ENRICHING THE UNIVERSITY OF WYOMING LEARNING EXPERIENCE

A Thematic Self-study

Prepared for the Higher Learning Commission for a comprehensive evaluation and visit March 1-3, 2010

The University of Wyoming Self-study is available in PDF format online. The Web site also contains additional documentation and supporting materials.

www.uwyo.edu/accreditation



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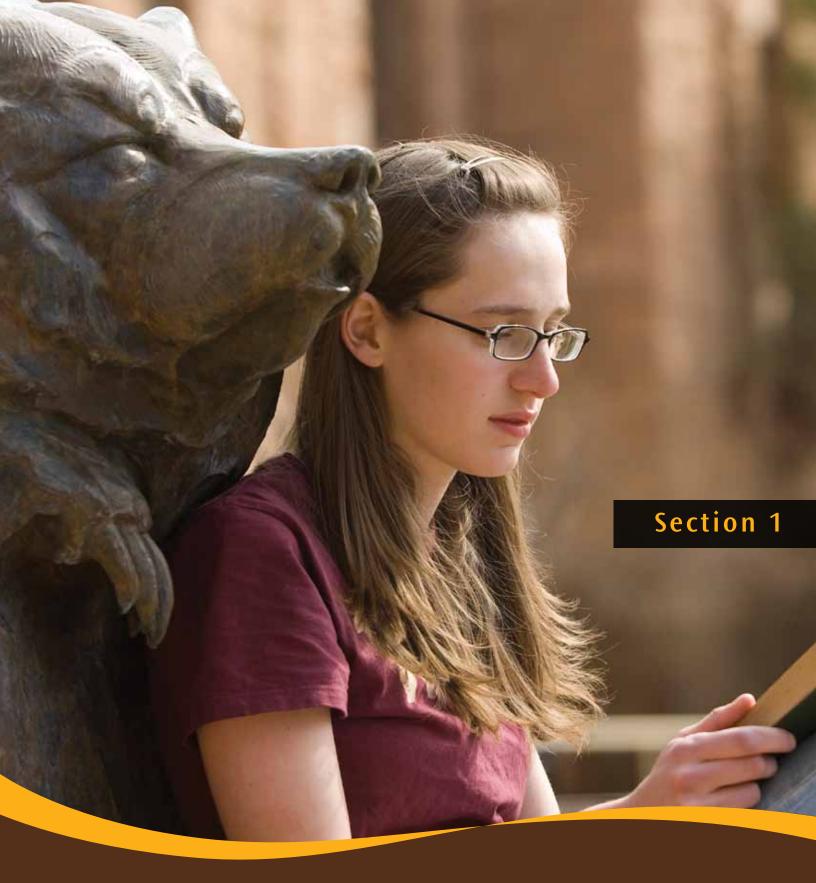
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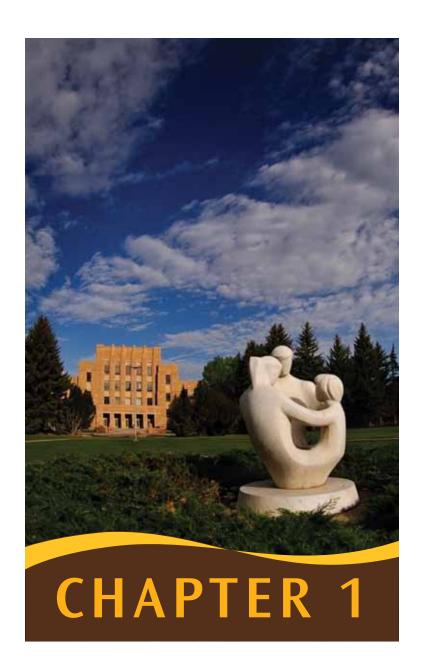
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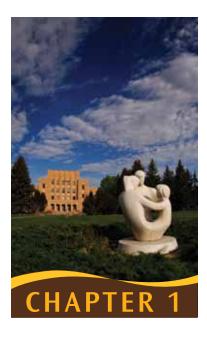
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Overview of University Self-study and Planning Processes



Overview of the University of Wyoming and Introduction to the Self-study



"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."

> —University of Wyoming Mission Statement (2009)

Overview of the University of Wyoming and Introduction to the Self-study

THE UNIVERSITY OF WYOMING, THE DIVERSITY OF ITS LEARNERS, AND THE CONSTITUENTS IT SERVES (Core Components 1a, 1b, 1d, 5a, 5c, 5d)

The University of Wyoming, located in Laramie, opened its doors in fall 1887 when Wyoming was still a territory. The institution was officially established by the territorial legislature in 1886 to "provide an efficient means of imparting to young men and young women, on equal terms, a liberal education and thorough knowledge of the different branches of literature, the arts and sciences, with their varied applications." Funded as a land-grant institution, the university's early administrations worked quickly to establish programs in agriculture, mining, and other practical disciplines to comply with the Morrill Act. (1a) In *Wyoming University: The First 100 Years, 1886-1986*, author Deborah Hardy commends the founding faculty members with this account of their responsibilities: "The position of professor at the University of Wyoming in the early years demanded breadth, specialization, administrative ability, classroom discipline, a willingness to travel, research interests, talent in public relations, and generally, great good humor." University of Wyoming faculty in the 21st century might conclude that this summary remains an accurate characterization of their complex academic lives.

Since the university's inception, it has grown from 42 students and four degree programs to more than 13,000 students with access to 79 undergraduate degrees, 59 master's degrees, 30 doctoral degrees, an Education Specialist degree, the Juris Doctor degree, the Doctor of Pharmacy degree, and 15 certificate programs. It is

UNIVERSITY OF WYOMING MISSION STATEMENT, MARCH 2009

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 co-curricular 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.

home to seven academic colleges: Agriculture and Natural Resources, Arts and Sciences, Business, Education, Engineering and Applied Science, Health Sciences, and Law. The university also includes two schools, the Haub School of Environment and Natural Resources and the recently established School of Energy Resources. Its academic core is enhanced by the American Heritage Center, the Art Museum, the University Libraries, and a variety of specialized collections, several having national or international significance. The university has also extended its service to the state through its Outreach School, which delivers 20 undergraduate and 12 graduate degree programs at the University of Wyoming Casper College Center and through its distance learning delivery systems. The university maintains nine outreach education centers across Wyoming and Cooperative Extension Service centers in each of the state's 23 counties and on the Wind River Indian Reservation. (5a)

While Wyoming is the ninth largest state in the United States, encompassing 97,914 square miles, it supports the nation's smallest population of slightly more than 500,000 people. Since the university's beginning, the state legislature has consistently resisted efforts to establish a second state university, choosing instead to support seven community

colleges. The Wyoming State Legislature continues to be unique among the 50 states in supporting only one provider of baccalaureate and graduate education. As a result, the University of Wyoming is a primary recipient of state and federal funding for research and education. According to the 2008 *State Higher Education Finance* report by the State Higher Education Executive Officers, the university leads the nation in state funding for higher education. Approximately 43 percent of the university's budget comes from the state legislature. In return for this support, the residents expect broad services and expertise. (5d) The university is the academic partner to state government and the state legislature, providing research and knowledge for government initiatives. (1b, 1d, 5c) It also has close connections with the seven community colleges, the Wind River Tribal College, and the state's 48 public school districts. Planning efforts are instrumental in the university's efforts to provide for a variety of constituents' needs while maintaining its high quality performance standards.

Organization, governance, and administrative structure to promote effective leadership

(Core Components 1d, 1e)

The University of Wyoming is governed by its Board of Trustees, consisting of 12 voting members appointed by the governor with the consent of the Wyoming State Senate. The governor, the state superintendent of public instruction, the president of the university, and the president of the Associated Students of the University of Wyoming (ASUW) serve as ex officio members. (1d) The presidents of the faculty and staff senates hold non-voting seats at the table. The university's president oversees the work of the provost and vice president for academic affairs, several directors, and five vice presidents who have responsibility for administration, research and economic development, information technology, institutional advancement, and student affairs. Faculty and staff senates and the ASUW also participate in the activities of institutional governance. (1e) For additional information on the organizational structure, see Appendix A.

A snapshot of the university, 2008-2009

The Carnegie Foundation for the Advancement of Teaching classifies the University of Wyoming's undergraduate profile as full-time four-year with a selective enrollment, a high transfer-in rate, and a high graduate co-existence. It classifies the doctoral graduate programs as science, technology, engineering, and mathematics (STEM) dominant. Overall, the university has high research activity. The following statistics, based on the academic year 2008-2009, further describe the university.

- Total university enrollment: 13,106
- Outreach enrollment: 3,065 (UW Casper College Center: 542; statewide outreach: 2,523)
- Full-time enrollment: 9,254
- Average undergraduate class size: 29
- Student-to-faculty ratio: 14 to 1

- Undergraduate enrollment: 9,603
- Fall-to-fall retention (Fall 2007 new freshmen): 72%
- Graduate and professional enrollment: 3,503
- Undergraduates over 25-years-old: 22%
- Non-resident student enrollment: 27%
- Minority student enrollment: 9%
- New, first-time freshmen: 1,693
- Six-year graduation rate (Fall 2002 new freshmen): 53%
- New transfers: 984
- Degrees awarded: 2,437
- Full-time instructional faculty: 715
- Faculty holding the highest degree in their field: 82%
- Benefitted employees: 3,006
- Increase in extramural funds over the past decade: 88%

A THEMATIC SELF-STUDY ON ENRICHING THE LEARNING EXPERIENCE

(Core Component 4a)

In the past decade, the university has experienced unprecedented levels of financial support from three sources. 1) With its wealth derived from a boom in the extractive industries, the state legislature has invested heavily in the university through such avenues as increased block grant funding, endowed scholarships to students, endowed professorships, capital construction, and matching funds for major gifts. 2) The University of Wyoming Foundation surpassed its goals for a major capital campaign and has continued to attract millions of dollars in gifts and commitments. 3) University faculty have secured record amounts of funding through federal and foundation grants. This self-study is an analysis of how those resources are being utilized to benefit the institution and Wyoming citizens. Our theme of enriching the learning experience focuses on how well the university has integrated effective learning experiences, for all stakeholders, with the overall growth it has experienced during this decade. (4a)

The self-study process

(Core Components 1d, 1e, 2d)

The university began planning for its self-study process in 2007. After careful consideration and consultation with our Higher Learning Commission (HLC) staff liaison, the commission granted approval for a thematic self-study. This report, entitled *Enriching the University of Wyoming Learning Experience: A Thematic Self-study*, is intended to evaluate the effectiveness and extent of the learning opportunities within our researchextensive university environment for students, staff, faculty, administration, and external constituencies. The report also presents evidence to support the university's continued accreditation, and it will be used to communicate to its stakeholders (both internal and external constituents) the university's accomplishments and capacity for future performance. (1e)

The self-study was initiated concurrently with the development of the university's third planning document, University Plan 3, and was completed subsequent to the Board of Trustees' approval of *The Creation of the Future: University Plan 3, 2009-2014* (UP 3). President Buchanan laid the groundwork for UP 3 in his fall 2006 convocation speech by outlining three motifs: improving *access* to higher education, fostering *excellence*, and cultivating *leadership*. Because these motifs became the organizing principles for UP 3, the self-study organizers proposed a thematic self-study around these motifs within the context of three subareas: undergraduate education, graduate education, and professional and lifelong learning. After vetting the idea with university leaders and in consultation with HLC staff, the university decided to engage in this thematic self-study to tie its planning, budgeting, and accreditation efforts together. (2d)

The university's self-study process officially began in spring 2008. The Office of Academic Affairs provided the overall leadership for the self-study process, with Associate Provost Abernethy serving as chair of the HLC Self-study Steering Committee. The committee consisted of nine co-chairs leading ad hoc self-study subcommittees created for this thematic process. The committee also included representatives from the Office of the President, Office of Institutional Analysis, Office of Academic Affairs, the University Libraries, the Division of Student Affairs, and others. President Buchanan invited identified faculty, staff, and administrators to serve on the nine subcommittees. The HLC Self-study Steering Committee members are identified in Table 1.1. Each of the nine subcommittees consisted of four to nine members with more than 60 total participants. (1d) For a list of subcommittee members, see Appendix B.

The HLC Self-study Steering Committee met twice a month beginning in spring 2008 to discuss issues and ideas related to the self-study. The nine subcommittees, led by their respective co-chairs, met regularly in person and communicated via email. Numerous faculty, staff, and students contributed information and their perspectives through discussions, interviews, and surveys conducted by members of the HLC Self-study Steering Committee and the nine subcommittees.

The Office of Academic Affairs regularly updated the Board of Trustees on the self-study process, and it provided information to the university community via its Web site and assessment newsletter. In September 2009, the steering committee invited the entire university community to review and respond to a draft of the self-study. Associate Provost Abernethy and committee members organized several group discussions of the draft with faculty, staff, and students, and individual responses were collected electronically and in hard copy. In addition, the university sent postcards to Wyoming residents inviting them to review the self-study on the Web site and to make comments.

Name	Unit
Rollin Abernethy	Academic Affairs (Committee Chair)
Penne Ainsworth	College of Business
Chamois Andersen	Haub School, Ruckelshaus Institute of Environment
	and Natural Resources
Wendy Bredehoft	University Art Museum
Mark Collins	Division of Administration
Maggie Farrell	University Libraries
Andy Hansen	College of Engineering and Applied Science
Sue Koller	Office of Institutional Analysis
Beth McCuskey	Residence Life & Dining Services, Wyoming Union
Jane Nelson	Ellbogen Center for Teaching and Learning
Erika Prager	Office of Academic Affairs
Kim Reichert	Office of the President
Don Roth	Graduate School (former)
Mary Scott	Information Technology
Robert Scott Seville	Outreach School
Audrey Shalinsky	College of Arts & Sciences
Dorothy Yates	Office of Research & Economic Development
Courses Andresia Affaire	

Source: Academic Affairs

Organization of the self-study

This self-study consists of 12 chapters organized in four sections. In Section 1, we introduce the university, characterize the self-study process, and explain the university's planning process. Section 2 contains the self-study proper on enriching the learning experience. Section 3 contains additional evidence that the university is meeting the criteria and core components for budget and federal compliance issues, which are outside the theme of our self-study. Section 4 contains a request to alter our statement of affiliation status in relation to the delivery of distance learning. Most of the chapters conclude with a list of our most significant findings highlighted in the self-study. We also note where key findings align with action items in UP 3.

Section 1

The three chapters of Section 1 underscore the importance of the university's extensive planning processes. Chapters 2 and 3 and Appendix C are intended to serve as a frame for the self-study that identifies the university's emphasis on planning and assessment.

• Chapter 2 contains a summary of *Taking Stock: Reflections on a Decade of Planning* (2009), a document in which the university published the results of two cycles of

planning and assessment. In Appendix C, we include the text of *The Creation of the Future: University Plan 3, 2009-2014*, which is the planning document that governs the next five years of university activities.

• In Chapter 3, we continue the taking stock theme by highlighting the university's progress with the nine specific issues and recommendations from the reaccreditation visit in 2000.

Section 2

The self-study theme of enriching the university learning experience is presented in Section 2, consisting of Chapters 4 - 9. The basis for evidence provided in these chapters was informed by student and faculty surveys, department and program annual reports, institutional data, and annual academic plan and support services plan reports following the last reaccreditation self-study in 2000.

- In Chapter 4, we discuss university faculty and lecturers. We focus on several efforts to increase the quality of the workforce to enrich learning.
- In Chapters 5 7, we study the undergraduate program, emphasizing the themes
 of access, excellence, and leadership with a focus on scholarships, recruitment,
 and transition programs. In Chapter 6, we examine the significant work the university has devoted to quickly engage students in learning. In Chapter 7, we
 study how the university has enriched undergraduate student learning. We end
 by explaining and evaluating the university's work on assessing student learning.
- In Chapter 8, we study the graduate program, again focusing on issues of access, excellence, and leadership. We highlight the role of university planning and examine the role of graduate student teaching and research. An assortment of funding issues is also examined.
- Finally, in Chapter 9, we study the university's role in lifelong learning throughout the State of Wyoming.

Section 3

Section 3 contains three chapters that present additional evidence outside of the thematic focus on enriching the university's learning experience.

- In June 2009, the governor mandated a 10 percent cut in all state agency budgets, a reduction in funding that is expected to be maintained for several years. In Chapter 10, we outline the university's budget structure and explain how we are managing these reductions through our planning processes in order to preserve our gains and minimize the impacts of budget reductions on the institution's academic core.
- Chapter 11 documents the university's compliance with federal law related to higher education.
- In Chapter 12, we provide a brief conclusion with our request for reaccreditation.

Section 4

Section 4 consists of the university's request that the Higher Learning Commission change its statement of affiliation to allow delivery of distance programs without seeking prior commission approval. Distance learning is now a significant part of the university, managed by a fully developed Outreach School that delivers numerous degree programs and certificates.

Additional documentation and supporting materials

The University of Wyoming self-study and accompanying appendices are available online. In addition, the university has provided a variety of additional documentation and supporting materials to assist readers in understanding key statements made within the selfstudy. These additional resources are also available online. The university decided on this online format in order to reduce the amount of paper associated with printing and because it would be easier to update these documents in the future.

The university Web site for accreditation can be found at <u>www.uwyo.edu/accreditation</u>. Readers may download the entire self-study in PDF format or view and print individual chapters. All supporting materials are organized by chapter and are listed in the order in which they appear in each chapter. This format allows the reader to select specific sections of the self-study without having to review the entire document. The accreditation Web site is a public site accessible to everyone. As such, the documents and supporting materials on this Web site were chosen because they are both relevant to the content of the self-study and appropriate for public viewing. Additional documentation will be available to the HLC evaluation team in the site visit resource room.



CHAPTER 2

Academic Planning and Major Developments



"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 baccalaureategranting 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."

