree programs. Whatever the intellectual merits of new programs may be, they siphon faculty time, administrative overhead, and budgetary resources away from existing programs. This effect can be healthy. To be forward-looking, a university must add new programs while consciously and judiciously pruning old growth. However, academics rarely bring as much enthusiasm to the task of pruning as they bring to innovation. Excitement about new ideas, coupled with reluctance to jettison old ones, promotes a dynamic that is antithetical to depth: universities can easily expand their curricula faster than they can expand the budgets needed to support them.

Action Item 2 Requirements for new degree programs. The Office of Academic Affairs anticipates advancing several new degree programs to the Board of Trustees during the period 2009-2014. The triggers for placing a degree proposal on the Trustees' agenda will be (1) a brief, written analysis from the affected dean(s) showing that all of the required personnel, courses, and fiscal resources are in place to deliver the proposed curriculum and (2) written approval of the detailed degree proposal from the Provost and President.

UW's regulation governing academic program closure compounds the dynamic. It prescribes a procedure that is time-consuming and effort-intensive, even when there is consensus among the affected faculty and student demand is low.

Action Item 3 Review of UW Regulation 6-43, academic program elimination. The Faculty Senate will review UW's regulation governing academic program elimination, with an eye toward streamlining the process, especially in cases where the responsible academic unit agrees that a program is no longer viable or no longer holds a high priority within the unit's academic plan.

A corollary to the need to circumscribe UW's degree offerings is the need to circumscribe the curriculum more generally — whatever the near future may hold for the institution's budgets. While it is easy to grasp benefits associated with a rich curriculum and low-enrollment sections, it is all too common to ignore the costs. They include upward pressure on the teaching component of faculty job descriptions, greater use of temporary instructors, pressure to spread an already lean temporary instructional budget over more people, and diminishing flexibility to accommodate team-taught courses, special topics, sabbatical leaves, and other measures that help sustain scholarly excellence.

The critical task is to balance benefits and costs. We urge all departments to scrutinize their curricula, with the goal of reducing the number of courses and sections taught wherever it is possible to do so while preserving sound pedagogy, intellectual depth, and an appropriate degree of interconnectedness among fields of learning.

The third key to building depth is to think deeply about interconnectedness. Being one of the nation's smallest public research universities, UW cannot aspire to match the department sizes characteristic of sister institutions in states like Texas, Illinois, California, and Washington. However, we can turn our scale into an asset through interdisciplinarity. By promoting shared scholarly interests and overlapping areas of expertise across department and college boundaries, individual academic units can expand their intellectual communities *within* the university, at the same time as they build their stature in national and international arenas. The next motif addresses these shared interests and overlapping areas of expertise.

IV. PLANNING MOTIF 2: REINFORCING AND REFINING AREAS OF DISTINCTION

In AP1 and AP2, UW identified six *areas of distinction*. Areas of distinction are broad categories of academic inquiry and curriculum in which the institution has both an existing foundation in faculty expertise and a commitment to sustained and increasing prominence. In alphabetical order, the areas of distinction identified in AP2 are as follows:

- Critical areas of science and technology
- Cultural assets, arts, and humanities
- Environment and natural resources
- History and culture of the Rocky Mountain region
- Life sciences
- Professions critical to the state and region.

These areas are far from arbitrary. As detailed in the action items in sections VI and VII, they are arguably the areas that Wyoming and the Rocky Mountain region must cultivate if we are to build "a society to match its scenery." Wyoming and the region will be richer environments for personal growth, economic development, cultural depth, and intellectual leadership if UW adheres to a stable, relevant, carefully crafted set of academic directions that involve all of its colleges and that enjoy national and international recognition. Central tasks for the 2009-2014 planning period will be to preserve, refine, and reinforce these areas.

Areas of distinction also possess an academic rationale. They provide opportunities for many academic departments, even small ones, to pursue excellence. This strategy, emphasizing the interdependencies mentioned in Section III, stands in contrast to a model in vogue among some academic administrators, which is to identify "marquee departments" for special emphasis and funding. By pursuing excellence in a well defined set of themes, UW can enhance its ability to recruit outstanding faculty members and students *across* the institution, not just in a small number of departments vulnerable to the vagaries of retirement, external recruitment, and student interest.

Section VI of this plan introduces specific action items related to five of the six areas of distinction: (1) critical areas of science and technology; (2) cultural assets, arts, and humanities; (3) environment and natural resources; (4) history and culture of the Rocky Mountain region; and (5) life sciences. Section VII enumerates a set of action items related to the sixth area of distinction, professions critical to the region.

Finally, the concept of areas of distinction admits an extension to students' experiences outside the credit-bearing curriculum. A novel aspect of UP3 — one that promises to enrich students' learning

experience at UW — is the adoption of areas of distinction in the co-curricular arena, also described in section VII.

V. PLANNING MOTIF 3: PROMOTING ACCESS TO HIGHER EDUCATION

As a public land-grant institution, the university has an historic commitment to access to higher education. With the ground-breaking Hathaway scholarship program in place, a tradition of cooperation among the university and community colleges, and recent increases in permanent funding for post-secondary education, Wyoming is poised for national leadership in this arena. Whereas access traditionally refers to UW's commitment to serve learners throughout Wyoming and beyond, it also implies a responsibility to guide and challenge students intellectually and to hold ourselves accountable for how well they learn.

Access is a multidimensional goal. Among the most pressing dimensions of access to a UW education are cost of attendance, education throughout Wyoming, enhancing students' preparation, enhancing students' success, internationalization, and diversity. The action items below address these issues.

Cost of attendance

The Hathaway scholarship program represents a remarkable policy achievement in lowering the cost barrier to a college education, but it does not eliminate that barrier for all students. UW has considerable resources, in the form of privately funded scholarships, with which to complement the Hathaway program. How these scholarships articulate with other sources of financial aid is a persistent source of debate between academic units and the Division of Student Affairs.

Action Item 4 Re-examining UW's use of university-endowed scholarships to offset institutional financial aid. The Division of Student Affairs will re-examine the institution's current policies for awarding private scholarships. Currently, these scholarships partially offset tuition discounts, to help maximize institutional revenues. Alternative approaches may help balance this objective with several others, including donor stewardship, recruitment and retention of high-achieving students, and the student incentives associated with the awards.

Another important potential use of privately funded scholarships — one that requires careful study because of the complexities associated with endowment agreements and federal financial regulations — is to enhance the support available for non-tuition costs of a UW education. These costs are especially significant for low-income, nontraditional, part-time, and graduate students, for whom there are few other sources of financial aid.

Action Item 5 Need-based and other types of support for the non-tuition costs of a UW education. The Divisions of Student Affairs and Institutional Advancement will solicit funding to support scholarship aid to students based on financial need, to help defray the costs of attendance — such as housing and living expenses — not covered by tuition-based financial aid.

A third area for consideration, especially in light of the support that the Hathaway scholarships provide for undergraduates and broad faculty interest in better support for graduate students, is a greater emphasis on graduate fellowships.

Action Item 6 College- and department-level fundraising to pursue gifts that fund graduate fellowships. The Division of Institutional Advancement, in cooperation with college deans and development officers, will establish and pursue goals for private and corporate philanthropy that supports fellowships for masters' and doctoral students.

The Hathaway program has already encouraged more Wyoming students to attend college. The resulting enrollment increases will yield modest increases in tuition revenue, but the cost of delivering a high-quality, current, and relevant education will continue to outpace those increases. Because tuition revenues constitute an important part of UW's operating budget, the institution needs a coherent policy for setting future tuition rates — one that ensures continued high quality but does not undermine the benefits of the Hathaway program or jeopardize access to university-level learning.

Action Item 7 Coherent policy for setting future tuition rates and managing financial aid. The Board of Trustees, with support from the Vice Presidents for Academic Affairs, Administration, and Student Affairs, will develop a long-range policy for determining UW's tuition rates. The policy will (1) identify appropriate uses of tuition revenues to help address university needs, (2) establish a set of agreed-upon rationales for changing tuition rates over time, (3) strike an appropriate balance between the public and private benefits of a university education, and (4) clarify the mechanisms available for mitigating the adverse impacts of tuition on students for whom cost is a genuine barrier to higher education. In conjunction with this project, the Vice Presidents for Academic Affairs, Administration, and Student Affairs will examine UW's scholarship budgets to ensure that the institution's financial aid and tuition discounting practices are fiscally sound, sustainable, and consistent with available information about student demand for and access to higher education.

Many of UW's residence halls and apartments need remodeling and upgrading. The costs, traditionally borne by students who use the buildings, can add significantly to the cost of attendance. A university housing plan, including clear fiscal plans for sustainably operating and periodically upgrading these facilities, must be a factor in our deliberations on student fees as well as an element in UW's capital facilities plan.

Action Item 8 *University housing plan.* The Division of Student Affairs, in cooperation with the Division of Administration, will develop a long-range plan for university housing. The plan will include (1) a fiscal analysis of mechanisms for sustainable operations and periodic upgrading and (2) a policy delineating the appropriate mix of state and institutional subsidies and the costs borne by students who use the facilities. Elements of the plan will constitute essential components of the long-range development plan for the campus east of 15th Street.

Education throughout Wyoming

Along with institutions nationwide, UW delivers an increasing portion of its curriculum to nontraditional students in nontraditional modes and in locations distant from its main campus. UW administrators have already begun discussions about enhanced partnerships with Wyoming community colleges in the delivery of UW baccalaureate and masters'-level coursework and degree programs. In some cases, such as with Laramie County Community College and our long-standing partnership with Casper College, the conversations focus on new buildings. In other cases there is less emphasis on bricks and mortar and more on specific academic programs. Partnerships between UW, the state's community colleges, and the Wind River Tribal College represent a sound model for expanding access to higher education.

However, avoiding a tangled skein of inefficient one-on-one arrangements between colleges and the university will require a statewide curricular outreach plan. This plan must include mechanisms for funding the new programs without eroding resources that support existing programs, as well as measures that promote the success of UW faculty members in settings outside the Laramie campus.

Action Item 9 Community college curricular outreach plan. To guide ongoing partnerships with Wyoming community colleges, the Outreach School will oversee the development of a statewide curricular outreach plan identifying the degree and certificate programs that the university will offer statewide. This plan will (1) take into account statewide needs for baccalaureate and masters' degree programs, (2) identify opportunities for shared programs and facilities to enable their delivery, and (3) identify mechanisms to ensure that

the UW academic units contributing to these arrangements receive adequate, sustainable funding for them.

- Action Item 10 Staffing plan in Criminal Justice. To support the curricular outreach plan discussed above, the College of Arts and Sciences will develop a staffing plan for the Criminal Justice Department. The plan should identify long-term levels of faculty and academic professional staffing that will allow for stable delivery of the curriculum, including explicit commitments to instruction outside the Laramie campus.
- Action Item 11 Statewide student referral and services pipeline. To support the statewide curricular outreach plan, the Vice President for Student Affairs will develop a statewide student services pipeline, to ensure that UW's off-campus students have the best possible access to student services.

The fiscal structure of the Outreach School also requires attention. UW's current model for off-campus course delivery rests on premises more appropriate to the 1970s than to the twenty-first century. The Outreach School is constrained to deliver a fiscally self-sustaining curriculum, staffed by faculty members whose outreach teaching is often perceived as ancillary to their main duties. To mesh with the Outreach School's current mission, UW's funding model for outreach delivery must place distance education on a footing commensurate with traditional, on-campus delivery.

- Action Item 12 Revised Outreach funding and faculty staffing model. Recognizing the constraints associated with UW's current, revenue-based model for funding off-campus instruction, the Office of Academic Affairs, the Outreach School, and the President's office will identify methods for supporting Outreach instruction with stable, Section 1 funding. Allocations of this type would allow the Dean of the Outreach School to fund positions in the academic departments and colleges that contribute to outreach instruction, via a process brokered annually through central position management. Any model adopted must advance the capacity of academic departments to deliver outreach and hybrid courses through contributions from their faculty and academic professionals. The basic elements of such a model should be in place in time to influence UW's budget request for the Wyoming Legislature during the implementation period of this plan. The model may require a review of UW regulations governing compensation for outreach and hybrid instruction.
- Action Item 13 Off-campus delivery of engineering and technology-related curricula. The Dean of Engineering will identify and implement a suite of curricula to be offered off campus, in cooperation with the Outreach School and Wyoming's community colleges. The offerings should include credit-bearing courses in the baccalaureate engineering curriculum as well as continuing professional development for practicing professionals.