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

Academic Planning and Major Developments

ALIGNING PLANNING WITH THE UNIVERSITY'S MISSION (Core Components 1a, 1c, 2a, 2b, 2d)

One of the University of Wyoming's strengths is its ability to turn its academic plans into reality. Academic planning provides for continuous analysis and improvement of learning environments. The university's strategy is to promote discussion among stakeholders, identify key planning issues through iterative documents, and implement concrete action items that advance the guiding principles of the institution. (2a)

Strategic planning is relatively recent to the university's history. Although in 1978 the university developed a long-range strategic plan, former President Dubois initiated a more systematic, sustained approach in 1997. Nine months later, in May 1998, the Board of Trustees approved the university's first academic plan, Academic Plan I, designed to guide the decisions needed to focus and strengthen the institution's teaching, research, and service missions for the five-year period 1999-2004. (2d)

Five years later, the trustees approved Academic Plan II, followed by a support services plan for all non-academic divisions and a capital facilities plan, covering the period 2004-2009. With the recent completion of *The Creation of the Future: University Plan 3, 2009-2014* (UP 3), the university community is now fully engaged in a five-year cycle of an integrated planning process. With this third cycle of planning, the university combined all institutional planning efforts into one process as a way to further strengthen institutional priorities and commitments. The concept of using strategic plans to guide important institutional decisions has received broad acceptance among the university's leadership, faculty, staff, and students. (1a, 1c, 2d)

The university plan focuses on the most important institutional goals. That focus provides the basis for resource allocation decisions as well as for new resource requests at all levels across the university. Of crucial importance in implementing the academic plans has been a system of central position management (CPM) for faculty position allocation. Under this system, vacant academic lines revert to the Office of Academic Affairs for possible reallocation. College deans submit ranked requests and then meet as a group with the provost and associate provosts to discuss the degree to which each request aligns with the university's mission and major planning motifs. The strategic plan also guides the university through recent budget reductions, which are dependent upon the Wyoming economy in 2009 and 2010. (2b)

The university has completed more than 90 percent of the action items in Academic Plans I and II. Annual progress is documented for the university community and its external constituents by academic plan implementation report cards, demonstrating that institutional priorities, decisions, and resource allocation stem from the university plans. (2b) Academic Plans I and II, with their accompanying support services and capital facilities plans, have altered the university with a number of specific outcomes outlined in this chapter. In addition, our institutional credibility, verified to internal and external constituents, has been enhanced due to its increased communications and transparency with the planning process over the past decade. (2d)

PLANNING FOR A DIVERSE FUTURE: THE UNIVERSITY'S AREAS OF DISTINCTION (Core Components 1c, 2b, 2c, 2d)

Planning over the past decade has allowed the university to define and pursue a set of areas of distinction. For each area of distinction, the University of Wyoming has a sustained commitment to excellence in teaching and learning, inquiry, scholarship, and outreach. (1c)

This concept of areas of distinction has created some tension. The university's status as Wyoming's only public university suggests a mandate to respond to all external constituents. However, the university is relatively small for a public land-grant university, too small to be excellent in all things. Areas of distinction allow the institution to focus its resources strategically: to build depth, excellence, and international recognition in areas of study that are both globally significant and critical to the state's future. (2d)

The philosophy of focusing on distinction first appeared in Academic Plan I, which emphasized areas of inquiry that capitalized on Wyoming's geographic, historical, and cultural assets and on strategic opportunities to help build a sound future for the state. Academic Plan II affirmed, refined, and strengthened these opportunities. In UP 3, the university continues to focus on the same six areas of distinction. Planning has also delineated a set of core institutional challenges that must be addressed for advancement of the university's stature. The first two cycles of academic planning, including the correlating support service plans and capital facilities plans, helped align the institution's

"Areas of distinction allow the institution to focus its resources strategically: to build depth, excellence, and international recognition in the areas of study that are both globally significant and critical to the state's future." budget decisions, operating practices, infrastructure investments, administrative toolkit, and fundraising activities with its overarching academic goals. They also solidified the university's commitments to enhance student access and academic excellence, with a focus on student learning, greater diversity, stronger graduate education, internationalization, curricular coherency, outreach, and enrollment management. (1c)

In 2009, the university produced and distributed *Taking Stock: Reflections on a Decade of Academic Planning.* This document provides a report card of the university's accomplishments related to areas of distinction over the past decade. (2c) Because these achievements have been a critical part of reflection during this self-study, we include a summary of *Taking Stock* and some updates of the university's achievements in the following sections. In Chapters 4 - 9 of the self-study, we revisit some of these achievements in the context of enriching the learning experience. (2b)

Critical areas of science and technology (Core Components 2a, 2b)

Of major significance was the creation of a new School of Energy Resources (SER), established and funded in 2006 by the Wyoming State Legislature. SER currently receives \$10 million per year in legislative funding to bolster academic and research activities in the university's seven academic colleges and to conduct state and national outreach efforts in energy-related fields. SER's budget supports a dozen new faculty positions, visiting scholars, graduate assistantships, interdisciplinary curricular innovations, and enhanced connections with Wyoming's community colleges and school systems. It also provides seed money for energy-related research centers. (2a, 2b)

Partnerships with external constituents help align the university's planning with real world needs. Complementing the development of the SER is a new partnership between the university and the National Center for Atmospheric Research (NCAR). Based in Boulder, Colorado, NCAR is a federally funded research and development center with a tradition of world-class leadership in high-performance computing that spans over four decades. Under the partnership, announced in January 2007, NCAR will locate its next supercomputer in Cheyenne, Wyoming. Under the terms of the partnership, the university will have access to 20 percent of the computer time. But the partnership has deeper implications: the university and NCAR are now engaged in scientific collaborations that have enabled the institution to hire new faculty members in areas related to computational science and biosphere-atmosphere interactions.

Another recent collaboration is the university's partnership with General Electric to develop a High Plains Gasification Advanced Technology Center in eastern Wyoming. Approved by the Wyoming State Legislature, the center will be designed to explore the application of clean coal technologies to the grades of coal mined in the Powder River Basin at the altitudes prevailing in Wyoming's coal basins. (2a)

Part of this academic area of distinction in science and technology is the development of a computational science degree program, which is expected to draw additional students to the institution. Another advance in this area is a new computer tomography X-ray scanning laboratory in the Department of Chemical and Petroleum Engineering, which will help create knowledge critical for optimizing the production of oil and gas from fields in Wyoming and around the world. (2a)

Cultural assets, arts, and humanities (Core Components 2a, 2b, 5c)

One of the university's most prominent accomplishments has been the establishment of a new Master of Fine Arts degree program in creative writing. This program builds on the Department of English's long tradition of attracting prominent poets, fiction writers, and nonfiction writers to its faculty, and while in its infancy, it has begun to attract nationally recognized faculty and students of writing from all over the country. (2a)

In 2006, the Wyoming State Legislature established the \$105 million Wyoming Excellence in Higher Education Endowment, \$70 million of which was designated for creating several endowed faculty chairs. The university designated two of these to support permanent visiting positions in the arts and humanities: the Eminent Writer-in-Residence chair, held first by Terry Tempest Williams and then by Joy Williams, and the Eminent Artist-in-Residence chair, recently filled through a year-long visit by prominent theatrical actor and director Bill Bowers. The Artist-in-Residence complements the nearly annual appearance of university faculty and students in the selective national competitions at the Kennedy Center American College Theatre Festival. (2b)

The university's commitment to excellence in the arts includes funding from the state legislature to plan a new Fine Arts Center. When completed, the new and remodeled facilities will furnish the fine arts departments with improved learning spaces for students. (2b)

The Art Museum has strengthened its relationship with the art department and other departments and colleges, especially the College of Education, and has extended its mission to enrich education communities throughout the state. The premier example of this new form of outreach is the addition of a master teacher to the museum. Funded at first by the Art Museum National Advisory Board and subsequently by a challenge grant from the Wyoming Excellence in Higher Education Endowment, this program introduces K-16 students, teachers, and faculty to new concepts in interdisciplinary and arts education supporting shared educational goals. (5c)

Environment and natural resources

(Core Components 2a, 2b)

The university has a long history of expertise in environment and natural resources. This area of distinction encompasses interdisciplinary coursework, research, and policy discourse on issues such as land use, water, wildlife, climate, and energy-environment linkages. When Academic Plan I was adopted in 1999, the Haub School and Ruckelshaus

Institute of Environment and Natural Resources (ENR) were programs with much unrealized potential. (2a) As a result of the planning process, faculty members established environment and natural resources as interdisciplinary undergraduate and graduate majors, both of which are affiliated with disciplinary majors, providing an organizational commitment to environmental and natural resource issues. (2b)

The university's sustained focus on ENR has prompted the allocation of new faculty positions in a range of departments in several colleges. The ENR Spicer Chair position emphasizes collaborative processes in natural resources decision-making. The College of Engineering and Applied Science is now home to the Cline Chair, a distinguished faculty position dedicated to interdisciplinary work with the Haub School and the Wyoming Excellence Chair in Ecological Climatology, a position that promises to strengthen the university's partnership with NCAR. (2b)

The excellence of ENR teaching and research programs at the university has attracted substantial support in the form of private gifts in recent years, including a \$3 million gift and endowment from Ervin and Helga Haub for the School of Environment and Natural Resources. Another gift by Donald and Bim Kendall is financing the renovation of a building that will be one of the first green buildings on campus and the new home for ENR. (2b)

The College of Agriculture and Natural Resources has steadily strengthened its depth in ENR-related teaching and research through faculty commitments from the Department of Agricultural and Applied Economics. The College of Business has continued to support an internationally recognized graduate program in resource economics, and it has begun to weave concepts related to sustainability into its curricular and faculty hiring goals in the Department of Management and Marketing. (2a)

History and culture of the Rocky Mountain region (Core Components 2a, 5b)

Several social science departments, the American Heritage Center, the University Libraries, and the Art Museum house substantial collections and staff who demonstrate scholarly expertise in this area of distinction. As an outgrowth of Academic Plan I, the university now offers a PhD degree in anthropology, and in 2007 the new Archaeological and Anthropological Research Facility (AARF) opened on the Laramie campus to house collections, research labs, and classrooms. The university's Archaeological Repository (UWAR) is located in the AARF and functions jointly under the Department of Anthropology and the Office of the Wyoming State Archaeologist. UWAR is estimated to contain more than three million items from at least 25,000 sites found throughout the state. In addition to housing collections from state and private lands, the university is a federally designated repository for archaeological collections recovered from Wyoming's public lands. These collections have been, and continue to be, the basis for scholarly interpretations about human activity on the High Plains and Rocky Mountains that spans 11,500 years of occupation. Partnerships between the Wyoming State Historic Preservation Office and

the Departments of Anthropology and American Studies provide multiple research and internship opportunities for students in the history and culture of the Rocky Mountain region. (2a)

The American Indian Studies program has implemented undergraduate and graduate minors and programs that further scholarly and cultural goals under the guidance and expertise of an expanded faculty. It has attracted a number of highly accomplished new faculty members in recent years from several disciplines. The university has also added a Chicano Studies minor with a public history emphasis in the Department of History that includes partnerships with the American Heritage Center. (5b)

Life sciences

(Core Components 2a, 2b, 3c, 3d)

Through two completed cycles of planning since 1999, the university's broad-reaching presence in the life sciences has become deeper and more focused. At the undergraduate level, the university now has a revitalized, cross-college life science core curriculum for majors, and a suite of innovative courses that provides all lower-division courses for life science majors in three colleges. At the graduate level, the university has distinctive interdisciplinary doctoral programs in ecology (PiE), molecular and cellular life science (MCLS), and neuroscience. These cross-college programs have helped define unifying nucleation sites for a once diffuse array of life science faculty spanning four colleges. (2a)

In 2006-2007 the National Institutes of Health (NIH) awarded \$10.4 million for the second phase of a grant for the Center of Biomedical Research Excellence (COBRE). The Program in Ecology has benefitted from a \$7 million grant from the National Science Foundation's Experimental Program to Stimulate Competitive Research (EPSCoR). The university is entering its second phase of an IDeA Network of Biomedical Research Excellence (INBRE) grant with \$16.9 million awarded in 2009 through the NIH. (2b) The goal of the INBRE program is to boost the state's competitiveness in NIH-funded research oriented toward human biology. The COBRE, EPSCoR, and INBRE programs have all provided important opportunities for undergraduate and graduate student involvement in research. (3c) In addition, the INBRE program provides a link to Wyoming community college faculty and students.

Using resources marshaled through the central position management system, the Office of Academic Affairs has funded core scientific facilities that are essential to high-caliber research in the life sciences. Among these facilities are the Wyoming Geographic Information Sciences Center, the Stable Isotopes Laboratory, the Nucleic Acid Exploration Facility, the Microscopy Laboratory, and the Macromolecular Core Facility. Through a recent gift, the university is now designing the Berry Biodiversity Conservation Center, a facility that will help support and integrate several of these innovations to enhance learning, teaching, and research. (3d)

The Endowment for Excellence in Higher Education has enabled the university to solidify its expertise in keystone areas of the life sciences. Through a prospectus developed by the deans of the Colleges of Agriculture and Natural Resources, Arts and Sciences,

"The COBRE, EPSCoR, and INBRE programs have all provided important opportunities for undergraduate and graduate student involvement in research." Engineering and Applied Science, and Health Sciences, the university has allocated senior, endowment-funded faculty positions in the ecology of atmosphere-biosphere interactions, grassland ecology, biomedical science, and the biology of prion diseases, all of which have special relevance to Wyoming and the Rocky Mountain region. (2a)

Professions critical to the state and region (Core Components 1d, 2a)

Institutional planning has helped the university to align a significant portion of its teaching, research, and service missions with the economic needs of the state and region. (1d) Arguably even more important for Wyoming than for other states, initiatives in education, health care, engineering, business, and law have strengthened the university's contributions to workforce development in these critical professions, which comprise the sixth area of distinction. (2a)

Education (Core Component 5c)

Two statewide initiatives have helped to develop educational partnerships. One initiative is the Wyoming P-16 Education Council, created in 2007, which promotes more seamless transitions as students progress through the state's educational systems. This 15-member council focuses on shared commitments to educational excellence and student success at all levels from preschool through postsecondary. A second statewide initiative is the nationally recognized Wyoming School-University Partnership, whose facilitation of content area and course level articulations between secondary and postsecondary teachers has strengthened and deepened the P-16 Education Council's efforts. (5c)

The College of Education has launched several initiatives to address the impending critical shortage of teachers. The college has filled four endowed chair positions funded by the Endowment for Excellence in Education: two in literacy education, one in science education, and one in mathematics education. In addition, 19 concurrent majors for secondary education-designed to ensure that future high school teachers are highly qualified in their subject areas—are now in place as a result of agreements between the College of Education and Colleges of Arts and Sciences and Agriculture and Natural Resources. In 2003, the University of Wyoming Casper College Center added a degree program in technical education, which is the only bachelor's degree program in the state that helps prepare industrial arts teachers at the middle and high school levels. More recently, the College of Education partnered with Wyoming's seven community colleges and the university's Outreach School to mount a statewide, distance-delivered elementary education degree option, which is currently under consideration for approval by the Higher Learning Commission (HLC). Finally, faculty hiring in the College of Education has bolstered the STEM (science, technology, engineering, and mathematics) disciplines. From 2007 to 2008, students earning certifications in mathematics, science, and special education increased from 37 to 68 students.

Health care (Core Component 5c)

In the health professions, several initiatives completed by the College of Health Sciences have boosted the caliber of health care professional training at the university. These initiatives include a professional pharmaceutical degree program (PharmD), which began in 1997; the introduction of an accelerated BS in nursing for nontraditional students with baccalaureate degrees in other fields; an online RN-BSN completion program, which has drawn site-bound RN-qualified students into the nursing degree pipeline; and increased funding and resident recruiting at the Family Medicine Residency Centers in Casper and Cheyenne. A new minor degree program in disabilities studies is available through the Wyoming Institute for Disability Studies (WIND). In addition to these specific initiatives, the completion of the \$18 million Health Sciences Complex has changed the nature of clinical training, allowing for greater interaction among students in nursing, pharmacy, social work, communication disorders, and the Washington-Wyoming-Alaska-Montana-Idaho (WWAMI) medical program. (5c)

Engineering

(Core Components 2b, 5c)

The College of Engineering and Applied Science has broadened its scope. The college now includes the Department of Computer Science as well as a new major in computer engineering through the Department of Electrical and Computer Engineering. In 2006, the university reinstated the BS in petroleum engineering to meet growing demand and to complement its MS and PhD degree programs in that field. Since then, the college has filled six new faculty positions in the program. (2b) Other new faculty positions include one in coal technologies and one in wind energy. Energy-related technology now plays an important role in the undergraduate degree in architectural engineering offered in the Department of Civil and Architectural Engineering. Through summer school revenues, the Office of Academic Affairs established funding for the Engineering Summer Program for high school students, which draws 30 high school students per year. (5c)

Business

(Core Components 2b, 5d)

The College of Business has a central role to play in the economic and workforce development of the state and region through its undergraduate emphasis on entrepreneurship and its graduate programs in accounting, business administration, economics, and finance. (5d) Initiatives in business that have enhanced the university's impact include the offering of a high-demand Executive MBA program in cooperation with the Outreach School, developing expertise in business ethics with the hiring of a distinguished professor of business ethics, and approval of a PhD in Management and Marketing focusing on sustainable business practices. The 2006 Wyoming State Legislature established three new university positions in sustainable business, and in 2007 the college successfully recruited and filled all three positions. Private donations have included an endowment for the college's career center. In 2007, the Wyoming State Legislature authorized funding for the construction of a \$54 million building to unify the College of Business into a single complex. This building will be Leadership in Energy and Environmental Design (LEED) certified, illustrating the college's support of sustainable business practices. (2b)

Law

(Core Components 1c, 2b)

In 2009, the College of Law appointed a faculty director of the Rural Law Center to provide service and education to legal professionals practicing in Wyoming's rural communities. With tuition revenues, the College of Law has strengthened its curriculum and faculty in legal writing and in the legal clinics by hiring a full-time faculty director of legal writing and a full-time faculty director of the domestic violence clinic (the latter formerly funded by grants). (2b) Tuition revenues have also supported the hiring of a full-time Academic Support Program faculty director to assist students in successfully completing the academic program and preparing for the practice of law. Through an endowed chair, the College of Law has established a significant presence in constitutional law to support its mission. (1c) In addition, recent new faculty positions have allowed the college to strengthen its contributions to the legal aspects of natural and energy resources. A visiting professor position is shared with the School of Energy Resources, with that professor teaching energy law courses at the College of Law, as well as supervising law student graduate assistants in developing an undergraduate course in energy law and policy. The JD/MA program in Law and Environment and Natural Resources started in 2009. Several other new hires will bring expertise in the areas of international law as well as in applied legal skills.

In September 2009, the university held a dedication ceremony for the William N. Brimmer Legal Education Center, a \$4.5 million renovation and addition to the College of Law. This newly expanded instructional area, consisting of three classrooms within the College of Law building, is used for law classes, courtroom hearings, and other events. (2b)

THE UNIVERSITY'S COMMITMENT TO SUPPORTING AND STRENGTHENING EDUCATIONAL QUALITY (Core Component 2d)

In addition to defining the university's areas of distinction, Academic Plans I and II, together with their associated support services plans, have helped focus administrative attention on an array of persistent issues facing the institution. (2d)

Expanding the resource base: The University of Wyoming Foundation (Core Components 2b, 2d)

The University of Wyoming Foundation is an independent nonprofit corporation established to secure, manage, and steward private gifts in support of the university's mission. (2d) The foundation's average private giving over the past six years exceeded \$30 million per year, with \$35.9 million contributed in FY 2009. The number of endowments increased from 450 in 1999 to 1,113 in 2009. The value of endowments increased from \$136 million to \$225 million over this period. Throughout the self-study, we also provide evidence of the positive impacts of the state legislature's commitment to match private gifts. From 2001 to 2009, this commitment has supported university students, faculty, programs, and facilities with \$140.2 million in matching funds. (2b)

Creating a culture for student learning

(Core Components 3a, 3d)

Beginning with action items identified in Academic Plan I, the university revised and strengthened its general education program, the University Studies Program (USP 2003), and made substantial additions to its infrastructure to better promote academic success among students. USP 2003 was both streamlined and strengthened by the addition of requirements in oral communication, information literacy, and diversity in the U.S. Faculty members on the USP Committee review courses every three years to ensure the courses are aligned with the learning outcomes for a particular requirement. The USP Committee has also established a regular schedule for assessment, which will serve as the basis for curricular revision and cross disciplinary discussion of pedagogy. (3a)

The university has also made significant headway in creating an institutional culture focused on student learning through its assessment efforts. With the leadership of the university assessment specialist and the University Assessment Coordinators Committee, along with the work of several deans, department heads, faculty, and staff, a majority of the university's academic units now have functioning assessment processes and have begun to connect student learning outcomes and the results of assessment with pedagogical and curricular revisions. These efforts require different ways of thinking about teaching and learning, and the university's active participants and key leaders are making notable strides in demonstrating the benefits of well-grounded, continuous assessment cycles. (3d)

Supporting diversity

(Core Components 1b, 1d, 2a, 2b, 5c)

Diversity enriches the learning environment, helps ensure the broadest possible development of human talent, and helps cultivate leaders for a civil society. However, increasing the diversity of its faculty, staff, and student body continues to be a challenge for the institution. In recognition of this challenge, in spring 2008 the university appointed an associate vice president for diversity to expand the institutional commitment to diversity initiatives. (1d)

During the implementation of Academic Plan I and its associated support services plan, former President Dubois established the President's Advisory Council on Minority and Women's Affairs (PACMWA) with a broad mandate to explore diversity issues at the university and provided \$75,000 annually with which to sponsor diversity initiatives. (2b) The council has helped fund courses, special programs to retain students of color, initiatives to retain faculty members from underrepresented groups, and a salary equity study in collaboration

"In spring 2008 the university appointed an associate vice president for diversity to expand the institutional commitment to diversity initiatives." with the Office of Academic Affairs. Under the guidance of the associate vice president for diversity, the university reconfigured PACMWA in 2009 as the Strategic Diversity Initiatives Committee. (1b)

A major gift by an anonymous donor permanently funded several diversity initiatives, including the annual Matthew Shepard Symposium on Social Justice, the Martin Luther King, Jr. Days of Dialogue, and the recently established Social Justice Center to support faculty scholarship in areas related to social justice. (2a) These efforts have been significant in raising awareness of diversity issues and fostering a dialogue on social justice beyond the university.

Recently, the university joined with NCAR in signing a memorandum of understanding with four historically black colleges and universities—Hampton University, Howard University, North Carolina A&T University, and Jackson State University—to explore student and faculty exchanges in areas related to climate analysis, geosciences, and computational science. (2a) The goal is to increase opportunities for interactions between diverse populations and share educational objectives.

The Office of Academic Affairs has undertaken several additional measures to promote diversity. An annual \$200,000 funding pool has provided incentives for departments and colleges to diversify their faculty hiring. Initiatives include start-up and early-career enhancements for faculty members of color and female faculty in disciplines where they are underrepresented. This fund also provides bridge funding to facilitate the hiring of spouses and domestic partners in cases where there is strong department support. In 2006, augmenting its other investments in diversity, the Office of Academic Affairs permanently funded a visiting faculty position in the Department of African American and Diaspora Studies to help promote recruitment of faculty members in various disciplines who can contribute to that program's academic mission. (2a)

As called for in Academic Plan II, the Faculty Senate has taken a role in promoting diversity. In 2007, the senate's standing university Tenure and Promotion Committee conducted a study of the rates at which women and faculty members of color earn tenure and promotion, investigating whether there are subtle factors that adversely affect their success. The results did not suggest that female faculty or faculty of color achieve tenure less often than white male faculty, although in some cases promotion to full professor took somewhat longer. (1b)

Other divisions of the university have complemented these efforts. The Division of Student Affairs, for example, established the Multicultural Student Leadership Initiative to cultivate student leaders from a wide range of ethnic, religious, and cultural backgrounds. In addition, the Rainbow Resource Center was established to promote a sense of community among the university's gay, lesbian, bisexual, and transgendered students. Several divisions have helped make the physical environment more accessible to students and employees with disabilities. A disabilities services taskforce recently developed additional recommendations that can help guide the continuation of these efforts in UP 3. The university has

been granted generous state funding, in the form of a major maintenance formula-funded budget established by the Wyoming State Legislature in 2003, to help make older buildings and grounds more accessible. (1b)

While the university undoubtedly has more to accomplish, enrollment trends have been positive in respect to diversity. Growth among ethnic minority undergraduate populations increased by 26 percent since 1999, outpacing the overall undergraduate growth (14 percent) for the same period. (5c)

Strengthening internationalization (Core Components 1b, 2a)

The past decade has seen a transformation in the university's level of engagement in international education. Once characterized by institutionally embedded reluctance to recruit teachers, scholars, and students from other countries, the university now routinely hires the best faculty members it can through searches of international scope. At the same time, the university has strengthened its efforts to recruit international students. In the past decade, representatives of the university have engaged in recruitment trips to such countries as India, China, Vietnam, South Korea, Japan, Malaysia, Singapore, Thailand, Kuwait, United Arab Emirates, and Oman. In fall 1999, the international student population was 303, whereas in fall 2008, the university was home to 544 international students. Upon the recommendation of the International Education Steering Committee, UP 3 includes an action item to increase enrollment to 700 international students. (1b)

The University of Wyoming has also increased its support to the international community on campus. While the university has historically offered a comprehensive orientation program to new international students, new components have been added to provide cultural adjustment support, information about the academic environment, lessons about banking and budgeting, and more connections to current students, both domestic and international. Other services designed to help integrate international students include group and individual tutoring, weekly international coffee hours, weekly e-newsletters, the Friendship Families program, the American Conversation Club, and cultural programs supported by student organizations. (1b)

Initiatives in the Office of Academic Affairs include grants for international study and support for summer and winter break courses abroad. The Department of Modern and Classical Languages now offers regular instruction in Chinese, Japanese, and Arabic, in addition to its traditional offerings in Spanish, French, German, Russian, Latin, and Greek. (1b) A significant measure of the increasing interest in international education is the number of majors in the International Studies Program, which currently stands at 190 students.

Through a gift in 2005 from former Vice President Dick Cheney and his family, the university established an international travel scholarship fund to help support student travel and study abroad. The gift also helped fund a major building renovation for the Dick and Lynne Cheney International Center, a facility in the academic core of campus that has allowed the co-location of international programs, international studies, international

"The past decade has seen a transformation in the university's level of engagement in international education." students and scholars, and English second language programs—all entities that are critical to the advancement of internationalization. Located within the center is an immigration specialist to assist faculty and students with fulfilling additional federal immigration requirements, for which the Office of Academic Affairs provided funding in 2006. (2a)

Supporting external constituencies: Statewide extension and economic development

(Core Components 1b, 5b)

In 2002, the College of Agriculture and Natural Resources developed and began implementing the Cooperative Extension Service's (CES) strategic plan, which enabled it to deliver all of its programs across the state through a system of multi-county extension areas. Focused on five statewide initiatives—nutrition and food safety, profitable and sustainable agricultural systems, sustainable management of rangeland resources, 4-H youth development, and community development education—Cooperative Extension has reinvented itself to respond to state challenges. In 2006, the College of Agriculture and Natural Resources established the James C. Hageman Sustainable Agricultural Research and Extension Center in Lingle, Wyoming, where university faculty and extension educators apply state-of-the-art integrated crop livestock systems research to problems faced by Wyoming producers. (1b)

A number of entities administered by the university contribute to the economic development of the state. The Research Products Center assists with technology transfer through patenting and licensing of university-owned intellectual property. The Wyoming Technology Business Center, a not-for-profit business incubator, provides entrepreneurs with the expertise, networks, and tools they need to make their ventures successful. To date, two businesses have been successfully incubated. The Wyoming Small Business Development Center network provides consulting, training, and resources to businesses throughout Wyoming to help them become more successful and sustainable. It assists qualified Wyoming small businesses and individuals to access federal funding opportunities provided by the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. The university also participates in the Wyoming Workforce Alliance, the Wyoming Business Council, and the Wyoming Economic Development Association. (5b)

Strengthening quality: Educational infrastructure (Core Components 2b, 5c)

A visit to the Laramie campus will provide ready proof of the recent and ongoing improvements to the university's educational infrastructure as the result of legislative appropriations and generous private gifts. New facilities since 1999 include the \$18 million Health Sciences Complex, the \$2.4 million Early Care and Education Center, the \$50 million expansion of Coe Library, the \$15.1 million Archaeological and Anthropological Research Facility (AARF), the \$10.9 million Indoor Practice Facility, the \$8 million University of Wyoming Conference Center, the \$11.4 million Wyoming Technology Business Center, the \$14.7 million Classroom Building renovation, the \$31 million Information Technology Center, the \$2.5 million Honors House, the \$54 million College of Business expansion, the \$4.5 million College of Law expansion, and the \$3.8 million Cheney International Center. (2b)

The Outreach School has worked with several community colleges, including Central Wyoming College, Eastern Wyoming College, and Northern Wyoming Community College District, to remodel and acquire additional space for video conference classrooms and Outreach School offices. Outreach has also worked with city governments and the Wind River Development Fund to deepen the access to distance-delivered degrees in their communities. (2b, 5c)

Supporting student learning: Libraries (Core Components 2a, 2b, 3c)

The 2006 Wyoming State Legislature allocated \$4.3 million in one-time funding and an additional \$1.5 million per biennium to the University Libraries to bolster the collections and to enhance services and collaborations with Wyoming libraries. In 2008, the legislature renewed the one-time funding to a permanent annual increase of \$4.3 million. (2b) Recently, the University Libraries established a digital repository to house universityrelated materials, including undergraduate research projects and graduate theses and dissertations. To address the rapid inflation in subscription costs for scholarly journals, the libraries negotiated highly effective contracts with major serial publishers. The libraries also increased access to research materials, most notably by purchasing access to the Web of Knowledge and by expanding electronic delivery services available through interlibrary collaborations. The libraries currently provide a robust research collection complemented by advanced delivery systems and services. Unfortunately, to help meet the mandated 10 percent reduction in the university's state budget for FY 2010, the university used part of the \$4.3 million allocation to offset approximately one-quarter of the overall \$18.3 million funding reduction. Restoration of this funding for library acquisitions is a high priority for the institution. In fact, the university recently approved a plan for tuition increases, part of which will be dedicated to the library. (2a, 3c)

Supporting student learning: Information technology (Core Components 2b, 2d, 5c)

Academic and support service planning have led to substantial improvements in the university's information and instructional technology infrastructure. In 2003, Princeton University and Forbes magazine ranked the University of Wyoming 13th on their list of "top 25 most connected campuses" for its computer resources and services. The University of Wyoming was the only school in the Rocky Mountain region ranked in the top 25 at that time. As part of the implementation of Academic Plan II, the Division of Information Technology (IT) established the University Technology Planning Council to help guide technology decisions about administrative software (such as the student information

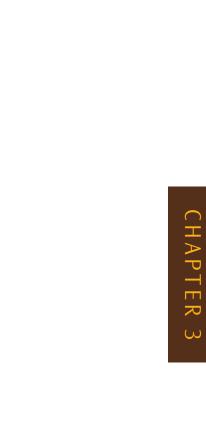
"The libraries currently provide a robust research collection complemented by advanced delivery systems and services." system) and instructional technology (such as the infrastructure needed to deliver online courses). In 2006, the Office of Academic Affairs permanently transferred \$140,000 to IT to support a dedicated office to oversee a rapidly growing instructional technology infrastructure. The Classroom Technology Advisory Committee (CTAC) now provides broad guidance to the director. In addition, the 2006 Wyoming State Legislature provided \$3.2 million in one-time funding and \$3.2 million in recurring funds, in part to support instructional computing and data networking. (2b) In partnership with Colorado's universities, the university has developed the Bi-State Optical Network (BiSON), a high speed, redundant fiber optic system connecting the university to the Front Range GigaPop consortium. These initiatives, together with the university's participation in the nationwide Internet 2 consortium, have laid the groundwork for the university's supercomputing partnership with NCAR. (2d)

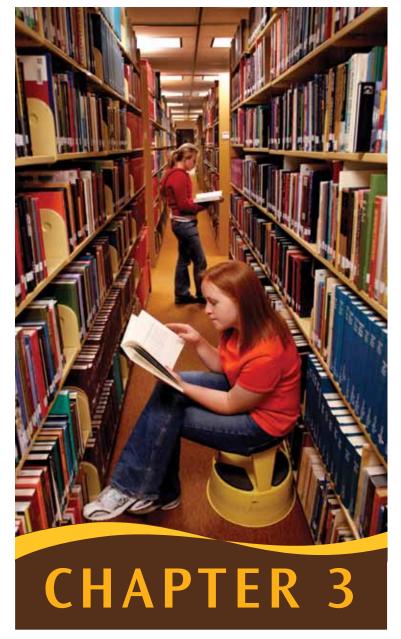
The Outreach School also helped to create a statewide Outreach Video Network (OVN) that delivers distance courses to approximately three dozen sites in 17 different communities across the state. Only two-years old, the OVN system is already recognized as the state's most robust video conference network. (5c)

CONCLUSION AND KEY FINDINGS

The University of Wyoming has experienced a decade of growth and support unparalleled in its history. At the same time, the university embarked on a new, ambitious journey of institutional planning, which has continued to evolve and mature over time. These processes have helped to guide periods of budget growth as well as address recent budget reductions. The university recognizes the following accomplishments:

- Planning has become part of the university's culture. Every major activity and allocation of resources derives from academic, support services, and capital facilities plans. Planning provides a framework for decision-making that is supportive of innovation and change, in both prosperous and unsteady economic times.
- The institution has been guided by academic and university planning processes over the last decade. The commitment to follow institutional plans without significantly deviating from priorities has provided the university immense credibility with its constituents and policymakers.
- The university has the capacity to link budgets with plans. Through internal decision-making mechanisms, such as central position management (CPM) and strong relations with the state's legislative and executive-branch leaders, the university has been able to direct existing resources to high-priority academic and support areas and to make successful, focused requests for new resources. (UP 3 Action Item 1)





Response to the 2000 Comprehensive Review and Visit



"When it comes to program assessment, university faculty love to whine by expressing skepticism about efficacy and cynicism about motivation. Certainly efforts to estimate program success are bedeviled by potential pit falls. ... Despite such caveats, my colleagues and I are motivated by data and the possibility that a database of student achievement can be used to make informed decisions about curricula and program issues."

—Mark Stayton, Chair, Department of Molecular Biology

Response to the 2000 Comprehensive Review and Visit

The 2000 reaccreditation report suggested that the university should actively address concerns expressed about nine areas:

- Gender and ethnic diversity of the faculty
- Low compensation for faculty and staff
- Enrollment decline and recruiting
- Collaboration between the Alumni Association and Institutional Advancement
- Insufficient library resources
- Improvements in graduate education
- Institutional standards for purchase and support of software and hardware
- Stabilization of new and replacement funding for information technology purchases
- Consistent implementation of assessment

In this chapter, we discuss and assess the university's actions related to each of these areas.