The demand for distance education in Wyoming and beyond has arguably outstripped the infrastructure available to deliver it. A plan for the state's distance-education infrastructure, including data, voice, and video networks and facilities as well as access to learning resources and research materials, would help address the fastest growing segment of UW's student body. It also would facilitate coordination among all levels of education throughout Wyoming and enhance UW's ability to deliver distinctive academic programs on a global scale.

Action Item 14 Plan for Wyoming's distance-education infrastructure. The Dean of Outreach and the Vice President for Information Technology will lead a statewide task force to develop a plan for the statewide technology infrastructure that supports distance education. This plan should accommodate the need for dedicated channels for delivery of credit-bearing classes as well as continuing education, an appropriate distribution of access sites; the need for ongoing maintenance and upgrades of these sites and the networks that connect them; and the associated staffing, funding, and governance needs.

Action Item 15 Wyoming Library Database. The University Libraries will expand their activities within the Wyoming Library Database (WYLD), a cooperative for purchasing resources, shared cataloging, professional development, digital projects, and resource sharing. The Dean of Libraries will involve additional partners within the university, including the American Heritage Center, the Law Library, and the Wyoming Geographic Information Science Center (WyGISC), to be a leader in providing information for Wyoming.

Enhancing students' preparation

Access without a reasonable chance at success is a hollow benefit. UW must work across the spectrum of Wyoming's educational system to ensure that students enter college with the right preparation, begin their college careers with the right courses, and have access to the right tools and resources to succeed.

With UW's leadership, the state has recently established a P-16 (pre-school through baccalaureate) Council, to promote information sharing and cooperation among various sectors of Wyoming's education system. This council furnishes a vehicle for more vigorous articulation among UW, the community colleges, and K-12 and preschool teachers and for smoothing the students' transitions — efforts already seeded through the work of individual UW departments and faculty members, the Wyoming School-University Partnership, and initiatives funded by the School of Energy Resources. Especially germane to this mission is the Hathaway success curriculum, enacted by the 2007 Wyoming Legislature. This prescribed high school curriculum delivers a profound message about the importance of solid preparation for post-secondary education. However, the Hathaway success curriculum is far from a panacea. Four out of 10 UW students are nontraditional: they are over 25 and are not entering university directly from high school. An increasingly critical task is to assess nontraditional students' preparation for the university experience and provide resources to promote their success.

Action Item 16 *P-16 Council.* We urge the Wyoming P-16 Council to pursue four tasks during the 2009-2014 period:

- 1. Develop a **common data-sharing system** for Wyoming's K-12 school systems, the community colleges, and the university, to promote more seamless student transitions among these institutions and to help assess students' readiness and success as they undertake these transitions.
- 2. Assess the **effectiveness of the Hathaway success curriculum** in promoting student participation and success in postsecondary education.
- 3. Develop a set of best practices for the **assessment of nontraditional students' preparation** for postsecondary technical, community college, and university study.
- 4. Based on the results of tasks 1 through 3, develop a set of initiatives aimed at increasing the percentage of Wyoming students who successfully pursue postsecondary education.

Of special interest are impacts that the high school curriculum has on students' preparation for the entry-level college curriculum. UW's academic departments are perhaps the units best positioned to analyze existing evidence and to host discussions about placement mechanisms and adaptive curricular measures in such fields as writing and foreign languages.

Action Item 17 Placement and adaptive curricular measures in writing and foreign languages. We urge the Departments of English and Modern and Classical Languages to examine placement instruments that gauge incoming students' readiness for UW composition and modern language courses and place college-ready students in courses at the appropriate levels. We also invite the Department of Modern and Classical Languages to propose language-study expectations for high school students who plan to attend the University of Wyoming.

- Action Item 18 Articulation with secondary schools. The Office of Academic Affairs will continue to develop mechanisms for UW faculty members to articulate with Wyoming secondary school teachers. Among the mechanisms currently in place or achievable in the near term are the following:
 - The Wyoming School-University Partnership has broadened its role in organizing and sponsoring statewide colloquia and summits in critical fields such as life sciences, writing, and mathematics. We encourage the partnership to continue with these efforts, possibly expanding the opportunities that they provide for professional development renewal credits required by the Professional Teaching Standards Board.
 - 2. The School of Energy Resources (SER) and the College of Engineering and Applied Science with support from the Office of Academic Affairs and external grants have both hosted **summer programs** for middle school students, high-school students, and teachers.
 - 3. SER also has funding to help support semester- or year-long **distinguished teaching internships** at UW for Wyoming high school teachers. Such a program can help promote continuing professional development; foster greater long-term connections between sectors of Wyoming's education system; and facilitate the exchange of information and perspectives about transitional curricula, including entry-level English, science, and mathematics courses. We urge SER to implement this program in collaboration with the Science and Mathematics Teaching Center and the Wyoming School-University Partnership.
 - 4. The Department of Mathematics has long hosted an annual **Summer Institute for Mathematics Teachers**, designed to promote the exploration of new content that can enrich the standard high school mathematics curriculum. The Office of Academic Affairs will explore mechanisms to stabilize the funding for this program.
 - 5. Through a National Science Foundation grant, the Graduate School's **Science Posse** will sponsor summer research experiences for junior high school and high school students and teachers.
 - 6. Many UW departments host or participate in regular, statewide articulation conferences with professional colleagues at Wyoming community colleges. In several of the disciplines involved, one or more of the institutions offers concurrent enrollment credit to high school students. We urge faculty members in these disciplines to involve high school teachers who deliver concurrent enrollment instruction to participate in the appropriate articulation conferences.
- Action Item 19 Articulation agreements with Colorado and Nebraska community colleges. Building on initial agreements developed in Colorado, the Offices of Academic Affairs and Student Affairs will invite community colleges in Colorado and Nebraska to develop formal articulation agreements that will facilitate student transfers to UW.

Enhancing students' success

Owing to its size and culture, UW is fertile ground for the adoption of measures that can enhance students' learning environment beyond the traditional classroom, laboratory, and studio activities. Indeed, this theme is a special focus in the institutional self-study being developed for UW's accreditation review, to be conducted by the Higher Learning Commission in 2010.

- - 1. The Office of Academic Affairs will review the university's current configurations for administering cross-college and interdisciplinary baccalaureate degree

- **programs**, to determine the best way to promote sustained attention to their staffing levels and quality, maintenance of intellectual community, and an appropriate system of recognition and rewards for contributing.
- 2. The Office of Academic Affairs will continue to bolster the support budget for the **Honors Program**.
- 3. The College of Agriculture proposes to establish **capstone courses** and enhance **internships** in its baccalaureate programs.
- 4. The College of Arts and Sciences proposes a focused initiative to increase the number of **research opportunities** available to undergraduates.
- 5. The Vice President for Research and Economic Development will continue to expand research opportunities for undergraduates, in collaboration with the academic colleges, the UW EPSCoR Program, the UW INBRE program, and the Graduate School.³
- 6. The College of Engineering and Applied Science will implement a program to embed effective communication skills into its baccalaureate curriculum.
- 7. The Ellbogen Center for Teaching and Learning (ECTL) has begun to craft a proposal for greater incorporation of **ethics** in appropriate parts of UW's curriculum. In tandem, the Office of Research and Economic Development will develop and deliver workshops and seminars on ethical conduct of research, on intellectual property and technology transfer, and on mentoring for faculty, graduate students, and undergraduates, in coordination with the Graduate School and other relevant units
- 8. ECTL will also continue to host the Science Literacies Initiative, to explore methods to promote **effective learning in highly technical scientific fields**.
- 9. The Graduate School, working in concert with appropriate offices in the Division of Student Affairs, will explore initiatives that bolster the **preparation of undergraduates for graduate education**.
- 10. The Vice President for Student Affairs and the Director of Financial Aid will identify a stable allocation of Work-Study positions to the Learning Resource Network (LeaRN) to support **undergraduate teaching internships** in the Writing Center, Math Lab, and Oral Communications Lab.
- 11. The Dean of the Outreach School will develop a **catalog of all lifelong learning programs** offered by UW across Wyoming, to enhance access to these programs by nontraditional students, people seeking professional development and continuing education, and citizens interested in noncredit learning available through the Outreach School and the Cooperative Extension Service.

Additional initiatives for enhancing UW's learning environment appear in other action items related to leadership, discussed in Section VII of this plan.

To gauge whether we have truly enhanced students' learning, we must have ways to measure it. Since the 2004 Academic Plan, UW has made significant headway in the assessment of student learning within academic majors. This progress notwithstanding, our assessment culture is still a patchwork: some disciplines have made tremendous progress; others still struggle to identify well-defined outcomes or to assess those outcomes.

Action Item 21 Symposium on best practices in the assessment of student learning. The Office of Academic Affairs and the ECTL will organize and host a symposium at which college assessment coordinators and faculty members from a wide array of academic departments can share information about effective and efficient methods for department-level assessment of student learning and the effective evaluation of teaching.

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³ EPSCoR and INBRE are federal institution-scale grant programs; see Appendix B for further description.

Action Item 22 Assessment of the University Studies Program. As part of UW's initiative to enhance the baccalaureate learning experience, the Office of Academic Affairs will coordinate an assessment and review of the University Studies Program (USP), UW's core undergraduate curriculum. The purposes of the assessment will be threefold: (1) to refine assessment techniques that focus on verifiable outcomes and minimize the time commitments of faculty members and administrators, (2) to gauge how effective the curriculum has been in meeting its original learning goals and (3) based on these outcomes, to streamline the USP curriculum, reducing the number of constraints that it places on undergraduates and increasing the simplicity and clarity of the system for students and their advisors.

As the previous action item suggests, questions of curricular structure have ramifications beyond their obvious pedagogical implications. All colleges can benefit from a careful examination of their curricula, with an eye toward balancing the richness of course offerings with the pressures that the curriculum exerts on deans' support budgets and the faculty's time for scholarly work. The College of Engineering and Applied Science is exemplary in having engaged this question head-on:

Action Item 23 Review of structure and delivery of the Engineering Science curriculum. We recognize the long-standing discussions within the College of Engineering and Applied Science about the structure and delivery of the Engineering Science curriculum, including questions about the degree to which the courses should be common across all of the engineering disciplines as well as questions about who teaches the courses and how large the sections should be. To focus continued discussions, the Dean of Engineering and Applied Science will develop an Engineering Science instruction plan. The plan should address the tradeoffs that highly differentiated curricula and small section sizes imply for faculty teaching loads and capacity for research and graduate-student supervision.

The Division of Student Affairs also has a role to play in enhancing students' success, both through its enrollment management functions and through measures that target the success and safety of students after they have matriculated.

- Action Item 24 Enrollment goals. The Vice President for Student Affairs, working with the Enrollment Council, will develop a matrix of enrollment goals by student attributes, academic programs, geographic and ethnic diversity, and gender. This matrix will inform strategies for more focused student recruitment, emphasizing the following areas:
 - 1. Increasing the number of high-achieving students, from Wyoming and elsewhere.
 - 2. Increasing the **diversity** of the UW student population.
 - 3. Increasing to at least 700 the number of international students who attend UW.
 - 4. Increasing the number of students who pursue careers in strategic fields, discussed below.
- Action Item 25 Scholarship enhancements in strategic fields. The Enrollment Management Council, in collaboration with affected college deans, will identify strategic fields in which to focus scholarship enhancements. The aim is to encourage students to pursue careers in which shortages are likely to affect the future workforce. Fields prominent in this category include engineering and technology; advanced health-care professions; secondary education in science, mathematics, and foreign languages; and special education. The Enrollment Council will assess the impacts that the achievement of these enrollment goals will have on the delivery of key entry-level courses and on the learning resources available through LeaRN.
- Action Item 26 Student retention strategy. The Division of Student Affairs, in collaboration with LeaRN, will design and develop cost estimates for a student retention strategy that includes at least five elements:

- 1. A transition program to promote success among first-year and transfer students.
- 2. First-year and transfer student orientation to an **international student body and faculty**.
- 3. Programs to help guide undergraduate students who have not declared majors.
- 4. Enhanced career counseling and guidance for undergraduates.
- 5. Enhanced support services tailored for **nontraditional and distance students**.