GENDER AND ETHNIC DIVERSITY OF THE FACULTY (Core Components 1b, 2a, 2d)

In Chapter 2, we discussed several diversity initiatives, including establishing a pool of funds to encourage hiring women faculty and faculty of color and a permanently funded visiting position in African American and diaspora studies. The university also hired a new employment practices officer in 2004, who was elevated to the position of associate vice president for diversity in 2008. In 2008, the university joined the Collaborative on Academic Careers in Higher Education (COACHE). The first institutional report included some valuable information sorted by race and gender regarding perceptions of tenure-track faculty. A group of faculty and staff reviewed and interpreted the results, which were presented to the Board of Trustees in fall 2008. (See Chapter 4 for further discussion.) (1b)

By 2008, faculty gender balance and ethnic diversity had moderately improved. Women accounted for 18 percent of full professors, 35 percent of associate professors, 41 percent of assistant professors, and 36 percent of total full-time instructional staff. This represents between a 4 to 7 percent increase in each category since 1999. In 2008, 9 percent of tenured or tenure-track faculty members were people of color compared to 5 percent in 1999. While these data reflect some progress, the gender and ethnic diversity of the faculty is still an issue that commands attention in the university's strategic plan. (2a, 2d)

LOW COMPENSATION FOR FACULTY AND STAFF

(Core Components 2b, 2c)

The 2000 reaccreditation report noted that "compensation for faculty and staff lags behind that of peers." Using the American Association of University Professors' *Annual Report on the Economic Status of the Profession* as a measure, in 1999-2000 faculty salaries were well below the average of public doctoral universities: 74 percent of the national average for professor, 82 percent for associate, and 90 percent for assistant. While the university still lags behind the average for U.S. public doctoral universities, there has been significant progress. By 2008-2009, these numbers improved to 88 percent for professor, 93 percent for associate, and 96 percent for assistant. (2b)

These improvements can be attributed to two factors: 1) a more robust economy in Wyoming resulting in more regular state appropriations for salary raises, and 2) special efforts to address faculty compensation. Following a top priority request to the 2006 Wyoming State Legislature, the university was able to administer senior faculty raises in 2007 and 2008, in addition to the regular raises for all faculty and staff. In 2009, despite the economic downturn and attendant budget reductions, Governor Freudenthal explicitly instructed the state agencies to not forego the FY 2010 budgeted salary increases as part of their reduction strategies. As a result, the university proceeded as planned with salary increases in spring 2009.

Salary equity, listed as a concern in the 2000 report, has been the subject of careful review by the provost and vice president for academic affairs. The provost reviews faculty

"Salary equity, listed as a concern in the 2000 report, has been the subject of careful review by the provost and vice president for academic affairs." and academic professional salary data each year in conjunction with the administration of raises, paying particular attention to the salaries of women faculty and faculty of color to ensure they do not systematically fall behind the salaries of male and Caucasian peers. To ensure this review remained continuous, in 2006 the Office of Academic Affairs employed an independent consultant to statistically analyze salary equity for academic personnel. The analysis indicates that salary differences are largely reflective of the salaries of different disciplines, not gender inequity. (2c)

ENROLLMENT DECLINE AND RECRUITING

(Core Components 2a, 2b, 5c)

The 2000 report stated that "enrollment declines have reduced some program areas below the level required for critical mass" and that "successful recruitment and retention strategies are lacking at graduate and undergraduate levels." The report also noted that undergraduate and graduate enrollment had decreased during the previous 10 years (17 percent and 9 percent, respectively). The evaluation team commented that the five-year enrollment goal of 13,000 students might not be reasonable given the expected decrease in the number of Wyoming high school students.

We are pleased to report that the university's enrollment has reached at least 13,000 total students since fall 2003, with the exception of 2007 when numbers fell slightly below that number. With current enrollment at over 13,000, undergraduate enrollment has increased by 14 percent since 1999 with an increase of 8 percent on the Laramie campus. Outreach School enrollments increased 86 percent. Graduate and professional enrollments increased about 30 percent since 1999. (5c) Tables 3.1 and 3.2 provide additional detail about headcounts by site and student level.

Of the total number of students enrolled in classes, three-quarters attend classes on the Laramie campus. The remaining 3,000 students are enrolled in either distance programs exclusively or at the University of Wyoming Casper College Center. Projected increases are attributed to the recent economic downturn as well as to the state's legislatively endowed student scholarship program (see Chapter 5). (2a)

As described in the 2000 report, the university was in the process of reorganizing its student recruiting efforts with a new focus on enrollment management, based on demographic trends as well as organizational capacity. The vice president for student affairs now oversees the Enrollment Management Council, the Center for Advising and Career Services, and the Offices of Student Financial Aid, Admissions, the Registrar, and Student Educational Opportunity. Other actions include the following:

- The permanent addition of \$500,000 to the annual enrollment management budget in 2002 to support student recruiting, marketing, and process improvement. (2b)
- Expanded program and course offerings and delivery by the Outreach School. (5c)
- Increased graduate student recruiting efforts, closely coordinated with the academic colleges. (2a)

Fall 1999 to Fall 2008			
Fall	Laramie	Outreach (including UW/CC)	Overall
1999	9,476	1,650	11,126
2000	9,459	2,284	11,743
2001	9,759	2,643	12,402
2002	9,854	2,912	12,766
2003	9,938	3,224	13,162
2004	9,991	3,216	13,207
2005	9,757	3,369	13,126
2006	9,979	3,224	13,203
2007	9,963	2,912	12,875
2008	10,041	3,065	13,106
10 Year Change	6%	86%	18%

Table 3.1. Headcounts by Si

Source: Office of Institutional Analysis

Table 3.2. Headcounts by Site and Student Level

Fall 1999 versus Fall 2008			
	Fall 1999	Fall 2008	10 Year Change
Laramie Campus			
Undergraduate	7,592	8,212	8%
Graduate/Professional	1,884	1,829	-3%
Outreach (including UW/CC)			
Undergraduate	830	1,391	68%
Graduate/Professional	820	1,674	104%
Overall			
Undergraduate	8,422	9,603	14%
Graduate/Professional	2,704	3,503	30%
TOTAL	11,126	13,106	18%

Source: Office of Institutional Analysis

COLLABORATION BETWEEN THE ALUMNI ASSOCIATION AND INSTITUTIONAL ADVANCEMENT

(Core Component 5b)

In 2000, the university discussed the need for strong support and cooperation from alumni and alumni organizations for the success of its institutional advancement. The site visit team noted "this support and cooperation has not yet been established." In 2007, cooperation dramatically improved when President Buchanan led the reuniting of the University of Wyoming Alumni Association with the university. The Alumni Association now reports to the vice president for student affairs. (5b)

Recognizing the need to connect the university to outside communities, the Office of Institutional Advancement and the Alumni Association are collaborating with the support of the Division of Information Technology to implement an online alumni community to strengthen alumni connections and to provide alumni with professional and social networking opportunities. This should facilitate efforts to improve external relations.

INSUFFICIENT LIBRARY RESOURCES

(Core Components 2a, 2b)

Since 2004, the University Libraries have made significant progress on issues outlined in the 2000 reaccreditation site visit report. To support educational quality, the annual library collections budget increased 166 percent from \$2.9 million in 2000 to \$7.7 million in 2008, which is unprecedented in the library environment. (2b) To meet the immediate needs of a 10 percent overall university budget reduction (see Chapter 10), the collection budget was reduced in 2009 by \$2 million of a recent \$4.3 million annual legislative increase. The university is committed to restoring the collection budget increase through tuition increases and legislative funding during the next few years. (2b)

The libraries strengthened their partnerships in the state and region by joining the Wyoming Libraries Database (WYLD) project. This initiative enables all 23 county libraries, 43 branch libraries, 48 school districts, seven community colleges, the university, and several others to provide joint purchasing of statewide databases and improved interlibrary loans. In addition, the university joined Prospector, a unified catalog of 23 academic, public, and special libraries in Colorado and Wyoming. With a single search, patrons can borrow materials from other libraries, with delivery to Laramie in two to three days. In many cases, the libraries can deliver materials in electronic form even more rapidly, providing exceptional support to distance and off-campus academic programs. (2a)

The libraries have focused on improved services through the merging of catalogs, through software improvements that allow for integration of searches, and through the streamlining of questions to reference librarians. Other improvements include increased marketing of services, enhancement of services for outreach and distance students, the establishment of an advisory board for community relations and fundraising, and increased library instruction. (2b)

In fall 2009, the university completed the \$50 million addition to and renovation of the Coe Library. The addition enables the libraries to achieve their goals of research integration, student and faculty collaboration, instruction in information literacy, and partnership with associated units such as the student computer labs, the Ellbogen Center for Teaching and Learning, the Writing Center, and the Learning Resource Network (LeaRN). University funding has been utilized for the transformation of the former Science and Technology Library into the Library Annex. (2b)

IMPROVEMENTS IN GRADUATE EDUCATION (Core Component 1d, 2b, 3a, 3c)

The 2000 report cited the need for "closer connections, joint efforts, and regular interaction" between the Graduate School and the research office. The team also recommended reviewing the achievement of graduate faculty to ensure that they maintain a "consistent research component" to their work. Several joint programs sponsored by the Office of Research & Economic Development and the Graduate School were developed, including a Graduate Student Symposium for graduate student research presentations and numerous workshops on ethics and other topics. (3c) To encourage more robust graduate student recruiting, the university added health insurance to the standard state-funded graduate assistantship package in 2002. In the same year, the university instituted a higher-level stipend for PhD students to encourage departments to recruit higher caliber graduate students. (2b)

With the elimination of the administrative functions of the Graduate School in response to budget reductions in 2009 (see Chapters 8 and 10), the provost charged the Graduate Education Taskforce to address how these administrative functions should be carried out. (1d) As a result, the Offices of Admissions and Student Financial Aid, with oversight from the Office of Academic Affairs, assumed administrative staff support for recruiting, admissions, and assistantship payment for graduate programs. The provost oversees issues related to program quality, assessment, student recognition, faculty mentoring, and allocation of graduate assistantships. (3a, 3c) Pertinent to the 2000 report, the Office of Research & Economic Development collaborates with the Office of Academic Affairs on issues related to graduate assistantship reallocation, graduate student orientation, and human subjects compliance issues. This collaboration positively impacts the faculty research enterprise and graduate student education.

INSTITUTIONAL STANDARDS FOR PURCHASE AND SUPPORT OF SOFTWARE AND HARDWARE

(Core Component 2d)

To achieve quality control and economic benefits as well as to assure effective technological operations, the 2000 site visit team advised a commitment to standardization of hardware and software. As a first step, Academic Plan II and Support Services Plan II first called for the review of hardware and software standards. In 2004, the university contracted with RSM McGladrey to review and provide recommendations for hardware and software purchases, standardization strategies, and staffing. The university has made ongoing progress on software and hardware standardization with implementation of some RSM McGladrey recommendations and consideration of others not yet implemented but incorporated in support services plans. Among other recommendations implemented was the creation of the Technology Planning Council, chaired by the vice president for information technology, which provided clear linkages between the university's information technology expenditures and its planning and budgeting processes. In 2009, the university began centralizing the purchase of hardware and software as well as consolidating staff support for institutional information technology. All general information technology employees will report to the Division of Information Technology. The Technology Planning Council, the centralization of technology purchasing, and the consolidation of employees will create and enforce institutional technology standardization. (2d)

STABILIZATION OF NEW AND REPLACEMENT FUNDING FOR INFORMATION TECHNOLOGY PURCHASES

(Core Components 2a, 2b)

The 2000 report noted the use of "income from the telecommunications operation . . . to subsidize the development of the network." Because the income from telecommunication operations declined precipitously with growth in student cellular communications, the Division of Information Technology (IT) "sustained a substantial budget cut." To combat these financial issues, the evaluation team recommended several cost saving strategies including the standardization of software and hardware purchases and the reduction of IT-supported platform types and software. (2a)

After the 2000 report, various cost saving mechanisms were instituted to assist in funding the university's data network. These provided only minor savings. Until 2006, the short-fall in data network funding continued to be offset primarily by annual one-time university allocations. In 2006, the university made a request for permanent network funding to the Wyoming State Legislature, which approved recurring funding in an amount sufficient to cover the annual shortfall and ensure adequate resources to achieve quality. (2b) The standardization described in the previous section is expected to bring significant savings to the university's technology expenditures and provide better overall management.

CONSISTENT IMPLEMENTATION OF ASSESSMENT

(Core Components 1a, 1d, 2c, 3a, 3b, 3d)

The 2000 report recommended the integration of student affairs into the assessment process, better sampling procedures for institutional surveys, the merging of institutional and survey data "to provide a richer set of findings and more in-depth analysis of results," and increasing faculty understanding of assessment to promote varied assessment methods. The university's progress in developing an assessment culture that focuses on improved student learning outcomes as a core principle can be described as steady and consistent since 2000. (3a) Specific strategies to move the institution forward have ranged from allocating additional resources for staff and small internal grants to creating institutional processes that address assessment issues on a systematic basis. In this section we describe the university's commitment to creating a culture of assessment and provide a summary of strengths and challenges. Further discussion about assessment of student learning can be found in Chapters 7 and 8.

For more than a decade, the university has been seriously and actively engaged in the assessment of student learning. The Office of Academic Affairs provides the leadership for and general oversight of the university's student learning assessment efforts. (1d) The

"For more than a decade, the university has been seriously and actively engaged in the assessment of student learning." overall university strategy has been to provide resources, incentives, and encouragement to the faculty and academic departments, steering away from strategies that are viewed as punitive or dismissive of long-standing faculty practices. In doing so, the university continues to build a faculty-centered assessment of student learning. (3b)

In 2000, the university formed the University Assessment Coordinators Committee, which includes dedicated representatives from the seven colleges, the Office of Academic Affairs, the Ellbogen Center for Teaching and Learning, the Outreach School, the Division of Student Affairs, the University Libraries, and the Office of Institutional Analysis. The committee meets regularly to discuss various assessment matters, to plan and offer assessment workshops, to review applications for annual assessment reports. (3b) As a result of the committee's work, each college within the university has its own assessment expert.

In 2004, as part of the second five-year cycle of academic planning, all units developed their five-year plans for 2004-2009. The Office of Academic Affairs charged each academic program to craft a detailed plan for assessing student learning. As faculty and academic leaders worked together to guide curriculum, the goal was for each academic department to complete one assessment cycle by 2007. (1d) In spring 2005, academic affairs hired a part-time university assessment specialist to provide additional resources for faculty and to assist in creating more university-wide visibility of assessment goals. The university assessment specialist frequently meets with faculty and departments, providing advice and strategies to advance their assessment efforts. Other assessment initiatives include an annual Fall Assessment Forum (which has occurred regularly since 2005), various assessment related workshops offered through the Ellbogen Center for Teaching and Learning, an assessment Web site, and a semi-annual university assessment newsletter. (1a) In addition to these institutional efforts, many academic disciplines and programs participate in some type of program accreditation or discipline-specific review process. (2c)

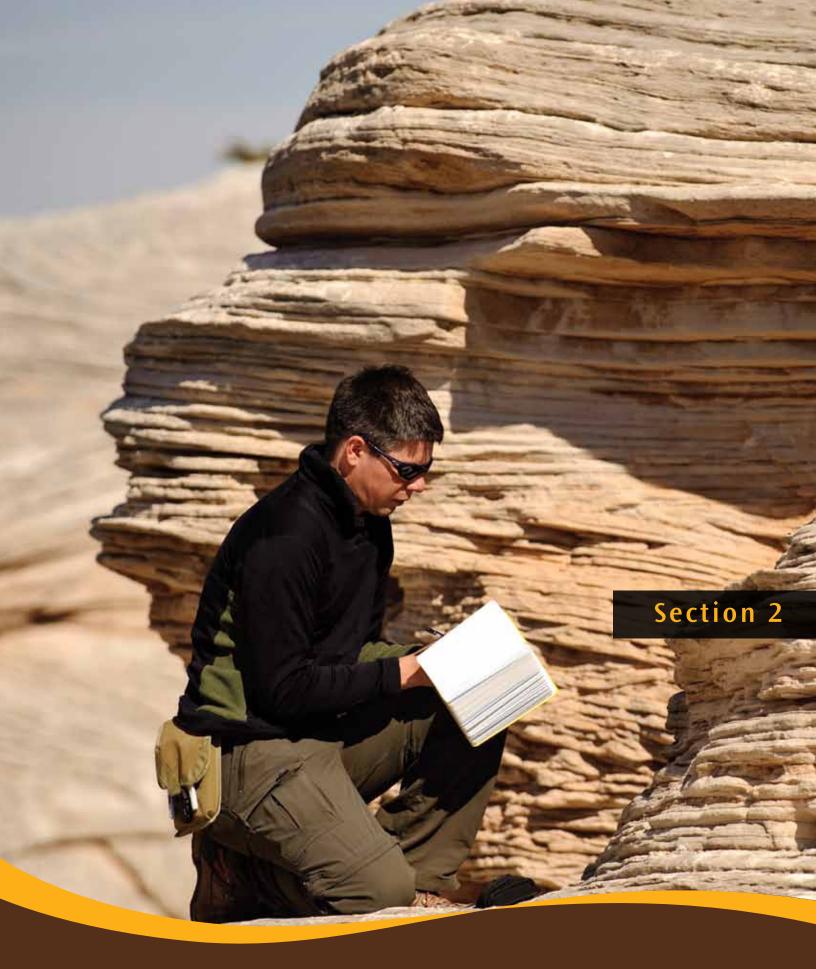
The Division of Student Affairs has also implemented assessment efforts for the co-curriculum. In 2007, eight division-wide learning outcomes were identified. Each department within the division determines which of the learning outcomes it will promote, creates programs related to the learning outcomes, and evaluates its efforts in its annual report. (3d)

The university's work to create an assessment culture is not without challenges. The university has experienced mixed results when it comes to implementation of the comprehensive assessment plans created in 2004. Nearly all programs have adopted learning outcomes and are moving ahead with assessment. The institution's progress is less consistent in the documentation of assessment cycles: using information about student learning to drive changes in the curriculum. Some departments have forged ahead as models for the university. The greatest challenge for many others, however, is to analyze and use the results of their assessments for improvement. (2c, 3a) Overall, the university's efforts can be best characterized as achieving numerous pockets of excellence, with some departments and programs still needing improvement.