Action Item 27 Sexual assault and sexual harassment prevention. The Vice President for Student Affairs, through the office of the Dean of Students and the University Counseling Center, will implement a program to assess the incidence of, increase the awareness of, and enhance the institution's response to sexual assault and sexual harassment among students.

Internationalization

Internationalization is now such a commonly discussed goal in the American academy that the idea is at risk of losing meaning. To maintain clarity of focus in this arena, we encourage the UW community to think of internationalization as a three-legged stool:

- Cultivate an environment that attracts international scholars and students
- Enhance UW students' international awareness through the curriculum
- Expand the opportunities for UW students to study abroad.

During the last decade, UW has made solid headway in building the first leg. UW's colleges routinely conduct faculty searches that are international in scope, and many departments recruit students — especially at the graduate level — from around the world. Also, as an outgrowth of the 2005 Support Services Plan, infrastructure is now in place to manage the complex immigration and visa issues that arise from international recruitment. The International Education Steering Committee has proposed initiatives to further this objective, including not only the enrollment goals discussed above but also the stabilization of measures needed to ease language difficulties that sometimes arise.

Action Item 28 Staffing plan for ESL instruction. The College of Arts and Sciences, the College of Education, the International Programs Office, and the International Students and Scholars Office, in collaboration with ELS, Inc., will develop a range of options — together with cost estimates — for the future delivery of instruction in English as a Second Language (ESL). The emphasis in this endeavor will be twofold: (1) to ensure that UW remains competitive in attracting international students and promoting their success and (2) to explore whether ESL instruction at UW can provide opportunities for students who seek ESL endorsement for future careers as K-12 teachers.

The curriculum plays a key role in internationalization. UW's foreign language curriculum, in particular, enhances students' awareness of international cultures and helps prepare them for careers in a global workforce.

Action Item 29 Coordination of language study with international education opportunities. The Director of International Programs will host a summit of UW faculty members involved in foreign language instruction, international service-learning opportunities such as Engineers Without Borders, and a focused set of articulated degree programs that involve coursework at UW and at a stable set of institutions abroad. The purpose of the summit will be to ensure the best possible meshing of these programs to build language fluency.

⁴The relevant action items appear in the Student Affairs support services plan, viewable at http://www.uwyo.edu/studentaffsupport/docs/SSP_2005-10_10-28.pdf.

Action Item 30 Staffing plan for Asian language instruction. The Dean of Arts and Sciences will develop and implement a plan for the delivery of instruction in Asian languages, including Chinese and Arabic. The plan should include (1) a specification of which Asian languages UW will teach on a regular basis and (2) a plan for staffing the instruction of these languages that identifies the appropriate mix of tenure-track or extended-term-track positions, temporary positions, and student study abroad.

Study abroad is the third leg of the stool. Increased study abroad will require more funding to support students' travel and living expenses in other countries and an increased capacity to advise students who are preparing for international study.

Action Item 31 Seeking endowed gifts to support study abroad. To augment the extraordinary opportunities furnished by the Cheney Scholarships,

- 1. The Division of Institutional Advancement and the International Programs Office will pursue additional endowed gifts to fund scholarships that can fund UW students' opportunities to study abroad during their undergraduate careers.
- 2. The International Programs Office (IPO) will work with college deans to enhance the advising available to students about international opportunities, through an appropriate combination of college faculty contributions and the IPO itself.

With these additional resources, UW will aim to provide study-abroad opportunities to at least 20 percent of its baccalaureate students.

Diversity

As the state provides new opportunities for its students, responsibility falls to UW to maintain an inclusive environment for teaching and learning. We must continue reaching out to those for whom opportunity may not come so easily: students of color, students of limited economic means, students who have never dreamed of going to college. And we must cultivate the diverse and heterogeneous society that our graduates will find as they enter increasingly multicultural workplaces and communities.

The action items included under this heading help advance these values, articulated in more depth through the university's diversity statement:

UW DIVERSITY STATEMENT

The University of Wyoming aims to be a leader among higher education institutions in the Rocky Mountain region in designing and implementing diversity initiatives. Our ultimate goal is to engage in strategic activities designed to promote a university environment that appeals to individuals from varied backgrounds and beliefs. We are not interested in political correctness. Instead, we welcome diversity because it dynamically enriches our collective scholarly productivity and creativity. The university therefore welcomes, encourages, and actively solicits new ideas and strategic approaches to achieving diversity.

The university seeks to embody in the minds of its administrators, faculty, staff, students, and visitors a warm and open human spirit. We also look forward to establishing a more visible partnership with the greater Wyoming community. We seek to complement the state's appreciation for and celebration of individualism, a principle that we see as strengthening a community's commitment to diversity. The university continues to endorse an environment free of discrimination because we know that fairness, tolerance, freedom, and diversity are essential for effective teaching and learning. We believe that we can secure a climate of

acceptance and mutual respect for different opinions, cultures, experiences and personalities. We are committed to evaluating, endorsing, and supporting viable diversity initiatives.

Action Item 32 Partnerships with HBCU and other minority-serving institutions. The Office of Academic Affairs and the Diversity Office will coordinate the development of substantive academic ties with historically black colleges and universities (HBCU). A key starting point will be the memorandum of understanding that the Office of Academic Affairs executed in 2008 with the National Center for Atmospheric Research, Howard University, Hampton University, North Carolina Agricultural and Technical University, and Jackson State University.

UW's programs in African-American Studies, American Indian Studies, and Chicano Studies draw upon the perspectives and talents of faculty members in a wide variety of contributing departments. For this system to work well, the contributions from these departments must be predictable, sustainable, and sufficient to cover the core courses. To inform decisions about these department-level commitments and their implications for central position management, we see a need for a staffing plan for these programs.

Action Item 33 Staffing plan for the ethnic studies programs. The Dean of Arts and Sciences, in collaboration with the directors of African-American Studies, American Indian Studies, and Chicano Studies, will develop a staffing plan for these programs. The plan should include (1) an analysis of the programs' curricula, (2) an assessment of the workforce needed to deliver them, and (3) a proposal for identifying and obtaining stable commitments from appropriate academic departments to meet those needs. The plan should take into account the emerging proposal to develop a common methods course for the three programs.

UW has arguably had less success in retaining women and people of color on the faculty than in recruiting them. Recent first steps in analyzing this problem have included a statistical analysis of salary equity, participation in a nationwide survey on the experiences of early-career faculty members, and an examination by the University Tenure and Promotion Committee of potentially subtle barriers to reappointment, tenure, and promotion, especially for women in some technical fields and faculty members of color across the institution. The issue's very persistence — at UW and at research universities nationally — suggests that additional measures are worth pursuing.

Action Item 34 Retaining women and people of color on the faculty. The Office of Academic Affairs endorses the following measures to promote greater diversity among UW faculty and academic professionals:

- 1. Continued use of the **Academic Affairs diversity funding pool**, to help support start-up packages, early career development, and domestic partner accommodations for newly hired faculty members from underrepresented groups.
- 2. Continued **monitoring of faculty and academic professional salaries**, in preparation for each raise exercise, to help identify and correct emerging salary discrepancies that may be attributable solely to factors related to sex, race, or ethnicity.
- 3. Continued efforts by the Faculty Senate's University Tenure and Promotion Committee to examine potential barriers to reappointment, tenure, promotion, and extended-term contracts faced by women and people of color.
- 4. UW's continued **participation in COACHE**, the national Coalition on Academic Careers in Higher Education, to help understand and mitigate factors that inappropriately hinder the success of early-career faculty members.
- 5. A study of options for enhancing employees' and students' access to child care.

Action Item 35 Broader mission for PACMWA. The Associate Vice President for Diversity will coordinate a transition of the President's Advisory Council for Women's and Minority Affairs to a new council with a broader mission. The new council will retain a central role in advising the President and will assist in the creation of an institutional environment and a Laramie community environment free of discrimination for all people. The new council will work directly with the Office of Diversity (1) to encourage diversity in teaching and learning; (2) to foster a welcoming community for historically marginalized groups at UW and in the Laramie community; (3) to promote a climate of acceptance and mutual respect for different opinions, cultures, and experiences; and (4) to support the recruitment and retention of a diverse student body, faculty, and staff.

Action Item 36 Recruitment and retention of staff members of color. The Vice President for Administration will establish a diversity funding pool, analogous to that maintained in the Office of Academic Affairs, to help promote diverse staff hiring and career advancement.

An issue of increasing prominence in the American workplace is providing fair, equitable benefits to domestic partners of UW employees. For UW to remain competitive with the corporate sector, with the top tier of private universities, and with an increasing number of our public peer institutions, we must follow through with the university's efforts to develop expanded health insurance coverage and a sound strategy for funding an appropriate suite of benefits.

Action Item 37 Health-care benefits for domestic partners. The UW Board of Trustees will consider a UW-funded plan to provide vouchers redeemable for health insurance benefits for unmarried domestic partners of UW employees, based on recent feasibility studies sponsored by the Divisions of Academic Affairs and Administration. Such a voucher plan is a near-term measure, aimed at providing coverage with the understanding that true parity in domestic partner benefits will require changes in the group insurance plan that applies to all Wyoming state employees.

UW has made significant progress toward full access for students and employees with disabilities. An important task for UW for the near future will be implementation of key recommendations made by the University Disability Support Services Site Review Team.

Action Item 38 Access for students and employees with disabilities. The Vice Presidents for Administration; Student Affairs; and Government, Community, and Legal Affairs will identify key recommendations made by UW's 2007 disability services task force, together with a fiscal plan and timeline for implementing those key recommendations.

VI. PLANNING MOTIF 4: FOSTERING EXCELLENCE

Many of UW's most fertile opportunities to foster excellence reside in the six areas of distinction. Focusing on areas of inquiry relevant to the state and region not only connects the university to its most important constituencies; it also highlights Wyoming's role as a natural laboratory in which to explore many of the most pressing issues confronting the broader world. Other opportunities reside in the institution's responsibility to build excellence in human capital. A third category of opportunities revolves around the need for excellence in UW's capital facilities, also discussed in this section.

Section IV identifies six areas of distinction, five of which are as follows:

- Critical areas of science and technology
- Cultural assets, arts, and humanities
- Environment and natural resources
- History and culture of the Rocky Mountain region
- Life sciences.

A sixth area, professions critical to the state and region, is one of the central topics of section VII.

Action Item 39 Institution-level research support for areas of distinction. The Research Office will continue to foster research in UW's areas of distinction (1) by focusing its support of interdisciplinary, institution-building research initiatives and other major programs (such as EPSCoR, NIH IDeA, and NSF IGERT)⁵ and (2) by instituting common operating models and developing cost centers for university core research facilities.

Areas of distinction: critical areas of science and technology

Although UW has experts in a wide array of scientific and technological fields, three fields warrant special strategic emphasis:

- Computational science and engineering
- Earth and energy science and technology
- Water resources.

Two other large areas of science and technology — environment and natural resources and life sciences — are separate areas of distinction discussed later. In addition, a field cited in AP2 — materials science — still deserves sustained attention in many department-level hiring and curricular plans, although the scientific foci of UW faculty members in this field remain quite diverse.

Each of the three fields bulleted above is potentially quite broad and therefore risks being ill-defined or spread too thinly. Lasting depth will require sustained attention to a clearly understood set of shared interests among affected departments. In addition, any long-term thinking about the future of these three areas must take into account the intellectual overlaps among them.

UW's presence in the computational sciences, once limited to isolated sectors of the faculty, is now well established. Nevertheless, the university's computational science community is still too small, and its computationally oriented curriculum still too fragmented, to support the institution's recently established partnership to build and support a supercomputer facility with the National Center for Atmospheric Research (NCAR).

Action Item 40 Coherent plan for UW's high-performance computing infrastructure. The Vice Presidents for Research and Economic Development and Information Technology will organize a task force, including computational scientists selected from the UW faculty and WyGISC as well as representatives from the National Center for Atmospheric Research, to develop a coordinated plan for UW's future research cyber infrastructure. The plan should:

- Maximize the potential for UW researchers, from time to time, to combine separately administered computing platforms to form temporary higher-performance clusters.
- 2. Promote interoperability with the NCAR-UW supercomputer facility to be built west of Cheyenne and with high-level visualization and data storage facilities at other sites.
- 3. Propose a **system of shared system administrators** for research computers, funded through a flexible combination of stable state budgets and external research grants.
- 4. Provide **expanded co-curricular opportunities for students** to gain experience in high-performance scientific computing environments.

Action Item 41 Graduate curriculum in computational science. We encourage faculty members in the Colleges of Agriculture, Arts and Sciences, and Engineering and Applied

⁵ See Appendix B for definitions of these acronyms.

Science to continue developing a graduate curriculum in computational science, to serve as a core for computationally oriented options within existing masters' and doctoral degree programs. The Offices of Academic Affairs and Research and Economic Development will facilitate measures to link UW's computational science curriculum to programs at NCAR and to curricula at other research universities along Colorado's Front Range.

A key organizing principle for UW's presence in Earth and energy sciences is the School of Energy Resources, established with new state funding in 2006. SER provides a vision and a set of incentives for expanding UW's traditional strengths in energy-related areas. Neither a college nor an academic department *per se*, SER is best viewed as a permanent platform on which mainstream academic departments can build and sustain faculty strength in energy-related aspects of their disciplines.

In this endeavor, UW faces the delicate task of balancing the need for relevance to Wyoming's current energy portfolio, which is truly remarkable but largely based on fossil-fuels, with the need for a broader energy portfolio for the long term. Striking this balance will require scientific and technical advances as well as economic and policy analysis.

- Action Item 42 Expansion of energy-related teaching and research. The Office of Academic Affairs will oversee a proposal to fund expansion of the School of Energy Resources, subject to constraints on state funding. The purpose of the expansion will be to enhance energy-related teaching and research by adding senior SER faculty positions in key academic departments. The director of SER will work with academic deans and department heads to inform the development of this proposal and to help guide the eventual placement of any new positions arising from it.
- Action Item 43 Energy-related focus in the College of Engineering and Applied Science. The College of Engineering and Applied Science will strengthen the energy-related focus of its teaching and research. This initiative will include (1) bolstering the energy-related themes in each of the engineering departments, in part through a baccalaureate program in Energy Systems Engineering, and (2) curricular ties with the Haub School for Environment and Natural Resources and SER.
- Action Item 44 Stable portfolio of energy research centers. The director of the School of Energy Resources will identify a stable portfolio of research centers, operated under the aegis of the Institute for Energy Research and, where appropriate, started using seed money from the SER budget. Each center must have a plan for sustained funding from externally funded research awards. The portfolio should respond to SER's four-part mission:
 - 1. To make wise and environmentally sound use of **Wyoming's traditional energy resources** (Enhanced Oil Recovery Institute, Coalbed Natural Gas Center, Center for Fundamentals in Subsurface Flow, Institute for Energy Economics).
 - 2. To add value to Wyoming-mined coal and to keep in the mix of viable energy resources through the development of cleaner coal technologies (Wyoming Reclamation and Restoration Ecology Center, High Plains Gasification Advanced Technology Center).
 - 3. To support an appropriate array of research into **renewable energy resources** (Wind Energy Research Center, Renewable Energy Resources Center).
 - 4. To promote scientific and engineering advances in the **management of carbon dioxide** (Carbon Management Research Center).

The enumeration of centers here is not necessarily exhaustive.

Action Item 45 Statewide energy-related outreach. The School of Energy Resources will develop an active program of statewide outreach in energy-related areas, including public workshops and short courses on energy-related topics. We invite the Western Research

Institute and the Wyoming Geological Survey to become partners in delivering these programs. The workshops should include a mix of technical topics, coordinated through appropriate science and engineering departments, as well as geospatial topics, coordinated through the Wyoming Geographic Information Science Center, and legal issues, coordinated through the College of Law.

Action Item 46 Center for Quaternary Studies. The Dean of Arts and Sciences will oversee development of a proposal for a Center for Quaternary Studies, focusing on changes in Earth's climate, biota, ecology, and land-surface processes during the past two million years. The proposal should include (1) a statement of mission; (2) an assessment of the potential for contributions from key departments in the College of Arts and Sciences, such as Geology and Geophysics, Anthropology, Botany, Geography and Zoology and Physiology, as well as from relevant departments in the College of Agriculture and the College of Engineering and Applied Science; (3) a summary of the sources and uses of funding envisioned for the center; and (4) a discussion of possible involvement of scientists at the National Center for Atmospheric Research in the center.

UW's expertise in water resources has immediate relevance to the state and region, not to mention the rapidly emerging global issues associated with our planet's hydrologic cycle. The expertise is distributed across many departments, the UW Office of Water Programs, the Haub School, and several colleges, and it spans both the technological and policy arenas. Water resources being central to the life and economy of the Rocky Mountain west, there are compelling reasons to refine UW's focus in this area.

Action Item 47 Interdisciplinary graduate program in water resources. We encourage efforts currently underway to develop an interdisciplinary, cross-college Ph.D. program focusing on water resources. The proposal should include the following elements:

- Foundation: Summarize each contributing department's water-related faculty expertise, level of research, faculty involvement in doctoral education, and curriculum. Also summarize the departments' commitments to sustain stable, well focused cores of faculty expertise in the area. Identify the opportunities for participating faculty members and graduate students to address water-related issues through UW's Office of Water Programs as well as through grants and contracts from federal funding agencies.
- 2. **Cost:** Summarize the extent to which the new doctoral program will require resources including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities that the participating departments and colleges cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, and (c) the degree to which these new courses will replace existing courses.
- 4. Interdisciplinarity: Identify the scientific and engineering expertise in water resources to be contributed, at a minimum, by the Colleges of Engineering and Applied Science, Arts and Sciences, and Agriculture. We welcome contributions from other colleges as well.

To support this degree proposal, the Deans of Engineering and Applied Science, Agriculture, and Arts and Sciences will develop a brief prospectus identifying the stable faculty strength and scholarly focus areas that each college intends to maintain in water resources. The feasibility and timing of such a degree program will hinge in part on the availability of funding for the critical elements of the proposal.

Areas of distinction: cultural assets, arts, and the humanities

UW is Wyoming's natural hub for the fine and performing arts and creative endeavors in the humanities. Already home to the richest array of cultural assets in the state, UW enjoys a reputation in these areas that would be enviable even at larger, wealthier institutions. With award-winning academic programs in the studio and performing arts, a new MFA program in creative writing, an art museum of increasing national prominence, and outstanding archives, the university has an impressive array of assets upon which to build a magnet environment for the arts.

AP2 called for stronger links among the Art Museum, the American Heritage Center, and the curriculum-bearing programs in the fine arts and humanities. To a commendable extent, the directors of these units have fortified these links. UP3 should help solidify these efforts, promote measures to assess them, and explore opportunities to expand them.

Action Item 48 Increasing avenues for undergraduate involvement in the Art Museum, the AHC, and the University Libraries. The Directors of Student Financial Aid, working with the American Heritage Center (AHC), the Art Museum, the University Libraries, and LeaRN, will direct Work Study funds toward undergraduate internships in the Art Museum, the AHC, and the Libraries.

The facilities housing the American Heritage Center archives and the Art Museum suffer from a complicated array of maintenance and repair problems whose resolution — one of the areas of critical administrative focus in the 2005 Support Services Plan⁶ — has required several years and millions of dollars' worth of work.

Action Item 49 Maintenance and repair of the Centennial Complex. The directors of Physical Plant, the American Heritage Center, and the Art Museum will develop a process flow chart, timeline, and funding plan to complete the maintenance and repair in the Centennial Complex. The purpose of this project is fourfold: (1) to define the scope of the project, (2) to ensure a common understanding of which tasks are critical to human health and safety as well as to the care of the collections, (3) to make clear how the various tasks will progress under reasonable estimates of timing and workforce availability, and (4) to ensure proper staging of funding from the university's major maintenance budget.

Finally, UW's statewide leadership role in this area of distinction impels us to draw links with Wyoming's other major cultural resources. There are many: the Buffalo Bill Historical Center (BBHC) in Cody, the Nicolaysen Art Museum and Discovery Center in Casper, the National Museum of Wildlife Art in Jackson, the Wyoming State Museum in Cheyenne, and a host of others. UW already has many connections with the Buffalo Bill Historical Center:

Action Item 50 Links with the Buffalo Bill Historical Center. The Offices of Academic Affairs and Institutional Advancement will establish a task force to explore closer connections, scholarly exchange, and common programming between UW and the BBHC. Key participants in the early stages of this initiative are likely to include representatives from the American Heritage Center, the Art Museum, and the College of Arts and Sciences, although other units such as the College of Law and University Libraries, which have also had connections with the BBHC, may be involved.

We encourage closer links with other cultural resources, as well.

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⁶See the support services plan for the Division of Administration, viewable at http://www.uwyo.edu/administration/support_services/SSP%20for%20Administration%20Division%20Oct%2020_05.doc.

Areas of distinction: environment and natural resources

UW's expertise and reputation in environment and natural resources (ENR) are firmly established. One of the most promising opportunities for bolstering this area of distinction in the near term is the potential for strong connections between the Haub School; its research component, the Ruckelshaus Institute for Environment and Natural Resources; and the School of Energy Resources. These units rely on the seven academic colleges for faculty expertise.

Action Item 51 Review of the Haub School's structure and teaching workforce. The Office of Academic Affairs will organize a review of the Haub School for Environment and Natural Resources, with the following threefold aim:

- 1. Clarify the school's administrative structure as an interdisciplinary, degree-granting unit.
- 2. Identify curricular measures that can enhance UW students' exposure to concepts related to environment and natural resources.
- 3. Identify the teaching workforce that currently exists and any additional commitments of faculty time needed from contributing colleges and academic departments.

The College of Business has spent much of the 2004-2009 period developing cross-departmental expertise in sustainable business practices. Translating this expertise into a coherent curriculum, especially at the graduate level, will require a stable, focused definition of sustainability in this context; a carefully staged approach to the orchestration of course contents and program goals; and a commitment to areas of inquiry that are distinctive and meaningful to the Rocky Mountain west.

Action Item 52 Doctoral program in sustainable business practices. The College of Business will submit a proposal for a Ph.D. program in Marketing with a focus on sustainable business practices and housed in the Department of Management and Marketing. The proposal must address the following elements:

- 1. **Foundation:** Summarize the existing resources in Management and Marketing that contribute to expertise in sustainable business practices, including relevant faculty expertise, level of research, faculty involvement in graduate education, and curriculum.
- 2. **Cost:** Summarize the extent to which the new doctoral program will require resources including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities that the college cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, and (c) the degree to which these new courses will replace existing courses.
- 4. Interdisciplinarity: Review the potential for contributions from other academic units, including (a) possible participation in doctoral supervision by faculty members in Agricultural and Applied Economics, (b) prospects for curricular and research contributions from the Department of Economics and Finance, and (c) potential connections with the Haub School for Environment and Natural Resources.

UW offers a growing array of credit-bearing courses related to technical and social aspects of sustainability. The UW Sustainability Committee is an appropriate group to develop an inventory of such courses.

Action Item 53 Inventory of sustainability-related courses. The UW Sustainability Committee will develop an inventory of sustainability-related courses, with three purposes in mind: (1) to ensure that courses offered in different academic units mesh coherently and without unnecessary overlap, (2) to identify courses that have the potential for greater focus

on sustainability, and (3) to explore opportunities for students to become involved in practical applications outside the classroom, to complement the credit-bearing curriculum.

The College of Agriculture is home to long-standing expertise in natural resources, as well as to a cooperative extension workforce that has a unique statewide mission to connect knowledge and expertise with communities and practitioners. The time is ripe to connect and solidify these elements of the college's mission.

Action Item 54 Community issues associated with energy conservation, energy development, and sustainable energy use. The Dean of Agriculture will implement an enhanced mission for the Cooperative Extension Service (CES) that includes household energy education and economic development in Wyoming communities experiencing energy-related growth and other impacts. We urge CES to consider an explicit role for the Wyoming Geographic Information Science Center in this enhanced mission.

Action Item 55 College of Agriculture and Natural Resources. We support the college's proposal to change its name to the College of Agriculture and Natural Resources. The purposes of this renaming would be threefold: (1) to recognize and solidify the long-standing contributions that the College of Agriculture has made to teaching and research related to natural resources, (2) to emphasize the historic links between the agriculture industry and natural resource issues in the Rocky Mountain west, and (3) to promote greater cross-college collaboration involving College of Agriculture faculty members and faculty members in other colleges with significant scholarly contributions to natural resources.