CONCLUSION AND KEY FINDINGS

The University of Wyoming has made significant progress on the issues identified by the HLC during its last review, although progress has varied by issue. All issues identified by the HLC are part of the university's current academic plan. This record reflects the university's history of identifying and achieving its goals and emphasizing the needs for continual improvement in these areas. While all of the issues identified in the last review are important, the following four were deemed significant:

- The university remains committed to increasing the diversity of its faculty. While some progress has been made, there is more to accomplish in this area. This issue is discussed more fully in Chapter 4. (UP 3 Action Items 34, 35, and 36)
- The university maintains its commitment to the University Libraries because they are imperative to providing a rich learning environment to students and faculty. The university is working to restore funding lost as a result of recent budget reductions as soon as possible. The budget reductions are discussed more fully in Chapter 10. (UP 3 Action Items 15, 83, and 84)
- The university is redefining how it delivers services to graduate students given recent decisions to disperse the administrative functions of the Graduate School. The Graduate Education Taskforce has been charged with making recommendations on how and what changes should be made. Work of the taskforce is ongoing and discussed more fully in Chapter 8. (UP 3 Action Items 61, 62, and 63)
- The university has institutionalized its assessment processes, but it has yet to build a culture of assessment that consistently scales from the unit level to the institutional level to translate evidence of learning at the course, program, and institutional levels into documented curricular improvements. The university aspires to build a culture of assessment that is as firmly embedded as the university-wide planning processes. This issue is discussed more fully in Chapters 7 and 8. (UP 3 Action Items 21, 22, and 63)



The Thematic Self-study



Developing a Quality Academic Workforce to Enrich Learning



"Successful faculty careers are characterized by triumphs in the most demanding realms of teaching and scholarship, seasoned with thoughtful and balanced contributions to the milieu in which these activities take place. Our evaluation and reward systems—including tenure and promotion—ought to cultivate careers of this caliber."

> —Myron Allen, Provost and Vice President for Academic Affairs

Developing a Quality Academic Workforce to Enrich Learning

A PROFILE OF THE UNIVERSITY INSTRUCTIONAL PERSONNEL (Core Components 1a, 1b, 1d, 2b, 3b, 4b)

Since the institution's inception, teaching, research, and service have been overlapping responsibilities of university faculty. Successful student learning depends on the university's capacity to provide an environment where the academic workforce members can do their best work. (1a) The university expects faculty and academic professionals to be experts in their scholarship and creative activities, and dedicated and effective in their teaching abilities. (3b) The quality of the workforce, continually monitored, is evidenced through a variety of indicators that are consistent with the organization's mission. (4b)

Keeping pace with the growth in student enrollments, the number of full-time instructional personnel steadily increased from 606 in 1999-2000 to 715 in 2008-2009. Expansion of the university's faculty was an especially important result of the 2006 legislative session when lawmakers authorized funding for up to 30 new academic positions. (2b)

To serve the varieties of teaching, research, and service needs of the institution, university colleges and programs have five primary categories for hiring academic personnel. (Not included in this list are graduate students, whose roles are described in Chapter 8).

- Tenure-track faculty
- Extended term-track faculty (librarians and archivists belong to this category)

- Extended-term-track academic professionals (AP) of three types: lecturers, research scientists, and extension educators
- Clinical faculty
- Temporary and visiting faculty, academic professionals, and research professors

Typically, the university hires faculty at the tenure-track assistant professor level. These faculty hold a terminal degree and are assigned to a specific academic unit. In some cases, faculty have been hired at the associate level and full level, which is the case for the recent hiring of several endowed professors.

Academic appointments in the academic professional lecturer (APL) category represent an institution-specific strategy to provide a highly qualified, committed workforce primarily engaged in activities that extend and support teaching. (3b) In 2008-2009, the number of APLs was 144, which comprised 20 percent of the full-time permanent instructional personnel. After 20 years of hiring in this category, many departments and colleges have fully integrated academic professional lecturers into their culture. They are eligible for professional development leaves that are similar to sabbaticals; they win teaching and research awards; they serve on a wide array of committees at the department and college levels; and they progress steadily through the retention process and the ranks of assistant, associate, and senior lectureships. In addition to their teaching and scholarship activities, many APLs serve important administrative functions. In 2009, for instance, a small number of APLs served in positions of department chair, assistant department chair, and assistant dean, and several served as program directors. (2b)

Table 4.1 demonstrates the breadth of instructional personnel employed. For lower division (1000-2000) course instruction, academic professional lecturers and graduate assistants play an important role. A preponderance of upper division coursework is provided by tenured and tenure-track academics. Using this mix of academic positions for instruction by course level is an effective strategy to draw on individual strengths and more effectively and efficiently fulfill all elements of the university's mission. (1d)

As noted in Chapters 2 and 3, diversity remains a priority yet presents challenges for the university. Women comprise 36 percent of full-time instructional personnel. At the lecturer level, women comprise 57 percent. Through self-reports, faculty and lecturers identify themselves as 81 percent Caucasian, 4 percent Asian, 2 percent Hispanic, 1 percent Black, 1 percent American Indian and Pacific Islander, and 8 percent non-specified. The international population is 3 percent. The university has identified recruitment and retention of women faculty and faculty of color as priority issues in UP 3, illustrating its commitment to continuous improvement. One strategy is for the Office of Diversity and EEO to provide ongoing training to hiring committees about how to diversify the applicant pools for vacant positions. UP 3 identifies the need to examine the subtle barriers affecting retention and promotion among faculty, including how to create a more supportive community on and off-campus. Students will benefit as the university works to diversify its instructional workforce because the workforce will be in a better position to understand the needs of a diverse student body. (1b)

	Two-year Average of Academic Years 2006-2007 and 2007-2008				
	Classes by Course Level				
Course Level	TD/TT Faculty ¹	Ext. Term Lecturers/Faculty ²	Graduate Assistants	Clinical Faculty ³	Supplemental Faculty⁴
1000	30%	9%	28%	0%	33%
2000	45%	14%	10%	0%	31%
3000	68%	6%	3%	0%	23%
4000	72%	9%	3%	0%	16%
5000	87%	4%	1%	0%	8%
6000	56%	7%	0%	20%	17%

Table 4.1. Percentages of Classes and Credit Hours Taught by Academic Personnel by Course Level

	Credit Hours by Course Level				
Course Level	TD/TT Faculty ¹	Ext. Term Lecturers/Faculty ²	Graduate Assistants	Clinical Faculty ³	Supplemental Faculty⁴
1000	35%	12%	23%	0%	31%
2000	46%	19%	8%	0%	28%
3000	67%	8%	4%	0%	22%
4000	72%	9%	3%	1%	15%
5000	86%	3%	2%	0%	9%
6000	74%	4%	0%	7%	15%

Source: Office of Institutional Analysis

¹Tenured/tenure-track faculty

²Extended term academic professional lecturers and faculty

³Clinical faculty include practicing professionals in the health sciences.

⁴Supplemental faculty include those hired on a contract basis, advisors, coaches, visiting faculty, outside agency experts, etc.

STRENGTHENING FACULTY QUALITY

(Core Components 1e, 2b, 3b, 4a)

The university's desire to build a quality faculty begins with its recruitment efforts. Several aspects of the hiring process contribute to continuing excellence and innovation in instruction at the undergraduate and graduate levels. Most faculty and lecturer hires involve a consideration of their teaching record and ability, and many departments encourage the inclusion of both teaching and research presentations as part of the on-campus interview of a candidate. (3b) The university commits in excess of \$3 million annually in start-up funds for new faculty to ensure that they have the support needed to launch a successful career. (2b)

The university strives to cultivate an environment of intellectual inquiry and creativity, provide clear and transparent expectations, and foster an engaging and collegial instructional environment. A critical aspect of this effort is a well-defined and implemented process for reappointment, tenure, and promotion. The goal of this process is its utilization as a faculty development tool, which can assist with stimulating a successful academic career. Sound advice on reappointment, tenure, and promotion decisions, philosophy, criteria, and expectations are available to faculty on the academic affairs Web site and through orientation materials. The Office of Academic Affairs also provides annual reappointment, tenure, and promotion workshops for untenured faculty and probationary lecturers as well as workshops for new department heads that cover the standards and procedures described by university regulations for the reappointment, tenure, and promotion process. (1e)

Continuous examination of faculty quality, including contributions to student learning, is provided through a rigorous and multifaceted process. Colleges have some latitude in specific details, but they generally use the following practices to ensure fair and consistent evaluation. (1e) Mandatory reviews for reappointment of faculty and lecturers occur during the first, second, and fourth years at the level of the department, the college, and the university. Portfolios typically document each individual's professional contributions, service, and teaching, all aligned to their job description. (4a) Instructors may offer a statement of teaching philosophy and specific reflections on several representative courses, a process that underwrites a focus on encouraging thoughtful approaches to teaching. Information from student evaluations and from faculty peer evaluators is included in the review. Academic personnel providing distance coursework are similarly evaluated and in addition receive feedback from the dean of the Outreach School or her appointed designee. These materials are scrutinized at each level of the process, ultimately providing a thorough accounting of each instructor's teaching, research, and service activities. (3b) A similar, though abbreviated, process is utilized to monitor faculty activities and contributions through a newly-designed post-tenure review process.

Improving salaries

(Core Component 2b)

Salary increases have proven to be one of the most effective strategies for the university to remain competitive in recruitment and retention. While the institution is still catching up to the national market after the compounding salary discrepancies of the 1990s, it has made some improvements in this area. The relative salary declines experienced in the 1990s were largely attributed to the infrequency of raises and the willingness of some units to hire below market. The central position management system implemented in 2000 now ensures that the salaries allocated for faculty positions are commensurate with national averages for the appropriate ranks and disciplines.

Table 4.2 shows how salaries have changed. The first two columns compare average University of Wyoming faculty salaries to the average salaries at other U.S. public doctoral universities. The third column shows the dollar difference between the average assistant and full professor at the university.

Academic Years 1999-2000 versus 2008-2009				
Assistant Professor Full Professor at UW at UW % of U.S. % of U.S.		at UW	\$ Difference between Full Professor and Assistant Professor at UW	
1999-2000	90%	74%	\$17,000	
2008-2009	96%	88%	\$36,600	

Table 4.2. Average Faculty Salaries as a Percentage of U.S. Public Doctoral-level Universities

Source: AAUP, the Annual Report on the Economic Status of the Profession and Office of Institutional Analysis

The university has taken steps to address salary compression issues by raising salaries in all ranks and providing additional salary increases for senior faculty. In 2008-2009, the average assistant professor at the University of Wyoming earned 96 percent of the average assistant professor at other U.S. public doctoral universities, while the average full professor earned 88 percent. Furthermore, based on a 2006 study of university salaries conducted by Wendy Stock, professor of economics at Montana State University, it does not appear that gender bias is a factor in average salary differences between female and male faculty. The difference is attributable to differences in salaries across disciplines. (2b)

Endowed chairs

(Core Components 2a, 2b)

The Wyoming Excellence in Higher Education Endowment, created in 2006, authorized the establishment of a \$105 million endowment for the university and the seven state community colleges to use for hiring outstanding faculty members. The university receives earnings from \$70 million of the endowment, with earnings from the balance apportioned among the community colleges. The state legislature provided \$2.8 million for initial start–up efforts for the university to recruit top faculty, while allowing the endowment to grow during the first two years after its implementation. This \$2.8 million resource base allowed the university to be more strategic in its efforts to recruit and secure quality faculty, hired to excel at both teaching and research. (2b) The endowment specified that the College of Education receive at least four of the faculty positions. That expectation has been met with two endowed chairs in literacy and two in science and math education. The remainder of the endowment earnings was allocated to the university's areas of distinction. As of fall 2009, the university had hired nine endowed chair positions. (2a)

Other chairs are made available through private donation support. For example, the College of Business hired the Bill Daniels Chair of Business Ethics, and an endowment from the Spicer Family led to the establishment of the Spicer Chair in Environment and Natural Resources—one of the few in the nation devoted to collaborative processes in decision-making. (2a)

"Faculty perceptions of their work environments are important to the institution's planning efforts, particularly in the retention of its highquality professors."

DEVELOPING AND SUPPORTING THE ACADEMIC WORKFORCE (Core Components 2c, 5a)

Faculty perceptions of their work environments are important to the institution's planning efforts, particularly in the retention of its high-quality professors. In 2008, the university administered the Collaborative on Academic Career in Higher Education (COACHE) survey. Of the 159 eligible tenure-track faculty members, 123 participated, which is a response rate of 77 percent, compared to 59 percent of all participating institutions nationally and to 64 percent of the university's five peer-matched institutions.

The University of Wyoming ranked first among its peers as a place for junior faculty to work, with 70 percent satisfaction compared to 67 percent peer and national satisfaction. The sense of fit, the support of junior colleagues, the short commute to work, and overall family-friendly policies were listed as the best aspects of working at the university. The university's tenure processes were also rated clear by the majority of respondents. (5a)

The least desirable aspects were teaching loads and the quality of the graduate students. The university also ranked low on satisfaction with opportunities for junior faculty members to collaborate with or establish professional relationships with senior faculty. Interestingly, while Caucasian faculty members responded that one of the best aspects of working at the university was the geographic location, faculty of color ranked this among the worst aspects. (5a)

Along with its planning efforts, the university is using the COACHE results to spur discussion among faculty and departments, to review policies, and to identify areas in need of improvement. (2c) One of the first issues being addressed is the lack of adequate childcare facilities, which was rated important by faculty, yet ineffective. Since the publication of the COACHE results, breastfeeding stations have been created in several campus buildings, and the university has strengthened its commitment to help resolve the lack of childcare facilities.

Creating effective learning environments

(Core Components 2b, 3b, 3c, 3d, 4d)

The Ellbogen Center for Teaching and Learning (ECTL), established in fall 1991, is administered from the Office of Academic Affairs. The mission of the ECTL is to provide leadership, advocacy, support, faculty development, and instructional services for teaching and learning excellence. Formerly known as the Center for Teaching Excellence, the center was renamed on September 6, 2001, to honor long-time benefactor of the university John P. "Jack" Ellbogen. (3d)

The ECTL sponsors a full variety of programs during the course of a year. Programs include technology and teaching workshops, seminars for new faculty and graduate students, fall and spring colloquia events, assessment forums, book discussions, and grant projects. The ECTL also oversees the popular offices of the Writing Center, Instructional Computing Services, and Instructional Media Services. (3c)

In addition to the state funding for the ECTL, it has secured numerous sources of external funding to support its initiatives. For example, a private endowment supports a yearly \$15,000 program for new faculty. A \$360,000 federal FIPSE grant entitled "Connecting Learning across Academic Settings" (2003-2006) supported numerous scholarly projects on general education in the sciences and humanities. A \$75,000 privately funded program entitled the "Kaiser Ethics Project" (2006-2009) supported the efforts of faculty and lecturers in six colleges to infuse the teaching of ethics in their courses. (4d) These kinds of long-term projects involving cross-disciplinary cohorts of faculty and lecturers are helping to develop collegiality, intellectual curiosity, scholarship, and leadership. (2b, 3b)

Supporting discovery and application of knowledge

(Core Components 4a, 4b, 4c, 4d)

Recruiting and retaining highly qualified faculty who are actively engaged in research enhances the educational experience for the students. Equally important, the outstanding basic and applied research and creative activity of the faculty creates new knowledge and new works—the most exacting form of learning that faculty members and academic professionals undertake. In a truly engaged university, these scholarly activities enhance the quality of life and economic activity of the state, region, and nation, and they provide a model for how students direct their own lives and careers. (4d)

The university receives the traditional federal land-grant formula funding from Hatch and McIntyre-Stennis funds. In addition, research and economic development activities in support of the faculty, staff, and students are overseen by the Office of Research & Economic Development. This office links research, technology transfer, and economic development efforts to enhance federal, state, and private sector support for faculty and graduate student scholarship. In FY 2009, extramural support increased for the 24th consecutive year (Figure 4.1) by reaching \$81 million in external funding, a 4 percent increase over the previous year and an 88 percent increase over the last decade. The external funding increase, coupled with continued federal funding, demonstrates a high degree of confidence in the quality of the University of Wyoming's research programs. It also demonstrates the high caliber of its faculty and staff in their capabilities to successfully secure competitive research funding. (4b)

Over the last 10 years, the university has secured many partnerships in research. For example, since 2008 the university has been the recipient of \$17 million federal and matching state funds for cleaner coal technology research. In 2009 with the state's support, the university engaged in a \$100 million partnership with GE Energy to create a coal gasification test facility. These long-term research initiatives are vital to providing energy resources to the nation while minimizing the impacts on the environment. Another important initiative is the study of carbon sequestration, which is the ability to store carbon underground to minimize carbon dioxide emissions into the atmosphere. Most recently, the University of Wyoming received \$16.9 million in federal, state, and corporate funding for the Wyoming Carbon Underground Sequestration Project (WY-CUSP). This project is designed to demonstrate the commercial feasibility of sequestration at the Moxa

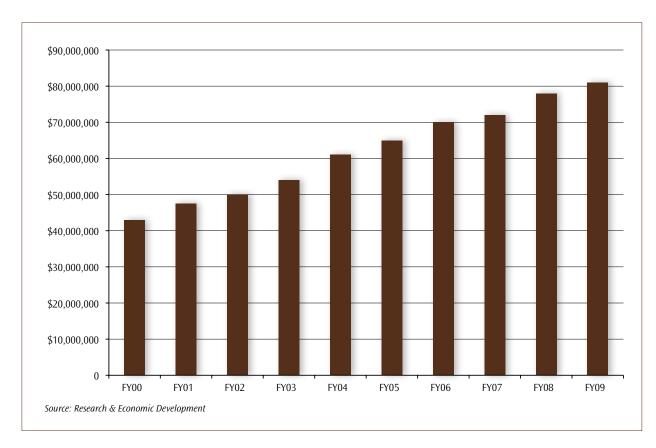


Figure 4.1. Total External Funding, Fiscal Years 2000 to 2009

Arch and Rock Springs Uplift, two major geological structures in southeastern Wyoming. Preliminary results suggest that these two structures have the ability to store Wyoming's current carbon dioxide emissions for many centuries. (4d)

The university provides a variety of opportunities for graduates and undergraduates to gain hands-on experiences in cutting-edge research and scholarship activities. (4a) Many of the university's degree-seeking graduate students are supported either partially or fully with funding. Additionally, according to the University of Wyoming's 2008 Survey of Graduate and Professional Students, 15 percent of the students said they are involved with developing research or funding proposals, and 25 percent of the students have delivered research or teaching presentations at conferences. One of the attributes that separates this university from other universities is the access that undergraduate students have to research faculty. Between 300 and 370 full-time undergraduates were paid monthly from research contracts in 2008-2009, with an increase in these numbers likely for 2009-2010. In fact, the university's research enterprise is one of the largest employers of undergraduate students on the Laramie campus and at the University of Wyoming Casper College Center. Because of the university's small size relative to other public doctoral institutions, students can easily partner with faculty on projects. (4b)

Each spring, the university hosts Undergraduate Research Day and the Graduate Student Research Symposium, programs designed for students to showcase their work to the university community and to highlight their collaborative work with faculty and fellow students. (4b, 4c) In 2009, 293 students participated in Undergraduate Research Day and 225 in the Graduate Student Research Symposium. In addition to student participation, faculty and staff members served as moderators for the sessions and the students' research advisors attended the sessions to show their support of student work. Participation in these two research showcase events has grown steadily over the last three years.

Recognizing faculty through awards

(Core Components 3b, 3d, 4b)

The university has several mechanisms for acknowledging and rewarding excellence in classroom instruction and research contributions. The George D. Duke Humphrey Award is given annually to one faculty member to recognize high achievement in research, teaching, and service. Examples of awards for undergraduate teaching include the Council for Advancement and Support of Education (CASE) Award, the John P. Ellbogen Meritorious Classroom Teaching Award, the Hollon Family Award for Excellence in Off-Campus Programs, and the Ellbogen Lifetime Achievement Award. (3d) Faculty nominate colleagues for the UW Presidential Speaker Series and the Faculty Senate Speaker Series. (3b) In addition to these university-level awards, all colleges annually recognize deserving faculty for teaching and research.

An indication of the return on investment in faculty is the number of prestigious research awards received each year by University of Wyoming faculty, especially in disciplines where external funding is available. In 2009, five faculty members won the prestigous National Science Foundation CAREER Award: two in geology and geophysics, two in chemistry, and one in mathematics. These awards support junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent efforts in education, and the integration of education and research within the context of the mission of their organization. A notable example of international recognition includes two faculty members who shared the 2007 Nobel Peace Prize with former Vice President Al Gore for contributions to the Intergovernmental Panel on Climate Change. (4b)

CONCLUSION AND KEY FINDINGS

The University of Wyoming has a rigorous, well-defined tenure, reappointment, and promotion process. Faculty perceptions indicate that the organization makes its processes clear, deals fairly with its internal constituents, and operates with integrity. The creation and expansion of the academic professional lecturer academic position has benefitted the university with increased consistency and continuity for instructional personnel and students. Instructional personnel are awarded job longevity, have well-defined promotion ladders, and are better integrated into the fabric of their departments. Furthermore, the university is pleased with the level of extramural funding it has earned, including funding aimed at developing faculty. In sum, in the past 10 years, the university has been able to improve conditions for its instructional personnel to help build a quality workforce. Even so, the university is committed to continuous improvement, including further exploration of the impacts of its decisions and addressing ongoing areas of deficiencies identified. To aid in this effort, the following key findings have been identified:

- The University of Wyoming is committed to increasing the diversity of its faculty. While many efforts to do so are ongoing, further analysis of the COACHE results and continued administration of COACHE over time may yield new information, assisting the university in its recruitment and retention efforts. This issue is complex and requires ongoing attention. (UP 3 Action Items 34, 35, and 36)
- While faculty and academic professional salaries have improved in the last 10 years, the university needs to continue to address faculty compensation to be nationally competitive in attracting and retaining professors. Specifically, faculty salaries at the upper level tend to remain lower than the national average for doctoral institutions. Collaboration with the state legislature, along with internal dialogue and deliberations, will be essential to make further progress. (UP 3 Action Item 65)
- The University of Wyoming has progressively expanded its research enterprise, scholarly output, and creative activities in a dramatic way over the last 10 years. While extramural grants aid the university in achieving educational quality in both research and in teaching, additional documentation of the impacts needs to be developed. (UP 3 Action Items 67 and 68)
- The impact of the hiring of senior-level endowed chairs has not been assessed. Plans for tracking and assessing the impact will be critical to performing a cost-benefit analysis.



Undergraduate Access and Opportunity



"Access to higher education among Wyoming students is sustained through a number of programs and people working statewide to ensure that all students, regardless of income or other barriers, have the opportunity to prepare for and enroll in college. While access can get you in the door, success is the key to becoming a college graduate."

> —Pilar Flores, Director, Student Educational Opportunity

Undergraduate Access and Opportunity

UNDERSTANDING THE UNIVERSITY'S CORE CONSTITUENCIES (Core Components 2a, 5a)

According to the 2008 *Measuring Up* report card prepared by the National Center for Public Policy and Higher Education, Wyoming faces numerous challenges in educating its population. The good news is that Wyoming has a higher percentage than the national average of 18 to 24 year olds who have a high school credential. However, Wyoming ranks lower than average in the percentage of residents who have a bachelor's degree (23 percent compared to 29 percent), and the likelihood of enrolling in college by age 19 is only fair, according to the report. (5a)

In 2005, an inquiry initiated by former President Dubois provided some information about why Wyoming students are reluctant to attend college and why many are underprepared. This study revealed that many students were not taking rigorous high school coursework. Findings also revealed a lack of programs to support a smooth transition from high school to the university. Finally, the cost of higher education was identified as a significant challenge for Wyoming residents. (5a)

Parents, teachers, and mentors in local communities are key to fostering a culture of a well-educated citizenry. The University of Wyoming is a strong partner in efforts to create an educational system that meets the needs of the 21st century. In this chapter, we identify recent statewide and university initiatives that are helping to improve access to a four-year education. These initiatives fall into three categories: 1) partnerships for recruitment and college preparation, 2) improvements in student transitional experiences, and 3) changes in funding and tuition. (2a)

CONNECTING WITH FUTURE STUDENTS (Core Component 5b)

Collaborative and strategic communications among all levels of education are beginning to make a difference in improving student preparation for college. With support of the Wyoming State Legislature and the Wyoming Department of Education, the university and its K-12 partners have launched several initiatives to better prepare students for postsecondary education. Several of these initiatives are briefly described in the following sections. (5b)

The Wyoming P-16 Education Council (Core Components 4a, 5c)

The university led the formation in 2007 of the Wyoming P-16 Education Council, whose members—from all school levels and from the business and government sectors—have partnered to plan and implement programs for better transitions throughout the educational process. The council's goal is to identify and address selected factors that limit successful attainment of high school and postsecondary education credentials. (4a) One of its first actions was to create and administer a State Scholars Initiative (SSI) grant, funded through the U.S. Department of Education and administered through the Western Interstate Commission for Higher Education (WICHE), that promotes a core curriculum closely mirroring the Wyoming Hathaway Success Curriculum. In addition, the P-16 council has worked with secondary and postsecondary teachers across the state to develop information brochures on the right courses to take to prepare for college. The full-color pamphlets, which are distributed to every high school classroom and student in the state, include charts that compare high school and university courses in life sciences, mathematics, writing, world languages, and social studies. (5c) These course comparison charts provide high school students with a road map to college.

The Wyoming School-University Partnership (Core Component 5a)

Established in 1986, the Wyoming School-University Partnership, a consortium under the umbrella of the National Network for Educational Renewal, fosters civic engagement and a democratic process with connections between all levels of educators. Through collaborative efforts, instructors from P-12 levels, community colleges, and the university meet regularly to address mutual issues related to the changing needs of students and their successful completion of the first two years in higher education. Current initiatives include cross-level programs in three areas critical to academic success: life sciences, math, and English. (5a)

GEAR UP

(Core Components 2b, 4a, 5a)

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a collaborative effort among educational levels from middle school through postsecondary. GEAR UP Wyoming is funded at 50 percent through a six-year grant awarded in 2005 by

the U.S. Department of Education totaling \$3.5 million annually, with an additional \$3.5 million provided by in-kind and scholarship contributions from Wyoming's community colleges, the University of Wyoming, and the Wyoming Department of Education. The grant is managed by the university's Student Educational Opportunity office with a grant management team that works with coordinators at Wyoming's seven community colleges. (2b) GEAR UP provides services to 2,000 low-income pre-college students throughout the state each year. Student services include career exploration, advice, and support to students taking a college preparation curriculum, ACT preparation, college exploration, application, and planning, and assistance with financial aid processes and procedures. (4a) GEAR UP also works with the Wyoming Department of Education in providing teacher training and school improvement initiatives. (5a)

Diversity-oriented recruiting

(Core Component 1b)

The diversity of the student body continues to be a challenge for the university. However, we are pleased to report that undergraduate minority enrollments have increased by 26 percent over the last 10 year period, outpacing overall enrollment growth of 14 percent for this time period. The university has made strides in increasing diversity through several recruitment efforts: creating programs aimed at bringing minority youth to campus, such as Minority Higher Education Days, promoting group visits to campus from schools with high minority populations, working with current minority students to communicate with prospective minority students, and increasing targeted marketing. Recently, the university has partnered with organizations such as New Futures to conduct college-for-a-day programs and has worked directly with middle and elementary schools to promote the college experience to younger students from schools with high minority and underserved student populations. As an example of this, the Help Yourself Academy was created in fall 2009 as a partnership between the Natrona County School District, Casper College, and the University of Wyoming Casper College Center. This program takes Title I eligible primary school children onto a college campus and connects them with university education students as mentors. Over time, it is anticipated that these efforts will help to create a college-going culture at these schools with a goal of building minority enrollments. (1b) The university has also identified the need to design specific recruitment strategies for regionally important Hispanic and American Indian populations. Finally, the university is committed to increasing its efforts to recruit international students.

FACILITATING THE TRANSITION TO THE UNIVERSITY

One of the outcomes of the collaborations described in the previous section is a growing understanding that students need multiple kinds and levels of support to make transitions as they move through the educational system. The university has initiated and strengthened several programs for two student groups: 1) first-time first-year students coming to the Laramie campus and 2) transfer students, especially those transferring from Wyoming community colleges.

Transitions for first-time first-year students (Core Components 1d, 2c, 3c, 4b)

New student orientation has historically provided new students the opportunity to enroll early for their fall semester coursework. Because it also provides students and families with information about the University of Wyoming's academic community and the expectations for its new members, it is an important step to ensuring future academic success. New students who have been admitted to the university enroll for one of eight sessions that occur in late May and throughout June. In 2009, 87 percent of new students chose to attend one of these sessions. In the past three years, new student orientation has received high evaluation marks from both students and families. (2c)

Faculty and staff support new student orientation in a variety of ways. All six undergraduate colleges conduct advising sessions to help students create their fall class schedules. Many offices participate in a resource fair, and several university officials formally present information to students and families. Perhaps the most important participants in this program are the student peer orientation leaders who provide an enthusiastic and honest introduction to college life. (1d) Immediate feedback from participants in the first few sessions is frequently used to improve subsequent sessions, whether it is tweaking a presentation or adding additional sections of courses. Formal evaluation data are used annually to refine the program overall. (2c)

Until recently, other transition programs for new students occurred in the first few weeks of school, such as the Weeks of Welcome program. Because national data about first-year experiences indicate that students form their expectations about college community life and academics early in their first semester, the university has recognized the need to create programs that occur immediately before fall semester begins to help students integrate into university culture. The university now has two transition programs that begin or occur right before the semester's start: the Fall Outdoor Experience and the Summit Transitions Program.

Many who choose the University of Wyoming because of its proximity to the mountains discover Wyoming's outdoors before the start of the school year. The Fall Outdoor Experience, established in 2000, is designed to enrich the transition to the university by helping students make connections with the surrounding environment. Program leaders take an average of 80 new students each fall on hikes in the mountains, rock climbing, or cave exploring in southeast Wyoming. This program is a way for students to meet other students and to build leadership skills. To advance this concept, UP 3 includes an action item calling for the Division of Student Affairs to build outdoor experiences as an area of distinction in the co-curriculum. (3c)

The Summit Transitions Program is a natural evolution of the last decade of work with learning communities at the university. A collaboration between academic affairs and student affairs, the program was designed as an extended orientation occurring the weekend before classes start with the following goals: to expose new students to the academic culture and its expectations; to build upon the students' personal strengths; to support student interaction with faculty outside of the formal classroom; to support new students through peer mentoring; to help students experience a symbolic transition to campus; and to help students learn more about the institution, community, and surrounding wilderness. The inaugural Summit Transitions Program in August 2009, called Summit 2009, required all new students to arrive on Thursday prior to the start of classes. After the presidential welcome and reception, students spent two days meeting in large and small groups led by peer mentors, faculty volunteers, guest speakers, and theatre students. This ambitious initiative, supported by significant institutional resources, will require multiple forms of longitudinal assessment to gauge its impact on student success. Early survey data from the nearly 80 faculty volunteers in Summit 2009 indicated that they had an increased awareness of the need to address academic transition issues in the first few weeks of their courses. (4b)

Transitions for community college transfer students (Core Components 2c, 4a, 5a, 5b)

The university facilitates the transfer of Wyoming community college students through a number of efforts that focus on recruitment, academic preparation, and articulation of academic program courses and goals across institutions. For over a decade, the University of Wyoming has hosted a statewide academic vice president and academic deans' articulation conference. The university provost and associate provosts join with all seven community college chief academic officers. Recently, the chief student affairs officers from the university and the community colleges have also joined. The statewide common course numbering system, course transfer guide, statewide general education articulation agreement, and baccalaureate of applied science (BAS) degree are prominent outcomes of this collaboration. (5b)

The overarching goal of articulation between the university and community colleges is to create a connected educational experience for students as they move from one institution to the next. To address several continuing transition issues, a subgroup of the university's Enrollment Management Council undertook a thorough review of transfer processes with the intent to improve student transitions to the University of Wyoming. A number of recommendations are in various stages of implementation, including an improved transfer student orientation, a transfer student guide, advisor preparation, and course evaluation processes. While these efforts have been productive, there is need for continued attention to effective and efficient transfer practices. (2c)

In order to meet the growing number and variety of learners the university serves, the Outreach School operates regional centers located at every community college campus in Wyoming. Academic coordinators at each center recruit and advise students, promote the university and the Outreach School, and serve as a liaison between the college, community, and the university. In addition to the services at the regional centers, the Outreach School has added additional programs for site-bound, nontraditional students.

"The overarching goal of articulation between the university and community colleges is to create a connected educational experience for students as they move from one institution to the next." The community colleges assist the University of Wyoming in recruiting transfer students by hosting university recruiters on the community college campuses every fall and at other times during the year. The university also hosts transfer student orientation sessions on campus that draw high participation from Wyoming community college students. University faculty also recruit by speaking to community college classes. (5a)

To enhance transfer student success, several university academic departments hold annual articulation meetings with academic personnel in community college departments to share freshman and sophomore course syllabi, program goals, and curricula so a shared vision for courses and associate and baccalaureate degree programs is developed. Articulation between community colleges and the University of Wyoming is also aided by the publication of the *Transfer Guide*. The success of this project is a testament to what can be accomplished in order to provide access to excellent higher education opportunities for the citizens of Wyoming. (4a) The user-friendly format of the *Transfer Guide* is possible because of the advances in cooperative relationships over the past 17 years between the faculties and administrations at the University of Wyoming and the Wyoming community colleges. Common names and numbers have been assigned to more than 600 equivalent courses statewide.

RESPONDING TO STUDENTS' FUNDING NEEDS (Core Component 5a)

Financing higher education can be a source of stress for many college-bound students and their families. According to the U.S. Department of Education, state funding growth for higher education has fallen to its lowest level in over two decades. With increased tuition rates for higher education across the nation, survey data from the 2008 Profile of the American College Student suggests University of Wyoming students are cost conscious when it comes to selecting a university or college to attend. The University of Wyoming has made considerable strides in easing this anxiety by keeping higher education affordable while also maintaining quality. In August 2009, Forbes magazine recognized this achievement by naming the university as 17th on its list of "America's Best Public Colleges" and fifth on its list of "America's Best College Buys."

The university's resident tuition is lowest among all comparator institutions, including the western land-grant institutions, the Western Undergraduate Exchange institutions, and the U.S. public doctoral institutions. Resident tuition remained at \$94 per credit hour for 2009-2010. While categories of student tuition other than resident increased in 2009, those amounts are relatively low. Non-resident undergraduate students saw an increase of 5 percent for 2009-2010, with the hourly rate increasing from \$341 to \$358 for a total annual tuition cost of \$10,740. (5a) The following sections describe other significant factors that help to make a University of Wyoming education exceptionally affordable even with the recently approved increases in tuition and fees over the next five years.