Areas of distinction: history and culture of the Rocky Mountain region

This area of distinction has a special challenge: studying the region makes sense only if we bear in mind the global context. Potential measures for advancing the institution's already considerable presence in this area of distinction include the following:

Action Item 56 Proposed major in Religious Studies. The Dean of Arts and Sciences has asked to develop a proposal for an undergraduate major in Religious Studies. The proposal should include the following elements:

- 1. Foundation: Summarize the existing resources that contribute to expertise in religious studies, including relevant faculty expertise, level of research, existing curriculum, and quantitative evidence of student interest in the major. Also indicate the degree to which the program will include an emphasis on aspects of religious studies that are distinctive to the Rocky Mountain region, its cultures, and its history of immigration. In particular, indicate the degree to which the program intends to incorporate the religious beliefs and ways of knowing followed by peoples native to the Rocky Mountain Region into the curriculum, through course contents and future hiring priorities.
- 2. **Cost:** Summarize the extent to which the new baccalaureate program will require resources including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities that the College of Arts and Sciences cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, and (c) the degree to which these new courses will replace existing courses.
- 4. **Interdisciplinarity:** Summarize the proposed contributions from other academic units.

Action Item 57 Proposed major in American Indian Studies. The Dean of Arts and Sciences has asked to develop a proposal for an undergraduate major in American Indian Studies. The proposal should include the following elements:

- Foundation: Summarize the existing resources that contribute to expertise in American Indian studies, including relevant faculty expertise, level of research, existing curriculum, and quantitative evidence of student interest in the major. Also summarize the degree to which the program will include a special focus on aspects of American Indian studies that hold particular relevance in the Rocky Mountain west.
- Cost: Summarize the extent to which the new baccalaureate program will require resources — including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities — that the College of Arts and Sciences cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, and (c) the degree to which these new courses will replace existing courses.
- 4. **Interdisciplinarity:** Summarize the proposed and potential contributions from other academic units, including the Departments of Anthropology, English, Geography, and History, as well as the College of Education.

As with other action items involving new degree programs, the viability of these two proposals hinges on the university's budget constraints during the implementation period of this plan.

Areas of distinction: life sciences

Like many land-grant universities, UW has a long tradition of strength in the life sciences. During the periods covered by AP1 and AP2, this strength has become deeper and more focused. At the undergraduate level, UW has unified and updated its core life-science curriculum, through laudable contributions from the life science departments in Arts and Sciences and from the College of Agriculture. Sustaining the new curriculum will require lasting commitments from faculty members in the Colleges of Agriculture, Arts and Sciences, and Health Sciences.

Historically, life-science planning at UW has vacillated between two distinct emphases, namely (1) administrative configuration and (2) intellectual directions. While proposals for reconfiguring UW's life-science departments are always fair subjects for discussion and, conceivably, for implementation, we believe that the identification and reinforcement of intellectual directions is a more productive use of time and resources. Hence, the action items below address degree programs and focus areas instead of departmental and college structures.

Action Item 58 Plant biology initiative. The Deans of Agriculture and Arts and Sciences will examine the feasibility and academic merits of combining at least two of the degree programs, at the undergraduate or graduate level, that are now offered in the Departments of Botany and Plant Science, with possible involvement by the Department of Renewable Resources. The purpose of this examination is to explore a spectrum of possible future configurations of the plant biology curriculum, ranging from the status quo to a proposal, once advanced by the two departments, that they merge administratively. Intermediate configurations are possible. The Office of Academic Affairs has no preferred outcome a priori.

At the graduate level, through a combination of academic planning, new graduate programs, and large programmatic grants, UW has identified several focus areas for faculty hiring, doctoral education, and infrastructure development. Three of these areas have been particularly successful, having attracted widespread faculty interest across several departments and colleges:

- Ecology
- Molecular and Cellular Life Science (MCLS)
- Neuroscience.

An important question for UP3 is how to refine and complete this set of focus areas.

The question of *refinement* is especially difficult. Each of the three areas listed above admits so much breadth that it risks having little sustainable focus. In practice, however, UW already has several outstanding nucleation sites around which to develop future faculty hiring in each area. A critical task for the life science faculty will be to avoid intellectual dilution in these areas.

Of interest in all three areas listed above are potential connections to a focus area discussed earlier, namely computational science. The Program in Ecology has a hiring initiative in mathematical ecology, a field that draws heavily on computational dynamics and geographic information science. The program in Molecular and Cellular Life Science has a nucleus of computationally oriented faculty expertise in bioinformatics and related areas. Yet to be fully explored at UW is the potential for a computationally oriented component of the neuroscience program. We encourage further development of these connections between the life sciences and computational science. An essential ingredient in this effort will be the willingness of affected departments to direct faculty position requests toward these rapidly emerging areas of inquiry.

The question of *completeness* is essentially the question whether the three focus areas listed above are sufficient. Not all of UW's life scientists fit naturally into these areas. And there have been numerous suggestions for other focus areas: reproductive biology, systems biology, biomedical science, to mention just a few. The arguments — not all equally compelling — range from a desire to encompass all existing areas of UW life-science expertise to a perceived need for closer links between clinically oriented and research-oriented programs.

Action Item 59 Doctoral program in biomedical sciences. We welcome the development of a proposal for a new Ph.D. program focusing on biomedical sciences, with the following caveats. First, any decision to implement such a degree program will hinge on its academic merits, and costs, as discussed below. Second, the proposal must focus on human biology, with the understanding that other organisms can furnish models. Third, the viability of a doctoral program hinges on projections of demand by qualified students and of the demand by prospective employers for doctorally qualified graduates. The proposal must address the following elements:

- Foundation: Identify a clear, succinct, unifying focus for the program. Discuss the types of students to be targeted for recruitment into the program and the likely demand for its graduates. Summarize the existing resources that contribute to expertise in this focus, including relevant faculty expertise, level of research productivity and competitive external funding, faculty involvement in graduate education, and curriculum.
- 2. **Cost:** Summarize the extent to which the new doctoral program will require resources including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities that departments and colleges cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, and (c) the degree to which these new courses will replace existing courses.
- 4. Interdisciplinarity: Describe the projected involvement of faculty members in key departments, especially in the Colleges of Agriculture, Engineering and Applied Sciences, and Health Sciences. Also discuss whether a new doctoral program in biomedical sciences will have implications for (a) the continued need for a doctoral

program in reproductive biology, (b) the continued need for department-centered doctoral programs in the participating departments, and (c) accreditation-related constraints on clinical degree programs (such as the Pharm.D.) in the College of Health Sciences.

The Program in Ecology (PiE), established as a doctoral program under AP2, has rapidly acquired stability and momentum. We encourage affected faculty members to explore natural ties among PiE, the Haub School of Environment and Natural Resources, the Department of Veterinary Science, and the School of Energy Resources in matters related to land use policies, wildlife, long-term impacts of energy development, and an understanding of climate change. Questions related to infrastructure are also important:

Action Item 60 Weaving the Berry Center into UW's research mission and credit-bearing curriculum. The planning team for the Berry Biodiversity Conservation Center will develop a short mission statement outlining the contributions that the new facility will make to (1) baccalaureate degree programs in the life sciences; (2) doctoral programs, especially the Program in Ecology; (3) the maintenance of core research facilities such as the Stable Isotope Laboratory, the Nucleic Acid Exploration Facility, and possibly others; and (4) public outreach.

Graduate education

One of the characteristics of world-class research institutions is a commitment to excellence in graduate education — a commitment that builds upon and bolsters the commitment to outstanding baccalaureate education. Indeed, one of UW's most important contributions to human capital development is the training of graduate students who contribute to the nation's supply of scientists, engineers, scholars, business leaders, teachers, health care providers, policy makers, and lawyers. Excellence in graduate education requires sustained faculty attention, not only to the painstaking mentorship endemic to teaching and learning at this level but also to the external research funding and the priorities for private philanthropy needed to support students during their graduate-school years.

More prominent now than during the formulation of AP2 is the perceived need to increase the number of and amount of support for graduate assistantships (GAs), to strengthen graduate programs and to attract top students to them. Quantifying the need and addressing it will require a multifaceted strategy.

Action Item 61 Increase the number of GAs. The Dean of the Graduate School will coordinate a broad initiative to increase the support available for graduate education at UW. The initiative must be multifaceted, including the following elements:

- An assessment of UW's current sources of support for graduate study in comparison with funding patterns prevailing at public research doctoral institutions more generally. Of interest are the magnitude and relative distribution of various types of support, including institutionally funded assistantships, assistantships funded through external contracts and grants, fellowships funded through private or corporate philanthropy, and self-funded graduate study.
- 2. A gauge of UW faculty involvement in graduate education especially doctoral education in programs that have them also in comparison with trends prevailing at public research doctoral institutions more generally.
- 3. An assessment of UW's existing graduate applicant pools, to support an appraisal of UW's ability to recruit promising graduate students to fill any new slots. Accompanying this appraisal should be an analysis of whether it would be more

- effective to spend institutional dollars on increasing the number of institutionally funded assistantships or on increasing GA stipends.
- 4. A survey of current uses of institutionally funded GAs, (a) to ascertain the degree to which they are used to support research programs more appropriately staffed through externally funded research assistantships and (b) to quantify the distribution of assigned workloads among institutionally funded GAs.
- 5. A proposed strategy for increasing the number of graduate and professional students that UW can support financially, including (a) UW's capacity for increasing the number of externally funded research assistantships, (b) increased attention to private and corporate philanthropy to support graduate fellowships, (c) potential uses of the faculty position budget to create new institutionally funded graduate assistantships, and (d) the ranking of new GA funding among various institutional priorities (including employee salaries and benefits, GA stipend levels, support budgets, library collections, and information and instructional technology) in UW's legislative budget requests.

An important key to the GA budget is making effective use of the state-funded GA slots that we have.

Action Item 62 Time limits on institutional GA funding. The Dean of the Graduate School will establish appropriate time limits on students' eligibility for institutionally funded graduate assistantships. These limits may vary with the level of degree sought and indicators of progress made toward a degree, and they may vary among disciplines. The purpose of the time limits is to ensure timely cycling of institutional graduate-student support and therefore to maximize the number of students for whom institutional GA support is possible.

The assessment of student learning in graduate programs remains an unfinished project. AP2 called for the development of graduate program goals for all graduate degrees (Action Item 55). These goals provide a foundation for the next steps:

Action Item 63 Assessment of student learning in graduate programs. The Dean of the Graduate School, working with the college assessment coordinators, will oversee a more systematic program of assessment in masters' and doctoral degree programs. This program will build on the results of Action Item 55 in AP2, which called for the development of graduate program goals for all graduate degrees. The purposes of assessment are to enhance the correspondences between program goals and program requirements, to track measurable outcomes against the goals, and to assess the contributions of members of the graduate faculty. Appropriate measures of outcomes include near-term measures, such as refereed publications resulting from students' work, as well as long-term tracking of graduates' career trajectories.

Building excellence in human capital

The foundation of an excellent university is excellent people. Developing the talents of our students, faculty, and staff requires a more consistent, institution-wide culture that encourages lifelong learning and professional development among all employees. We propose nurturing this culture through a set of specific, concrete measures.

Faculty hiring, retention, and promotion practices are pivotal in determining UW's future. While UW's culture of excellence in hiring has grown more robust over the past decade, several issues related to retention and advancement are persistent sources of concern.

Action Item 64 Clarification of policies governing faculty reappointment, tenure, and promotion. The Faculty Senate will continue its examination of UW Regulation 5-803, Tenure and Promotion Procedures for University Faculty, and to propose, where appropriate, improvements to the language that guides decisions regarding (1) credit toward tenure for

newly hired faculty members, (2) early tenure or promotion to associate professor, (3) institution-wide criteria for promotion to professor, and (4) department-level voting rights, including policies governing the rights of academic professionals to vote in faculty reappointment, tenure, and promotion cases.

Action Item 65 Faculty salaries at or above the fiftieth percentile of those prevailing at public research universities. UW's President; Vice President for Academic Affairs; and Vice President for Government, Community, and Legal Affairs will continue to pursue funding strategies that enable faculty salaries, when averaged by discipline and rank, to reach or exceed the fiftieth percentile of salaries prevailing at public research universities. To complement this endeavor, the Vice President for Academic Affairs will consider, through consultation with the Faculty Senate and academic deans, an increase in the mandatory raise associated with promotion to full professor, from 10 percent to 20 percent.

Action Item 66 Professional support for academic employees working outside the Laramie campus. The Dean of Outreach will:

- 1. Develop a policy statement on university-, college-, and department-level responsibilities in ensuring that faculty members and academic professionals assigned to positions outside UW's Laramie campus have opportunities for professional advancement that are commensurate with those of their Laramie counterparts.
- 2. Review drafts of all letters of offer and job descriptions for incoming faculty members and academic professionals whose primary assignments are outside the Laramie campus or in departments having significant outreach responsibilities, to ensure consistency with the policy statement described in item 1.
- 3. Acting as Associate Provost, have authority to provide advice to the Provost on reappointment, tenure, promotion, and extended-term review cases involving faculty members and lecturers whose primary assignments are outside the Laramie campus, to help ensure consistency of the review with the policy statement described in item 1.

To help address the reporting requirements of accreditation organizations, to promote greater fairness in faculty performance evaluations, and to document UW's scholarly contributions, we propose exploring electronic systems for updating, reporting, and tracking professional accomplishments of faculty members and academic professionals.

Action Item 67 Common electronic system for updating, reporting, and tracking professional accomplishments of faculty members and academic professionals. The Office of Academic Affairs will sponsor a pilot study examining electronic systems for tracking the accomplishments of faculty members and academic professionals in teaching, scholarship, service, outreach, and extension. Such a system ideally would support student projects, departmental and college self-assessment, research dissemination, and promotion of student careers. A key attribute of any system adopted is that it must be interoperable with the electronic research administration system discussed below.

Action Item 68 Electronic research administration system. The Office of Research and Economic Development will identify and implement an electronic research administration system to track the fiscal and administrative aspects of external research awards.

UW's practices in budgeting for classified staff positions leave little room for adaptivity or responsive decision-making as staff support needs evolve. A key step for 2009-2014 will be to develop an effective system for central staff position management, which will allow the allocation of some fraction of the resources associated with vacated staff positions. Preliminary estimates suggest that collecting only the salary dollars in excess of those needed to refill at the entry level for each pay grade could yield roughly \$1 million per year in institution-wide capacity to make decisions about the

staff salary budget. Thus it may be possible to add new staff positions each year — or to reallocate to other purposes the money left over from refilled positions — without requiring the reallocation or elimination of existing staff positions.

Action Item 69 Central staff salary management. The Vice President for Administration, in collaboration with other vice presidents, will develop a system for the central management of salary resources and benefits associated with classified staff positions. The purpose of the system will be to allow for decisions about some fraction of the resources freed when staff positions become vacant. The initial system will focus on potential uses of the differences between salary and benefits left by departing employees and those needed to refill their vacancies at the entry level.

The remarkable growth in UW's endowment during the past decade is attributable in part to a motivated and well coordinated set of college development officers. To build on this success, we urge the UW Foundation, in collaboration with college deans, to examine mechanisms for increasing the support for and central coordination of UW's fundraising enterprise.

- Action Item 70 Central funding and support for college development officers. The Vice President for Institutional Advancement, in collaboration with the Vice President for Academic Affairs and affected academic deans and directors, will explore mechanisms for (1) unifying the funding for college development officers' salaries and benefits, (2) greater coordination between the fundraising efforts of the UW Foundation and those of the academic deans and directors, and (3) protocols for early reconciliation of fundraising efforts when university-level objectives appear to compete with college- or unit-level objectives.
- Action Item 71 Assigning development officers to smaller units. The Vice President for Institutional Advancement, in collaboration with the Vice President for Academic Affairs and the directors of affected units, will assign development officers to support the fundraising activities of academic units that are not large enough to support full-time development officers of their own. Among the potentially affected units are the Haub School of Environment and Natural Resources, the Honors Program, the Ellbogen Center for Teaching and Learning, the Graduate School, the Wyoming Geographic Information Science Center, and the School of Energy Resources; however, this list is not necessarily exhaustive.
- Action Item 72 Searchable alumni database. The Vice President for Student Affairs, in collaboration with the UW Alumni Association, the Vice President for Institutional Advancement, and the Vice President for Information Technology, will design and develop a searchable database of UW alumni, including their UW departmental affiliations and current professional activities.

Overarching all aspects of UW's human capital is the institution's commitment to ethical practices. This commitment, a matter of principle but also of compliance with federal law, mandates a review of our existing policies.

Action Item 73 Advancement of ethical business practices. The Office of Research and Economic Development and the Office of General Counsel will develop and present for adoption a UW Code of Ethics and a revised institutional policy on conflicts of interest.

Building excellence in capital facilities and infrastructure

UW is committed to the capital facilities planning process begun in 2000. We will continue to update that plan⁷ and to push for the high-priority projects that it identifies, to the extent that realistic funding strategies permit.

⁷The current version of the plan is viewable at http://www.uwyo.edu/administration/cfp/CFP%20with%20pictures%2012406.pdf.

- Action Item 74 Facilities planning. UW will continue to pursue and refine its capital facilities plan. For the five-year period 2009-2014, capital facilities projects fall into three tiers:
 - 1. Tier 1: Projects under way. Included in this category are projects that appear in the capital facilities plan and for which at least partial funding and planning are in place. Among them are:
 - The **Fine Arts facilities**, including a new art building near the Art Museum and renovation of the existing Fine Arts building for use by the performing arts departments.
 - The Berry Biodiversity Conservation Center, including space for instruction and public education related to conservation biology as well as space for graduate education through the Program in Ecology and the Stable Isotope Laboratory.
 - The School of Energy Resources facility, including space for some faculty members and graduate students with energy-related expertise, interdisciplinary teaching and research, high-level computational resources, and appropriate centers funded through the Institute for Energy Research.
 - A biosafety level-3 (BSL3) laboratory, including space for research on high-risk wildlife and livestock diseases.
 - The **Riverton outreach facility**, which will provide an improved learning environment for UW students in Fremont County.
 - The completion of the **Kendall House**.
 - Continued renovation and improvement of existing classrooms.
 - **2.** Tier 2: High-priority projects not yet under way. Included in this category are projects that will have high impact on the university's mission but for which funding is not currently in place. Among them are:
 - A science teaching laboratory facility, which would provide modern laboratory space dedicated to instruction in entry-level laboratory courses and relieve some of the pressure on research laboratory space.
 - Half-Acre Gymnasium expansion, which will advance health promotion among UW students and employees.
 - 3. Tier 3: Other projects. Included in this category are projects that can have a positive impact on the university's mission but for which funding and timing hinge on the development of private philanthropy and possibly on the completion of projects in tiers 1 and 2. Projects currently in tier 3 include but are not necessarily limited to the following:
 - An expansion of the Animal Science Molecular Biology complex.
 - An American Indian Center, to advance interdisciplinary scholarship and promote the recruitment and retention of American Indian students and faculty members.
 - An upgrade of the engineering complex, to improve the functionality and use of space surrounded by the existing multistory buildings.
 - Expansion of the Art Museum to include space for public lectures and programming.
 - Possible expansion of the Early Care and Education Center.
 - A home for the Center for Literacy proposed in the College of Education
 - Outreach facilities in Casper and Cheyenne, shared with the local community colleges and providing improved learning environments for UW students in these counties, as well as some consolidation of UW operations in Natrona and Laramie Counties.

 Facilities identified in the Division of Athletics multi-year staging and funding plan.

To be realistic, it is important to recognize that the projects currently under construction at UW — including the College of Business building, the Information Library and Learning Center, the Student Health-Cheney International Center project, and the College of Law expansion — together with the tier 1 projects identified above — represent more construction than is likely to be completed during 2009-2014.

- Action Item 75 Long-range development plan for UW properties east of 15th Street. The Vice President for Administration, working with other vice presidents and seeking input from the university and Laramie communities, will continue to formulate a long-range development plan for UW properties east of 15th Street. Among the goals of the plan will be (1) siting of future facilities to promote coherent districts for academics, residence facilities, athletics, community and statewide outreach, and other major areas of university activity and (2) a vision for enhancing the physical connectedness of UW's Laramie academic facilities.
- Action Item 76 Comprehensive UW-Laramie transportation plan. The Vice President for Administration will refine and identify possible funding mechanisms for a comprehensive UW-Laramie transportation plan. The plan will (1) enhance the connectedness of UW's Laramie campus, (2) facilitate non-motorized travel on campus and for people for whom it is a feasible way to travel to and from campus, (3) provide more efficient transportation for employees who must commute to campus, and (4) promote better transportation for the Laramie community.
- Action Item 77 Administrative role for WyGISC. To support UW's long-range development and transportation plans, the Vice President for Administration and the director of the Wyoming Geographic Information Science Center will implement an agreement to support a standing role for WyGISC in administrative applications of geographic information science (GIS), possibly involving several vice-presidential divisions. This agreement should recognize the importance of GIS to UW's role in research and economic development.
- Action Item 78 Sustainable and energy-efficient operations. The UW Sustainability Committee will develop a set of initiatives to advance UW's 2007 agreement to participate in the American College and University Presidents' Climate Commitment. These initiatives should include (1) a set of measures to upgrade existing buildings, relying in part on UW's major maintenance budget; (2) a set of principles to guide the design and siting of new buildings, coordinated where appropriate with the long-range development plan; and (3) a set of recommended operating practices that UW can realistically implement by 2012.

What happens in and around UW's capital facilities is at least as important as the buildings themselves:

- Action Item 79 Safety, security, and emergency response. The Vice President for Administration will continue to implement measures to improve the safety and security of UW's facilities, to codify UW's emergency response plans, and to ensure that there is an appropriate core of employees trained to execute those plans if the need should arise.
- Action Item 80 Protection of computer privacy and personal data. The Vice President for Information Technology will implement state-of-the-art measures to protect the computer privacy and personal data of UW students and employees who use UW's data network.
- Action Item 81 Classroom, laboratory, and instructional technology support. The Vice President for Academic Affairs, Vice President for Administration, and Vice President for Information Technology will:

- 1. Identify key recommendations in the Classroom Technology Advisory Committee's 2009 report on classroom and instructional technology support and identify possible mechanisms for funding them.
- 2. Review the department-level budgets available for instructional equipment in the laboratory sciences and fine arts studios, to determine UW's long-range needs in these sectors of the curriculum and to identify stable funding mechanisms.

Action Item 82 Administration of academic shops. The Deans of Arts and Sciences and Engineering and Applied Science will develop a coordination plan for the shops administered by these two colleges. The purpose of the plan is to identify activities in which the two shops can share workloads and facilities as well as activities in which each shop has unique, college-specific responsibilities and needs.

With respect to infrastructure, the most academically central initiative is the University Libraries' commitment — supported by the Wyoming Legislature — to build national-caliber collections. This commitment includes measures, such as the Alliance Digital Repository, that will expand UW's preservation of and access to digital materials. Having enjoyed a recent infusion of new funding for collections, not to mention a new facility under construction, the Libraries have made great progress in this direction. The American Heritage Center has made similar strides, having completed a reassessment of its unique collections and having embarked on new acquisitions in areas of special relevance to its collection plan.

With these new assets come new questions about how to allocate resources to emerging digital sources of information, how to contribute to the national conversation about new forms of scholarly dissemination, and how to maintain the rapidly evolving expertise needed to staff UW's libraries and archives.

Action Item 83 Research collections of national caliber. The Dean of the Libraries will continue to pursue state funding and a collection development plan aimed at positioning UW's libraries as national-caliber research collections. This plan will require thoughtful development of UW's access to and ownership of electronic and digital resources as well as traditional materials, and it will require coordination with the Law Library and the American Heritage Center. Of special importance in the coordination between the Libraries and AHC will be an appropriate division of responsibility for acquiring digital materials, digitization, and the equipment and staffing needed to support them.

Action Item 84 Long-range plan for off-site library collections storage. The Dean of the Libraries will develop a long-range plan for storing seldom-used materials in facilities outside the core of the Laramie campus.

UW's infrastructure extends far beyond the Laramie campus. Given the growth in off-campus enrollments as well as the need to serve Wyoming citizens through the Cooperative Extension Service, Student Educational Opportunity, and Wyoming Small Business Centers, UW's infrastructure planning needs to be statewide in scope.

Action Item 85 Comprehensive statewide plan for learning facilities. The Dean of Outreach will coordinate the development of a comprehensive statewide plan for UW-centered learning facilities. The plan should involve the Cooperative Extension Service, Student Educational Opportunity, and the Small Business Centers run by the Office of Research and Economic Development.