The Hathaway Scholarship Program

(Core Components 2a, 2b)

In 2006, the Wyoming State Legislature established a \$400 million endowment, increased by another \$50 million in 2008, to fund the state's first college scholarship program, the Hathaway Scholarship. (2b) This endowment was then followed by an amendment to the state constitution that made the fund permanently inviolate. Eligibility for the scholarship requires that students complete the Hathaway Success Curriculum in high school. Upon admission to a community college or the University of Wyoming, eligible students are awarded a Hathaway merit scholarship based on their high school grades (or GED scores) and ACT scores. The Hathaway program consists of four scholarship categories, three of which are applicable at the University of Wyoming, as well as an added need-based component for eligible students. The merit scholarship awards range from \$1,600 to \$3,200 per year, while the need components range from a minimum of \$200 per year to covering all unmet need for the most academically qualified students. As shown in Table 5.1, in 2008-2009 \$5.8 million was distributed in Hathaway merit awards and \$734,000 was distributed in Hathaway need-based aid, for a total of \$6.5 million serving 2,325 students. In addition to the Hathaway scholarships, the university supplements these awards with over \$4 million in scholarships funded by the state, endowed scholarships from colleges and departments, and tuition discounts.

Preliminary analysis of this scholarship program suggests that more Wyoming high school students are choosing to enroll in college at either a Wyoming community college or at the university. Initial data also show that these students remain in college beyond the first year. The Wyoming P-16 Education Council is facilitating a longitudinal assessment with state funding to examine the program's impacts on completion rates at each level of education and on workforce placement and advancement. (2a)

					Academic Y	ear 20	008-2009				
	Merit	+	Need	=	Hathaway Total	+	UW Scholarship Supplement	=	Total	# of Students	Average Award
Honors	\$3,231,183		\$441,160		\$3,672,343		\$3,176,373		\$6,848,716	1,035	\$6,617
# receivin	ng both merit d	and ne	red							137	
Performance	\$1,919,694		\$164,234		\$2,083,928		\$683,602		\$2,767,530	862	\$3,211
# receivin	ng both merit d	and ne	red							181	
Opportunity	\$614,126		\$128,111		\$742,237		\$192,006		\$934,243	428	\$2,183
# receivin	ng both merit d	and ne	red							118	
TOTAL	\$5,765,003		\$733,505		\$6,498,508		\$4,051,981		\$10,550,489	2,325	\$4,538
# receivir	ng both merit	and n	eed							436	

Table 5.1. Hathaway Scholarship Recipients

Source: Student Financial Aid

Changing funding needs of students (Core Components 1e, 2a, 2b)

In the last 10 years, several significant policy changes have affected tuition, fees, and financial aid. In 2003, the university changed its tuition model to bill by the credit hour rather than at a fixed rate once full-time status was reached. This approach distributes costs more equitably for full and part-time students. (1e) At the same time, a taskforce examined the distribution of mandatory fees to full and part-time students to ensure fair distribution. The changes in tuition and fee policies were not designed to generate additional revenue; rather they were designed to distribute costs of attendance and use of services more justly and, if possible, to curb course shopping.

The Hathaway Scholarship Program has also changed the way scholarship funds are awarded and distributed. Because these scholarships are fixed-dollar awards, the university committed to maintain Hathaway's purchasing power by not increasing resident undergraduate tuition for three years since implementation, between 2007 and 2009. This flat tuition rate was made possible through increased state appropriations to the university. Other expenses included in the cost of attendance, such as mandatory fees and room and board, did increase because these units are self-sustaining and do not receive state appropriations to offset increased expenses. (2b)

Although the university's tuition has remained exceptionally affordable, the overall cost of attendance has risen. Cost-of-attendance figures used for federal financial aid are in Table 5.2. Cost of attendance for resident students increased 60 percent from 1999-2000 to 2008-2009; for non-residents, it increased 53 percent. These increases correspond to average annual increases of approximately 5 percent per year for all students. (2a)

			Academ	nic Years 19	999-2000 ver	sus 2008-	2009			
	1999-2000				2008-2009				10 Year Change	
	Resident Non-resident		sident	Resident Non-re		esident Residen		Non-resident		
	Cost	% COA	Cost	% COA	Cost	% COA	Cost	% COA	\$	\$
Tuition & Fees	\$2,416	25%	\$7,684	51%	\$3,621	23%	\$11,031	48%	\$1,205	\$3,347
Room & Board	\$4,446	46%	\$4,446	30%	\$7,707	49%	\$7,707	33%	\$3,261	\$3,261
Books & Supplies	\$660	7%	\$660	4%	\$1,200	8%	\$1,200	5%	\$540	\$540
Transportation	\$578	6%	\$580	4%	\$892	6%	\$892	4%	\$314	\$312
Personal Expenses	\$1,640	17%	\$1,640	11%	\$2,200	14%	\$2,200	10%	\$560	\$560
TOTAL	\$9,740		\$15,010		\$15,620		\$23,030		\$5,880	\$8,020

Table 5.2. Undergraduate Cost of Attendance (COA)

Source: Student Financial Aid and Office of Institutional Analysis

The university redesigned scholarship policies in fall 2006 to automate processes and to maximize the use of private resources as part of its aid packages to students. The two main goals of the redesign were to 1) assure continued university-controlled support to resident students at previous scholarship funding levels and 2) establish the Peak Scholarship program in an effort to attract more highly qualified non-resident students, building on the University of Wyoming's success in recruiting non-residents, especially from the neighboring state of Colorado. An econometric analysis helped to determine the amount needed to attract and retain Wyoming and non-resident students. As a result, the average resident financial aid package continues to cover about 30 percent of students' costs, despite a significant increase in the cost of attendance over the last 10 years.

There are three important considerations when analyzing the composition of financial aid during the last 10 years. First is the tremendous increase in the dollar amount of university-controlled scholarships. Privately endowed scholarship programs have increased approximately one-third to more than 1,100 endowed programs. University-controlled scholarships increased from \$16.1 million in 2000 to \$30 million in 2009. This increase does not include the \$4.1 million in Hathaway Scholarships, which further supports enrollment strategies. With the advent of the first class of Hathaway Scholarship recipients in fall 2006, the redesign of the scholarship programs allowed for the pool of funds for non-resident scholarships to increase more than three-fold. (2b)

The second significant change during this 10-year period is the increase in non-loan financial aid as a proportion of total financial aid awarded to University of Wyoming students. This decline in student loans as a proportion of total financial aid comes at a time when national statistics have seen a significant increase. In 2000, non-loan aid comprised 48 percent of the total, while in 2009, this percentage increased to 54 percent. Additionally, non-loan financial aid has outpaced the growth in cost of attendance. Non-loan aid awarded in 2000 was \$23.9 million and grew to \$47.1 million in 2009 for a 97 percent increase. This compares to undergraduate cost of attendance increases of 60 percent and 53 percent for resident and non-resident students, respectively.

A final observation is the decline in federal grants as a percentage of total financial aid. Federal grants comprised over 10 percent of total financial aid in 2000, but declined to slightly less than 8 percent of total aid in 2009. Part of the explanation may be that Federal Pell Grant eligibility has not kept up with inflation during the last 10 years. This decline could also be due to Wyoming's strong economy and reduced student need. Additionally, the much larger increase in scholarship awards has offset the more modest increase in federal grant awards.

While many of the trends in financial aid have been positive, cost of attendance remains a concern for the university. With tuition and fees comprising only a quarter of the total cost, developing strategies to mitigate increases in other areas will be important in the next several years. It does appear that the efforts to realign scholarship resources have been successful in attracting new students to the university. Like the Hathaway Scholarship, these efforts will need to be continually monitored and assessed to ensure the greatest impact on recruiting and retaining students to the University of Wyoming in the future. In addition, the institution has yet to add significantly to the amount of financial aid specifically available to nontraditional students, for whom such programs as the Hathaway Scholarship are not available. Addressing this financial need has been identified as an institutional priority, both in terms of foundation priorities and state legislative support. (2a)

Revisiting decisions about tuition to address changing funding needs of the institution

(Core Component 2b)

The university has identified the need for tuition increases as a critical element of its budget planning effort for the next several years. (2b) Evidence supporting this need includes the following:

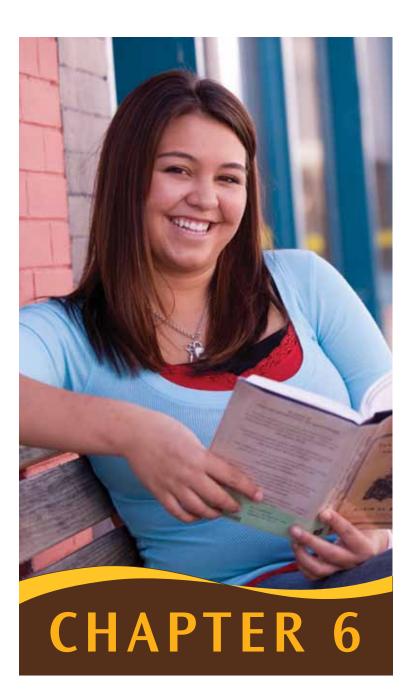
- State appropriations support for the university has been very strong in recent years when Wyoming's economy has been thriving. However, in FY 2010, Wyoming experienced a significant decline in revenues, necessitating budget reductions for all state-supported institutions including the University of Wyoming. The outlook for state support for FY 2011 and FY 2012 is likely to be constrained as the state's economic picture has gone from one of large surpluses to one in which revenues barely support flat appropriations.
- Current resident tuition levels are too low to offer immediate relief for revenue generation—especially in a single year.
- In 2009-2010, resident undergraduate tuition and fees ranked as follows:
 - » 13th out of 13 western land-grant institutions
 - » 25th out of 25 Western Undergraduate Exchange institutions
 - » 150th out of 150 public doctoral institutions in the U.S.

With these realities in mind, the Board of Trustees, with student support, recently approved President Buchanan's plan for a FY 2011-2014 tuition increase. Recent changes to undergraduate financial aid from federal stimulus funds (such as increased Pell Grants and additional student loan opportunities) would mitigate the impact on students of the tuition increases. In addition, it is anticipated that American Recovery and Reinvestment Act funding to the University of Wyoming in FY 2011 will enable the university to defer tuition increases until FY 2012. Communicating the institution's tuition increase plans should allow students and families to better plan for future cost of attendance at the university.

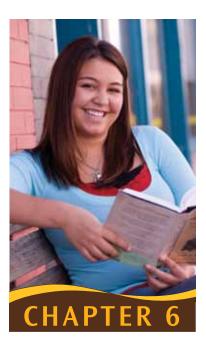
CONCLUSION AND KEY FINDINGS

The University of Wyoming is concerned about increasing access and opportunity to students. However, many competing factors create challenges for the university: the goal of increasing the college-going rate in Wyoming at the same time there is a projected decrease in the number of high school graduates; ongoing concerns regarding the increasing cost of attendance; the goal of increasing diversity; and the imperative to increase academic quality. This increasing level of complexity with access-related issues may compel the university to design a more unified, holistic set of strategies in the near future. To aid in this effort, the following key findings have been identified:

- The University of Wyoming must continue to support and assess the enrollment pipeline development programs. It should continue its collaborative, statewide efforts with GEAR UP, the Wyoming P-16 Education Council, the Wyoming School-University Partnership, and others related to preparation for college, retention, and completion of the baccalaureate degree. (UP 3 Action Items 11, 16 and 18)
- The university should continue and strengthen its partnerships with the state's community colleges in order to further facilitate transfer from twoyear institutions to the state's only university. At a minimum, this involves continuing the articulation process and maintaining current forums for discussion by the university and community colleges' academic and student affairs leadership. (UP 3 Action Items 18 and 19)
- The university should involve its constituents among minority populations in evaluating recruitment strategies in its efforts to increase diversity. Diversity of the student population continues to be an important priority. While the university has experienced an increase in ethnic minority students, it hopes to realize additional increases over time. (UP 3 Action Item 24)
- The Hathaway Scholarship Program expands access for Wyoming students; however, the impacts of the program are not fully understood and need to be assessed in collaboration with other statewide stakeholders. The study being coordinated by the Wyoming P-16 Education Council and the Wyoming Department of Education is a start, but additional studies internal to the university need to be commissioned. (UP 3 Action Items 4 and 16)
- The university needs to continue reviewing its scholarship awarding policies in light of the Hathaway Scholarship Program to ensure that it effectively uses scholarship dollars to optimize student recruitment and retention. Future investigation and analysis will be necessary to assess the needs of its constituents and the effectiveness of its scholarship programs. The need for increased aid is especially strong among nontraditional student populations. (UP 3 Action Items 4 and 5)



Engaging Undergraduate Students at the University



"Take this advice to heart. Keep your eye on the prize. You are here to get an education. Others measure your success by the grades you earn or the degrees you receive. We measure your success by what you learn. It isn't about getting a degree, it's about getting an education. That will happen in the classroom and that will happen in the co-curricular activities in which you choose to participate."

—Tom Buchanan, President of the University of Wyoming

Engaging Undergraduate Students at the University

CREATING LEARNING ENVIRONMENTS (Core Component 3c)

In Chapter 5, we assessed a number of the university's programs aimed at overcoming academic and financial barriers to provide for a more successful transition to the university. This chapter starts with a snapshot of enrollment trends. We then review programs aimed at integrating students into the university's academic and social learning culture and offering them the tools to succeed. This chapter also includes a discussion of major developments in the physical and technological environments that provide students with access to high-quality learning environments. (3c)

UNDERSTANDING THE DIVERSITY OF LEARNERS (Core Component 1b)

The University of Wyoming has experienced some demographic changes over the last 10 years. One of the most significant changes has been the growth among ethnic minority populations, an increase of more than 25 percent since 1999. Growth has occurred among Hispanics, Asians and Pacific Islanders, and biracial student populations. African American and American Indian enrollments have remained flat. Furthermore, the number of international enrollments has nearly doubled since 1999, with 260 international undergraduate students in fall 2008. (1b)

Undergraduate enrollment increased by 14 percent since 1999. While the increase has been moderate (8 percent) at the Laramie campus, the Outreach School, which manages the delivery of all off-campus instruction, has experienced a more substantial increase of 68 percent. The university continues to serve a predominantly traditionally-aged (18-22) student on the Laramie campus while the Outreach School serves a much higher proportion of older, nontraditional students. Table 6.1 provides an overview of some general characteristics of the undergraduate student body.

		Fall 1999 versus F	all 2008		
	Fall 1999		Fa	III 2008	10 Year
	Number	% of Students	Number	% of Students	Change
Race/Ethnicity					
Minorities	726	9%	914	10%	26%
Caucasian, non-Hispanic	7,069	84%	7,808	81%	10%
International	131	2%	260	3%	98%
Ethnicity unknown or unreported	496	6%	621	6%	25%
Gender					
Females	4,515	54%	5,073	53%	12%
Males	3,907	46%	4,530	47%	16%
Tuition Residency					
Resident	6,621	79%	6,620	69%	0%
Non-resident	1,801	21%	2,983	31%	66%
Site					
Laramie campus	7,592	90%	8,212	86%	8%
Outreach	830	10%	1,391	14%	68%
TOTAL	8,422		9,603		14%

Table 6.1. Undergraduate Student Characteristics

Source: Office of Institutional Analysis. Revised 03/10

Freshman enrollment and retention rates (Core Component 5a)

The largest group of new enrollments on the Laramic campus continues to be freshmen, which have grown 38 percent since 1999. Freshmen students are nearly all traditional college-going students enrolled at the Laramic campus and are an average of 18 years of age. In 2008, 16 percent of the state's high school graduates enrolled at the University of Wyoming. While some of the growth at the Laramic campus has come from an increase in Wyoming residents, significant growth has occurred in non-resident students from neighboring states such as Colorado. As a result, the percentage of in-state undergraduate enrollment has decreased from 66 percent to 53 percent over the last 10 years. New fall freshmen enrollments from Colorado grew 199 percent between 1999 and 2008. This increase follows an increase in University of Wyoming marketing and recruitment efforts in Colorado. It remains to be seen if the recent downturn in the national and state economy will affect these demographics. (5a) Table 6.2 provides additional details about freshmen.

		Fall 1999 versus	Fall 2008		
	Fa	ll 1999	Fa	10 Year	
	Number	% of Students	Number	% of Students	Change
Gender					
Females	668	55%	859	51%	29%
Males	557	45%	834	49%	50%
Site					
Laramie campus	1,224	100%	1,693	100%	38%
Outreach	1	0%	0	0%	0%
Average Age	18.3		18.5		
State of Residency					
Wyoming	814	66%	902	53%	11%
Colorado	136	11%	406	24%	199%
Nebraska	56	5%	60	4%	7%
Other	219	18%	325	19%	48%
TOTAL	1,225		1,693		38%

Table 6.2. First-time Freshman Characteristics

Source: Office of Institutional Analysis

The university's first-year (fall-to-fall) retention rates were highest in the early years of the 1999-2008 decade at 77 percent but declined to 72 percent. This effect has also influenced four and six-year graduation rates, which peaked a few years ago. Academic qualifications of new freshmen have ebbed and flowed but do not appear to explain this change. One possible explanation is the differential retention rates for resident and non-resident students. The retention rate of non-resident freshmen is on average 7 percent lower than for Wyoming students. As the proportion of non-resident students has increased, their influence on the university's overall retention rate has been more pronounced.

Transfer students

(Core Components 1b, 2a)

The university enrolls an average of roughly 1,000 transfer students per year. This number has ranged from a high of 1,113 students to a low of 929 students in the last 10 years. The majority are female at about 60 percent. While most transfer students enroll on the Laramie campus, there is a smaller but growing number who are enrolled through the Outreach School. Transfer students who come to the Laramie campus are the more traditionally-aged college student, with an average age of 23. (2a) Over the last five years, around 15 percent of the transfer students to the Laramie campus have come from Casper

College. Due to its proximity, Laramie County Community College is also a steady source of transfer students with an average of 13 percent of the transfers per year. Overall, 59 percent of the transfers in 2008 were from Wyoming community colleges. Out-of-state transfer students have traditionally come from Colorado, Nebraska, Montana, California, and South Dakota. The university also serves older transfer students who earn their degrees through the Outreach School, with an average age of 31. This group is also disproportionately female. (1b) Table 6.3 provides additional information about transfer student characteristics.