Also important in UW's capital facilities plan are the facilities identified in the strategic plan⁸ for Intercollegiate Athletics, including women's tennis facilities, completion of the War Memorial Stadium upgrades, improvements to Corbett pool and the arena auditorium, and storage space for athletic

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⁸The 2003 Athletics plan is viewable at http://www.uwyo.edu/UW/athleticsplan/draftplan.htm.

equipment. Because of the large costs involved in some projects, it is critical to establish a multi-year prospectus for their completion.

Action Item 86 Multi-year plan for staging and funding upgrades to UW's athletic facilities. UW's Director of Intercollegiate Athletics will develop a multi-year plan for upgrading UW's athletic facilities, including women's tennis facilities, completion of the War Memorial Stadium upgrades, improvements to the Corbett pool and Arena-Auditorium, and storage space for athletic equipment. The plan should include estimates of the funding streams required as well as proposals for sources of funding.

VII. PLANNING MOTIF 5: CULTIVATING LEADERSHIP

Leadership is a commitment to the success of the group. Hence, as a planning motif, leadership spans both the institutional and personal levels. The university itself has a leadership role to play, most prominently in educating people for professions critical to the future of the state and region but also in serving as a reservoir of expertise to help solve the state's most pressing problems. Paralleling the institution's leadership role is the responsibility to cultivate the often intangible aspects of character at the personal level that make good leaders. This mandate seldom appears explicitly in a university's curriculum or in any enumeration of its research or service accomplishments. A key goal for 2009-2014 will be to weave this motif more tightly into the fabric of our students' experiences and our employees' careers.

Few states look so consistently to their flagship universities for leadership. UW is Wyoming's most logical anchor for the professional and civic efforts required to build the "society to match its scenery" articulated in UW's vision. Many of these efforts involve professions critical to the state and region, as these are among UW's most publicly visible vehicles for strengthening communities.

Area of distinction: professions critical to the region's future

Arguably more critical in Wyoming than in other states is the need to align a significant portion of the university's teaching, research, and service with the economic needs of the state and region. Covered in this category are action items related to:

- health care
- education
- business and economic and community development
- law.

Other professions — such as engineering and energy-related professions — are equally critical to the region, but for the sake of coherency the associated action items appear in earlier sections.

Health care

The national landscape in health care includes rapid growth in the number and cost of clinical degree programs. To remain responsive to the needs of the state and region, UW must focus its faculty energies on a strategically circumscribed set of programs and practical experiences, through a comprehensive clinical education plan in the College of Health Sciences. Such a plan is the natural context in which to weigh the costs and benefits of clinically oriented graduate and professional programs and to avoid diverting resources away from the disciplines that are most critical to health care in Wyoming.

Action Item 87 Comprehensive clinical education plan in the College of Health Sciences. The Dean of Health Sciences will develop a plan for clinical education at UW. The plan should contain the following elements:

- An analysis of conceivable clinically oriented graduate and professional degree programs, together with an assessment of their benefits and costs — including opportunity costs — as well as an evaluation of the degree to which each potential program is critical to the delivery of high-quality health care in Wyoming and the region.
- 2. Options for **greater involvement of Laramie-area clinics**, including Student Health, the UW Counseling Center, the Downtown Clinic, Ivinson Memorial Hospital, and private clinics, in the provision of clinical experiences for UW students. The Vice President for Student Affairs will support the expansion of these options by developing clinical practice opportunities at UW for faculty and students.
- 3. Vehicles for more effective involvement by UW faculty members and academic professionals in **statewide policy discussions** related to health care, including closer articulation with the Wyoming Department of Health and the Wyoming Division of Family Services.
- 4. A plan establishing the college's commitments to courses and degree programs offered off campus or via distance delivery.

The analysis in element 1 should include an examination of the costs and benefits of starting a new degree program to offer the Doctor of Nursing Practice (DNP) in the Fay Whitney School of Nursing. The new degree proposal itself should address the following issues:

- 1. **Foundation:** Summarize the existing resources that can contribute to the program, including relevant faculty expertise, existing curriculum, and evidence of student demand. Also summarize the degree to which the program will address the existing and future health care delivery needs of Wyoming and the region, including projections of needs for DNP-qualified nurses at hospitals and private clinics.
- Cost: Summarize the extent to which the new professional program will require resources — including faculty positions, institution-supported graduate assistantships, new or renovated space, new support budgets, new library resources, and new technical facilities — that the College of Health Sciences cannot currently supply.
- 3. **Curriculum:** Summarize the curriculum required for the proposed program, including (a) the unifying core curriculum that will be required of all participating students, (b) any new courses not currently offered, (c) the degree to which these new courses will replace existing courses, and (d) the future viability of existing graduate degree programs at UW if the university starts a DNP program.
- 4. **Interdisciplinarity:** Describe the anticipated levels of involvement of faculty members in key departments that could conceivably be important to the development of a robust and effective DNP.
- Action Item 88 Health-care data sharing and telehealth initiatives. We welcome initiatives by the College of Health Sciences and the College of Engineering and Applied Science to advance the statewide and interstate application of telehealth and telemedicine systems and other forms of data sharing to promote state-of-the-art health care delivery in Wyoming and the region.

Wyoming faces a persistent shortage of primary care physicians. The urgency of the problem suggests a more integrative mission for UW's Division of Medical Education and Public Health.

Action Item 89 Recruitment, training, and career placement of physicians. UW's Director of Medical Education will advance the recruitment, training, and placement of physicians through a set of measures that may include but need not be limited to the following:

- 1. **Recruitment.** Systematic recruitment of students into the premedical curriculum, possibly taking advantage of related institutional initiatives associated with INBRE grants, statewide outreach efforts in the Graduate School, and cooperative efforts with other state-funded recruitment programs.
- Expanded WWAMI eligibility. Exploration, in cooperation with the Vice President for Government, Community, and Legal Affairs, of possibilities for extending eligibility for the Washington-Wyoming-Alaska-Montana-Idaho (WWAMI) medical program to include nonresident students who complete their baccalaureate education in Wyoming.
- 3. **MCAT preparation.** Refinement, as appropriate, of the Medical College Admission Test (MCAT) preparation course currently offered to aspiring medical students.
- 4. **Residency incentives.** Incentives for WWAMI medical school graduates to pursue family medicine residency training in Wyoming.
- 5. **Incentives for Wyoming practice.** Incentives for post-residency physicians to establish practices in Wyoming and for practicing Wyoming physicians to remain in the state.

A 2005 business plan for the potential uses of UW's WWAMI loan repayment account can provide some of the resources needed to implement these measures.

UW's Family Medicine Residency Centers in Casper and Cheyenne enjoy new levels of state funding and new mechanisms for managing it. To take full advantage of this opportunity, we urge the Division of Medical Education and Public Health to develop strategic plans for the residency centers. These plans must tailor the centers' administrative arrangements, staffing levels, and operations to the state's need for primary-care physicians and to the specific settings of their communities.

Action Item 90 Strategic plans for the Cheyenne and Casper Family Medicine Residency Centers. Orchestrated by the Director of Medical Education, the directors of UW's Family Medicine Residency Centers in Cheyenne and Casper will develop strategic plans for the uses of recent and potential future budget increases. In Casper, key issues include the finalization and implementation of a new affiliation agreement with the Community Health Center of Central Wyoming. In Cheyenne, key issues include potential expansion of clinical services to allow for the training of more residents. An issue facing both residency centers is the adoption of electronic records systems that can streamline the centers' business practices and help facilitate the adoption of telehealth systems throughout the state and region.

UW has wide-ranging expertise in mental health disciplines. To build on this expertise, we urge faculty members in the relevant departments to form an interdisciplinary mental health collaborative, spanning expertise in the Colleges of Health Sciences, Education, Agriculture, and Arts and Sciences. Such a collaborative can help organize the university's involvement in mental health issues that are widespread in Wyoming's communities.

Action Item 91 Mental health collaborative. We urge the Dean of Health Sciences, in collaboration with the Deans of Agriculture, Arts and Sciences, and Education, to establish a UW Mental Health Collaborative. The purpose of the collaborative is to promote cross-college research and clinical education involving faculty members in these colleges. The collaborative should involve, at a minimum, the School of Nursing, the Division of Social Work, the Center for Rural Health Research and Education, the Department of Psychology, the Department of Elementary and Early Childhood Education, the Department of Counselor Education, and the Department of Family and Consumer Sciences. It should also facilitate the infant mental health initiative being advanced in the College of Education and the Department of Psychology. In keeping with the comprehensive clinical education plan being developed in the College of Health Sciences, the collaborative should explore potential connections with the UW Counseling Center in the Division of Student Affairs.

UW's contributions to health care extend beyond the training of clinical professionals to include the advancement of fundamental research in biomedical fields. Raising the institution's profile in this arena will require continued contributions from the College of Health Science, but it will also require the involvement of faculty members in the Colleges of Agriculture, Arts and Sciences, and Engineering and Applied Science.

Action Item 92 Continued institution-level funding from the federal INBRE program.

The Vice President for Research will oversee the pursuit of follow-on National Institutes of Health funding for the INBRE⁹ program.

Education

Wyoming is fertile ground for improvements in science, technology, engineering, and mathematics (STEM) education — a topic that looms large in national conversations about elementary and secondary education. Existing doctoral programs in the College of Education, ongoing collaborations with science and mathematics faculty, and leadership in the Science-Mathematics Teaching Center provide fertile ground for enhancements in mathematics and science education. UW's new partnership with NCAR suggests an opportunity for truly innovative initiatives to import computational science into the K-12 curriculum.

Action Item 93 Improvements in STEM education. The Dean of Education will build on recent additions of faculty positions in science and mathematics education to strengthen doctoral training in STEM-related education. As part of this initiative, and as a complement to UW's partnership with the National Center for Atmospheric Research, we urge faculty members in STEM-related fields in the Colleges of Education and Arts and Sciences to explore initiatives to import computational science into pre-college curricula.

The College of Education has also become a center for scholarship in literacy, an area in which it appears to be poised for national prominence. Members of the Education faculty have proposed the establishment of a Center for Literacy, to help solidify the college's scholarship and service in this field. A Center for Literacy would provide diagnostic and tutoring services to children and families in the state and region, develop graduate literacy education programs to provide a new generation of leaders in schools and universities, provide professional development for reading and writing teachers, and support important research in literacy teaching and learning.

Action Item 94 Establishment of a Center for Literacy. Building on the College of Education's recent additions to faculty strength in literacy, the Dean of Education will identify steps necessary to establish a Center for Literacy. Central issues to be addressed include the center's mission and its staffing, space, and support-budget needs, as well as reasonable estimates of how the college can meet these needs through (1) redirection of existing resources, (2) identification of possible sources of new space and state funding, and (3) anticipated sources of external funding.

Our nation's rich diversity continues to increase, and our world is increasingly interconnected. Several departments in the College of Education have growing expertise in multicultural and culturally sensitive education, teaching diverse populations, and supporting students learning English as a second language. We endorse the college's discussions about building on this nucleus of expertise.

Action Item 95 Expertise in multicultural and culturally sensitive education. The Dean of Education will identify opportunities to build on an increasing faculty nucleus of expertise in multicultural and culturally sensitive education, including training for future teachers who may work with students for whom English is not the first language.

⁹ See Appendix B.

The College of Education also faces continual pressures to provide lifelong learning and professional development for in-service teachers throughout Wyoming. We recommend that the college develop a professional development plan to define a manageable set of professional development contributions for faculty members.

Action Item 96 Professional development plan in Education. The faculty in the College of Education will establish a professional development plan that will define a responsive yet clearly circumscribed set of expectations for faculty involvement in the professional development of Wyoming's in-service teachers.

Business and economic and community development

A robust economy is essential to attract, develop, retain, and provide employment for Wyoming's future residents and leaders. Small businesses, many of them started by entrepreneurs with science and engineering expertise but little formal business training, employ nearly 70 percent of the state's non-governmental workforce. The College of Business has an important role to play in disseminating business principles, not only for business majors but also for students seeking degrees in other colleges — especially in the Colleges of Engineering and Applied Science, Health Sciences, and Law — and for leaders in existing and emerging businesses.

Action Item 97 Disseminating business principles. Working with other affected deans, the Dean of Business will develop a plan for business-related education for non-business majors. The plan should include short courses, credit-bearing courses, or other vehicles aimed (1) at leaders in existing and emerging businesses in Wyoming and the region and (2) at students seeking degrees in other colleges, such as the College of Engineering and Applied Science, the College of Health Science, and the College of Law.

Action Item 98 Review of professional masters' degree programs in business. The Dean of Business will review the Masters in Business Administration, Master of Science in Accounting, Master of Science in Economics, and Master of Science in Finance with the following objectives:

- 1. Promote **stronger student recruitment** in the interest of increasing student admissions and degree completion.
- 2. Facilitate the adoption of more selective entrance requirements.
- 3. Track and enhance the professional placement of graduates.
- 4. Identify a focused, stable set of **graduate-level concentrations** in areas that may involve coursework and faculty expertise in several departments.
- 5. Explore whether managing and delivering these programs as three distinct, department-centered degree programs provides the **optimal administrative framework** for achieving objectives 1 through 4.

The Office of Research and Economic Development manages and coordinates an array of initiatives supporting economic diversification and development, entrepreneurship, innovation and business incubation. Many of these initiatives provide excellent avenues for colleges and their faculty and students to link to the university's economic and community development activities.

Action Item 99 Student and faculty links to UW's economic and community development activities. The Office of Research and Economic Development will identify avenues through which UW students and faculty can link to and contribute to UW's economic development initiatives. Potential avenues include internships in the Wyoming Technology Business Center and in faculty-initiated business start-ups. Among the academic units that stand to benefit from such links are the Department of Agricultural and Applied Economics,

the Cooperative Extension Service, the Wyoming Geographic Information Science Center, the masters' programs in Public Administration and Planning, and departments in the College of Business and the College of Engineering and Applied Science.

- Action Item 100 State science and technology plan. The Office of Research and Economic Development will work with the Wyoming Business Council to develop a state science and technology plan that delineates and formalizes the university's pivotal role in state-wide economic development.
- Action Item 101 Research park in southeastern Wyoming. The Vice President for Research and Economic Development will construct a proposal for a research park in southeastern Wyoming, including potential links to the Wyoming Technology Business Center. Consistent with UW's emphasis on enriching students' learning experiences, the proposal should include internship opportunities for students in science, engineering, and business-related fields.

Law and public policy

Recent increases in faculty resources in the College of Law provide an outstanding opportunity for enhanced faculty depth in natural resource and energy law, a goal that we see as critical to building a stronger college. Many natural resource issues prominent in Wyoming stand at the cutting edge of the law. Carbon sequestration, wildlife disease management, pipeline siting and economics, impacts of energy development on water resources, and the management of public lands are just a few of these issues. We welcome continued exploration of connections between the college and other academic units, as well as creative thinking about curricular enhancements and degree options.

- Action Item 102 Enhanced faculty depth in natural resource and energy law. The College of Law will establish a stable, nationally prominent complement of faculty expertise and curriculum related to legal issues in natural resources, energy, and water resources. The newly approved joint JD-MA program in Law and Environment and Natural Resources, offered by the College of Law and the Haub School, provides a tangible impetus for this initiative. We welcome continued exploration of connections between the Law faculty and other academic units, as well as additional creative thinking about curricular enhancements, degree options, and external relations in natural resource and energy law.
- Action Item 103 Rural Law Center. We support the proposal by the College of Law to establish a Rural Law Center, to provide service and education to professionals practicing in Wyoming's rural communities and to help prepare law students for rural practice. The proposal should include (1) an identification of the long-term levels of faculty expertise that the college is willing to commit to this focus area, (2) an estimate of the center's budget and funding sources, and (3) an analysis of opportunities that such a center can provide for collaboration with UW faculty members associated with the Masters in Public Administration, the joint JD-MA program offered in cooperation with the Haub School for Environment and Natural Resources, and the Masters in Business Administration.
- Action Item 104 Domestic Violence Legal Assistance Project. When feasible, the College of Law will permanently fund the Domestic Violence Legal Assistance Project as part of its clinical Legal Services Program.

UW is home to an enormous reservoir of faculty expertise in areas of interest to policy-makers. To facilitate the contributions of experts from many disciplines to local, state, and federal decision-making, we advocate the exploration of a policy analysis clearinghouse at UW.

Action Item 105 Policy analysis clearinghouse. The Offices of Academic Affairs and Research and Economic Development will oversee the development of a proposal for a policy analysis clearinghouse. The purpose of the center will be to provide a neutral platform

for the identification of policy issues ripe for deeper analysis and for the assembly of ad hoc teams of experts capable of providing that analysis.

Cultivating leaders

Universities are home to many of society's intellectual leaders, and they help nurture future leaders in all walks of life. This facet of UW's mission suggests a more prominent emphasis on leadership development beyond the traditional setting of the credit-bearing curriculum.

Action Item 106 Fostering student leadership and place-based and service learning. To enrich the learning experience at UW, the Vice President for Student Affairs will pursue two initiatives related to leadership at the undergraduate and graduate levels:

- 1. Establish student leadership as an area of distinction for UW's co-curricular program. This area of distinction will emphasize leadership attributes, civic engagement, and place-based and service learning. This enterprise must draw upon UW's long-standing sources of leadership development, including ASUW, the Minority Student Leadership Initiative, the Outdoor Program, Army and Air Force Reserve Officers' Training Corps (ROTC), and the Office of Academic Support in Intercollegiate Athletics.
- 2. Develop a **long-range strategy for enhancing student leadership.** The strategy should include (a) a review of all existing leadership development programs available to UW students, (b) incentives for participation by a diverse range of students, and (c) an analysis of areas for improvement or programmatic gaps in student leadership development.

The idea of a focused set of areas of distinction in UW's co-curricular program bears further exploration. In particular, UW's geographic setting makes it an ideal institution to adopt outdoor experiences as an area of distinction.

Action Item 107 Outdoor experiences as an area of distinction in Student Affairs. To the extent that funding allows, the Vice President for Student Affairs will expand the support and marketing efforts needed to establish outdoor experiences as an area of distinction for UW's co-curricular program. The Outdoor Program is a natural focal point for this endeavor; however, several club sports and UW's partnerships with the National Outdoor Leadership School and the Teton Science School provide additional avenues for student participation in this arena.

Universities themselves need a steady supply of leaders, not only to assume formal management responsibilities but also to provide day-to-day guidance in tasks that are essential to higher education. To promote lifelong personal growth and to ensure smooth transitions in governance, UW must develop leadership skills and career pathways among UW's faculty and staff. Initiatives of this nature have special importance in the academic arena: while faculty members and academic professionals justifiably insist that their leaders come from the academic ranks, academics' professional training and proclivities often lead them to shun leadership opportunities in their own careers.

Action Item 108 Programs for cultivating leadership skills and career pathways among UW's faculty, academic professionals, and staff. UW will implement the following programs for cultivating leadership skills and career pathways for faculty members, academic professionals, and staff:

1. The Office of Academic Affairs will continue to use funding from the Milgate endowment to support academic leadership development for faculty members and academic professionals.

- 2. The Vice President for Administration will support leadership development programs for classified staff members who aspire to become managers and supervisors.
- 3. The Vice President for Administration will revise the performance evaluation criteria for supervisors and managers of classified staff. The revised criteria will include explicit recognition of measures taken to support their employees' career advancement through credit-bearing and professional development coursework, independent of whether the coursework is related to the employees' current jobs.

Action Item 109 Leadership Wyoming. The Office of Academic Affairs will serve as UW's chief liaison to Leadership Wyoming and will identify measures to promote participation in and contributions to the program by UW faculty members, academic professionals, staff members, and administrators.

VII. CONCLUSION

The future of the University of Wyoming is inextricably linked to the health of the state. As Wyoming's only public university, UW has a responsibility to make Wyoming and the Rocky Mountain region an environment where people embrace higher learning, where citizens enjoy opportunities for rich and rewarding lives, and where arts, creativity, and the entrepreneurial spirit flourish. Our challenge is to maintain relevance and connectedness. Indeed, it is to go further: we owe it to our constituencies not just to be responsive but actively to *build* a society that sustains thriving, intellectually and culturally vibrant communities. UW must be the catalyst, providing the access, promoting human excellence, and demonstrating the leadership needed to create the future.

Líttle bít harder, just a líttle bít more, A líttle bít further than you've gone before.

Robert Hunter

APPENDIX A: TIMELINE FOR UNIVERSITY PLAN 3

AY 2006-2007: Propose main issues through presentations in various forums.

October 2007: First position paper, Creation of the Future 1, from Academic Affairs.

Department-, division-, and college-level conversations, feedback to

Academic Affairs.

April 2008: Second position paper, Creation of the Future 2, from Academic Affairs.

Department-, division-, and college-level conversations, feedback to

Academic Affairs.

August 2008: Third position paper, Creation of the Future 3, from Academic Affairs.

1 October 2008: Due date, first draft of department-level plans to college deans.

1 November 2008: Revised draft academic department plans to Academic Affairs. Draft college

plans due in Academic Affairs. Draft division-level plans to vice presidents

November 2008: Discussions of draft academic plans between academic deans and directors

and Academic Affairs. Discussions of division-level plans in Executive

Council.

January 2009: First draft of university plan.

March 2009: Final drafts of all plans.

May 2009: Approval by UW Board of Trustees.

APPENDIX B: LIST OF ACRONYMS USED

Acronym	Definition
AHC	American Heritage Center, UW's archives
AP1	Academic Plan 1, covering the period 1999-2004
AP2	Academic Plan 2, covering the period 2004-2009
ASUW	Associated Students of the University of Wyoming, UW's elected student government
BBHC	Buffalo Bill Historic Center, a historical research center and set of museums in Cody,
BSL3	Wyoming Biosafety level 3, a standard of biocontainment required for clinical analysis and research on organisms that can cause serious or lethal disease in humans.
CES	Cooperative Extension Service, a program sponsored by the U.S. Department of Agriculture to deliver non-credit bearing outreach throughout the state
COACHE	Coalition on Academic Careers in Higher Education, a research project centered at Harvard University to examine pressures facing early-career faculty members
DNP	Doctor of Nursing Practice, a clinical doctorate (as distinct from a research doctorate)
ECTL	Ellbogen Center for Teaching and Learning
ENR	Environment and natural resources
EPSCoR ESL	Experimental Program to Stimulate Competitive Research, a National Science Foundation program to strengthen scientific research and education without undue concentration
HBCU	English as a Second Language Historically black colleges and universities
GA	,
GIS	Graduate assistant, a position that allows some graduate students in certain programs to earn a stipend while they work and study Geographic information science
IGERT	Integrative Graduate Education and Research Traineeship, a National Science
INBRE	Foundation program to improve graduate students' preparation for academic careers Institutional Development Award Network for Biomedical Research and Education, a program of the National Institutes of Health, analogous to EPSCoR, focusing on biomedical research and education
IPO	International Programs Office
LeaRN	Learning Resource Network, an organization at UW established through AP2 to promote baccalaureate student success outside the confines of specific academic departments
MCAT	Medical College Admission Test
MCLS	Molecular and Cellular Life Science, a doctoral program adopted at UW as part of the implementation of AP2
NCAR	National Center for Atmospheric Research, a federally funded research and development center that has a long-standing commitment to high-performance computing
NSF	National Science Foundation
P-16	Preschool through baccalaureate
PACMWA	President's Advisory Council for Women's and Minority Affairs, a council established in 2000 to provide broad advice to the president on issues related to ethnic minorities and women at UW
PiE	Program in Ecology, an interdisciplinary graduate education and research program established at UW as part of the implementation of AP2
ROTC	Reserve Officer Training Corps, a program that trains future military officers at civilian colleges and universities

SER School of Energy Resources, established at UW in 2006

STEM Science, technology, engineering, and mathematics

UP3 University Plan 3 (this document)

USP University Studies Program, UW's core baccalaureate curriculum.

WyGISC Wyoming Geographic Information Science Center, a research and service center

dedicated to the dissemination and analysis of spatial data, especially related to

Wyoming's geography

WWAMI Washington-Wyoming-Alaska-Montana-Idaho, a consortium of northwestern states

with agreements to train medical students at the University of Washington School of

Medicine

WYLD Wyoming Library Database, a resource-sharing cooperative among Wyoming libraries

The task of the university is the creation of the future, so far as rational thought, and civilized modes of appreciation, can affect the issue.

Alfred North Whitehead