Transfer students with a higher number of earned credits at the time of transfer and those who have earned an associate's degree are more likely to complete a degree from the University of Wyoming compared to other transfer students. Sixty-three percent of Wyoming community college transfer students come to the university with an associate's degree, as opposed to only 27 percent of out-of-state students. This difference likely explains why Wyoming transfer students, for whom the statewide credit-transfer agreement facilitates the transition, have a higher six-year graduation rate from the university (64 percent compared to the 48 percent rate for out-of-state transfer students). (2a)

STUDENT SUCCESS PROGRAMS

(Core Component 3c)

Over the last decade, the university has designed several initiatives to help students succeed, especially in their lower division coursework. Central to these efforts is the recognition that learning is enhanced by social communities. In particular, the university has worked to foster connections among courses and between the curriculum and the co-curriculum. Other efforts include creating opportunities for students to make deeper connections with faculty and fellow students for enhanced learning. (3c) Almost all of the initiatives described in this chapter target the traditional high school graduate entering the university. The university is now evaluating the need for similar support systems for re-entering, transfer, and nontraditional students.

The Learning Resource Network (LeaRN) (Core Components 3c, 3d)

This innovative center had its origins in Academic Plan I, which envisioned an academic success center. In 2003, a team of faculty and student affairs professionals debated various aspects of remedial models versus models that focused more broadly on all baccalaureate student learning. In the end, the more broadly targeted model prevailed. With a vision of a center that would work with both faculty and students on college transition and success issues, the Learning Resource Network (LeaRN) was funded in 2004 to model an effective relationship between the curriculum and co-curriculum. A director and a program co-ordinator now work with faculty, a variety of campus offices, and state partners to design and coordinate programs for student success. (3d)

Table 6.3. Transfer Student Characteristics

	Fall 199	9 versus Fall 2008			
	Fall 1999		Fall	2008	
-	Number	% of Students	Number	% of Students	10 Year Change
Gender					
Females	591	59%	570	58%	-4%
Males	403	41%	414	42%	3%
Site					
Laramie campus	819	82%	667	68%	-19%
Outreach	175	18%	317	32%	81%
Average Age					
Laramie campus	22.6		22.9		0.3
Outreach	30.5		31.2		0.7
Transferring Institutions					
Casper College	139	14%	153	16%	10%
Central Wyoming College	48	5%	55	6%	15%
Eastern Wyoming College	34	3%	24	2%	-29%
Laramie County Community College	136	14%	131	13%	-4%
Northern WY Community College District	85	9%	68	7%	-20%
Northwest College	59	6%	64	7%	8%
Western Wyoming Community College	94	9%	88	9%	-6%
Wyoming Community College Transfers	595	60%	583	59%	-2%
Percent with associate's degree				63%	
Out-of-state transfers	399	40%	401	41%	1%
Percent with associate's degree				27%	
TOTAL	994		984		-1%

Source: Office of Institutional Analysis

Reporting to the Office of Academic Affairs, LeaRN is advised by a board consisting of representatives from academic affairs, student affairs, and the student body. LeaRN now administers most learning communities for first-year students, runs the Synergy program for conditionally admitted (and hence at-risk) students, sponsors supplemental instruction, and coordinates support centers such as the Math Lab, the Writing Center, and the Oral Communication Center. In the past two years, LeaRN has also engaged with the Wyoming School-University Partnership to work with public school teachers on issues of preparing students for college-level reading and writing. (3c)

Learning communities

(Core Components 2c, 3d)

Twenty-one percent of the university's freshmen indicated in the 2009 National Survey of Student Engagement (NSSE) Survey that they participated in at least one formal learning community or formal group taking two or more classes together. Another 19 percent indicated that they had plans to do so in the future. Twenty-five percent of seniors reported that they had participated in one of these groups. Recent registration records indicate that approximately 30 percent of matriculating students participate in academic learning communities that offer cohort courses in the first year. The university has developed several types of learning communities to accommodate a variety of student interests. Because data indicate that these communities successfully integrate students into the academic culture and enrich the learning environment, the university plans to expand their variety and number. (2c, 3d)

Engineering Power Groups (Core Component 2c)

Residential learning communities were first established at the university in 1995 with Engineering Power Groups, where first-year engineering students take courses together and live on the same residence hall floor. The College of Engineering and Applied Science has documented higher retention statistics as a result of this program. In addition, this program was selected as a model program in a 2002 publication, *Strengthening First-Year Student Learning at Doctoral/Research-Extensive Universities*. (2c)

Freshman Interest Groups (Core Components 2a, 2d, 3c, 3d, 4a)

The university piloted Freshman Interest Groups (FIGs) in 1998 as another residential learning community model, where students having common academic interests take three or four classes together and live together on the same residence hall floor. The program was designed as a collaborative effort between academic affairs and student affairs, with an advisory board overseeing the program. In the first years of this program, the Office of Academic Affairs provided administrative support for marketing and blocking courses, while residence life managed room assignments and floor program efforts. (2d)

The early successes of power groups and the FIGs pilot project led to further exploration of learning communities. In 2001, a group of faculty, administrators, and a student delegate attended an institute supported by the National Learning Communities Project at The Evergreen State College. This working group subsequently developed a proposal that set in motion a small funding stream for new learning community initiatives. A learning community summit was held in 2002 to provide a forum for conversations around learning community principles. As part of the National Learning Communities Project, a site review was conducted in 2003. Findings from this site review helped to inform the planning for a full implementation of FIGs. (4a)

LeaRN is now the administrative home for the FIGs project. Learning communities are established through a faculty proposal process. Every year, the university offers between 12 and 18 FIGs. The learning communities include major-based cohorts (e.g., nursing, education, animal science, pharmacy) and theme-based cohorts (e.g., Science and Society: The World Around Us; Environment and Natural Resources; Mind, Brain, and Culture). (2a) In the early years of the program, there were varying degrees of communication among the faculty teaching in the same FIG. In some cases, the only real linkage for students was their living environment. Under the auspices of LeaRN, course linkages are now enhanced through a FIG colloquium, which brings together faculty members in the program. (3d) The resident assistants assigned to FIGs receive additional compensation to attend some classes with their FIG students so that they may assist with study groups. FIGs have been a successful endeavor, with the fall-to-fall retention rate for FIG students ranging from 2 percent to 12 percent higher than for students who are not in FIGs, as evidenced in Table 6.4. While the retention rates are higher overall for FIG students compared to students not in FIGs, these retention rates differ for Wyoming high school graduates compared to out-of-state graduates. Figure 6.1 shows that retention rates were 14 percent higher for Wyoming students participating in FIGs compared to out-of-state students participating in FIGs. (3c)

		Fall 1998 to Fa	all 2007		
	FIGs		No	n-FIGs	
Entering Fall	Ν	% Retained	N	% Retained	Retention Rate Difference
1998	125	77%	1,133	75%	2%
1999	116	80%	1,109	76%	4%
2000	160	81%	1,192	74%	7%
2001	153	80%	1,293	76%	4%
2002	183	75%	1,288	73%	2%
2003	128	84%	1,288	75%	8%
2004	141	77%	1,377	73%	4%
2005	155	78%	1,266	74%	4%
2006	200	80%	1,374	73%	7%
2007	213	83%	1,428	71%	12%

Table 6.4. Fall-to-fall Retention Rates of FIG Freshmen versus All Other First-time Freshmen

Source: Office of Institutional Analysis

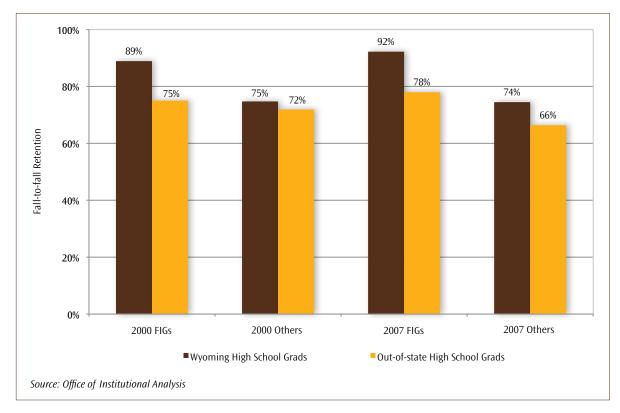


Figure 6.1. Retention Rates Comparison of FIG and Non-FIG Participants by Wyoming versus Out-of-state High School Graduates, Fall 2000 versus Fall 2007 Cohorts

Synergy (Core Components 2c, 3c, 5a)

Synergy is a learning program for the university's at-risk students. Synergy has its roots in the work of the Retention Committee of the Enrollment Management Council (EMC). Beginning in 2000, the retention team was established as one of six working committees of the EMC and was charged with analyzing retention data. The team found that students who were conditionally admitted (high school GPA less than 2.75 and/or ACT scores less than 20) were more likely to be on academic probation after their first semester and subsequently less likely to be retained after their first year. Virtually no conditionally admitted students were graduating with a degree. During this same time, the English department had been piloting a voluntary learning community for at-risk students that showed signs of improving retention. This pilot project was revised to include four courses that fulfilled several University Studies Program requirements: the first-year writing course, a large lecture political science course, an intellectual community course, and an oral communication course. The program, renamed Synergy, became a mandatory requirement for admission for approximately 150 conditionally admitted students. (5a)

Since the program's inception, students participating in the program have a 0.35 higher first semester GPA and about 20 percent lower academic probation rates than students admitted with conditions during the four years before the program began. In 2007, Synergy won the nationally prestigious Hesburgh Award for excellence in faculty development. (3c) The

program is resource-intensive, but in the view of the university's senior administrators its success justifies the expenditure. (2c)

Expanding learning communities (Core Component 5a)

Given the success of these learning communities, the university is exploring a variety of other learning communities to help students make a smooth transition to college. In fall 2009, in response to concerns that new students were unable to sign up for popular courses their first semester, the university piloted Sure Start, a program that blocks several courses based on a student's major. The program was piloted in six different majors and will be implemented more broadly pending analysis. Another effort is an intellectual community course that was first piloted with one section of undeclared first-year students and now has been expanded to multiple sections. This course links career counseling with students who need extra support to declare a major. In an expansion of this concept, learning communities for undeclared students began in fall 2009. Students who have not declared a major often find greater challenges in achieving community, feeling grounded academically, and locating course-based opportunities for exploring major and career possibilities. (5a) LeaRN has piloted cohorts for 120 undeclared students and will expand cohort opportunities in the next five years to serve the majority of entering undeclared students, which typically number about 300.

Honors Program (Core Components 2b, 4b)

The Honors Program was the university's first learning community, designed to provide academic and co-curricular experiences for a number of the most academically adept students. The program is directed by a full-time distinguished faculty member with staff who support the program, its participating faculty, and the students. This long-standing program has experienced increased enrollment in the last 10 years. It now serves approximately 600 undergraduates. First-year students must have either an ACT score of 28 or a high school grade point average of 3.75. The Honors Program learning community requires students to complete five innovative and challenging core courses taught by distinguished senior faculty members that include a two-semester colloquium the first year and thereafter one honors course each year. Students also complete a senior thesis. (4b)

The program encourages active leadership in student organizations and off-campus study. Honors Program students are disproportionately represented in the student government and other leadership positions. Honors students have been admitted to several leading graduate and professional schools. Over the past decade, University of Wyoming honors students have garnered one Marshall, one Rhodes, one Truman, and two Goldwater scholarships. The university has Honors Program agreements with four of the seven Wyoming community colleges. Recently the Honors Program has enjoyed an increase in permanent funding as well as a newly remodeled Honors House. (2b)

Supplemental instruction and tutoring (Core Components 2c, 3b, 3c, 3d)

Beginning in 2001, the Office of Student Educational Opportunity expanded the university's supplemental instruction (SI) program by securing funding from a number of student affairs and academic affairs offices. Between 2001 and 2004, SI served students in beginning biology, anthropology, and chemistry courses. Analysis of the program showed that students attending two or more sessions had exam scores that averaged 10-15 points higher than those who did not participate. (2c)

The program formally shifted to LeaRN in 2005, and in 2007 LeaRN began facilitating SI in several high-difficulty first and second-year courses. (2c) LeaRN now hires and trains 30 to 40 SI student leaders each year in multiple departments. (3b) In a 2007 assessment of the SI program, LeaRN found that 15 to 91 percent of students attended SI sessions depending on the course. (Nationally 10 to 20 percent attendance is considered successful.) In surveys, instructors have been overwhelmingly positive about the effects of SI for students, and many have discussed secondary benefits of the program on improving curriculum. In fall 2009, LeaRN partnered with the Outreach School to offer SI to online students in the Bachelor of Applied Science degree program. Distance SI is a new model, and this pilot appears to be one of the first in the country. (3c)

In addition to SI, several programs offer individual tutoring for their students. Student Success Services and the McNair Scholars Program offer one-on-one tutoring for first generation, low income, and ethnic minority students as well as for students with disabilities. The Office of Multicultural Affairs offers campus-based, one-on-one tutoring for ethnically diverse students by student request, and athletics provides subject tutors who are available at designated times for student athletes. These resources ensure access to diverse student learners. (3d)

Learning support centers (Core Component 3d)

The university maintains four learning support centers. Three are associated with academic disciplines (writing, math, and communication), while the fourth provides general tutoring support to students living in the residence halls. These centers ensure that students have access to the right tools and resources they need to succeed, especially in the key learning outcomes of written communication, oral communication, and quantitative reasoning. (3d)

Writing Center

(Core Components 3b, 3c)

The Writing Center is a resource for all university writers who need help with any writing assignment or task, with undergraduate students representing the main clientele. The center is staffed by several English faculty members and three or four undergraduate peer tutors. It is administratively supported by the Ellbogen Center for Teaching and Learning. In addition to working with undergraduate students, the Writing Center

"In surveys, instructors have been overwhelmingly positive about the effects of supplemental instruction for students and many have discussed secondary benefits of the program on improving curriculum." provides professional development workshops for teaching writing, works with faculty clients, and provides assistance on thesis and dissertation writing. (3b) More than 2,000 students utilized these services in 2008-2009, including online consultations for distance students. The Writing Center is considering dedicating a position to online consultation that would work specifically on the writing needs of online users. An increasing number of students using the Writing Center have a primary language other than English and as a result are placing special demands on the Writing Center. (3c)

Oral Communication Center (Core Components 3b, 3c)

The Oral Communication Center, staffed by the Department of Communication and Journalism, is designed to improve oral communication and presentation skills for all students. More than 1,250 visits were made by students seeking communication support at the center in 2008-2009, representing a 20-fold increase since its inception in the early 1990s. The center's director is nationally recognized for helping with high anxiety in public speaking. (3b) This lab is staffed by student interns who gain professional skills through their work. (3c)

Math Lab (Core Components 3b, 3c, 3d)

The Math Lab is another service center that receives high survey marks by students. Serving students at every level of mathematics, it has an average of 1,600 visits per semester, with a significant number of clients becoming repeat users. The Math Lab operates using faculty members and graduate students who work in the center as part of their graduate assistant duties. A small number of undergraduate students also work in the Math Lab. After operating for years with a volunteer faculty director, the university hired a full-time director for the Math Lab in 2005. (3b) The Math Lab also receives financial support by students. The Associated Students of the University of Wyoming provided a grant to help purchase additional computers and new furniture for the lab. According to assessment data, Math Lab services have been directly correlated with positive student learning outcomes. The approximate grade point average for a student who uses the Math Lab is 2.8 compared to 2.5 for non-users. Furthermore, 80 percent of students using the Math Lab earn a C or better compared to 70 percent for non-users. (3c, 3d)

Student Learning Center (Core Component 3d)

The Student Learning Center, housed in Washakie Center, provides tutoring services in a variety of disciplines during evening hours, which are popular study times for students. This center is funded by Residence Life & Dining Services and student affairs. This center does not have any specific academic disciplinary focus. All university students are served, but students living in the residence halls, where over 80 percent of first-year students are housed, are the primary users. (3d)

Student perception of support centers (Core Component 3d)

The university surveys students about their perceptions of the four learning centers through its University of Wyoming Student Opinion Survey. In general, student awareness of the centers has increased between 2004 and 2008. The Math Lab and the Oral Communication Center are the most used learning centers, with 48 percent and 45 percent of students reporting that they have used the centers, respectively. A large majority of students report that they received the help they sought at each of the four centers (ranging from 79 percent to 92 percent in 2008), and that the assistance improved their course grade (ranging from 63 percent to 81 percent). (3d)

Student Educational Opportunity

(Core Component 3d)

The Office of Student Educational Opportunity (SEO) houses several federally funded programs serving disadvantaged students and the Office of University Disability Support Services (UDSS). All program services are free to participants. (3d)

Student Success Services (Core Component 3c)

Funded through a grant from the U.S. Department of Education, Student Success Services (SSS) provides college success services to approximately 230 students from low income families, first generation college students, and students with disabilities. Students who apply for services in their freshman year join the Freshman Year Experience which includes assignment to a program coordinator. The coordinator helps students by assessing their skills and abilities, encouraging involvement in campus activities and student groups, assisting with financial aid applications, and helping to address issues affecting their ability to stay in college and graduate. SSS also offers scholarships and a large range of cultural activities as well as individualized tutoring. (3c)

McNair Scholars Program (Core Component 3d)

Also federally funded through the U.S. Department of Education, the McNair Scholars Program provides services to approximately 30 to 35 first generation and low income students as well as ethnic minority students with the goal of helping juniors and seniors to prepare to enter graduate school and earn a PhD. The McNair Scholars Program provides intensive services to participants including an extensive, funded research internship, assistance with completing graduate school applications, funding for graduate school visits, assistance with overcoming academic and other barriers common to disadvantaged students, and academic support services including tutoring. (3d)

University Disability Support Services (Core Component 3c)

University Disability Support Services (UDSS) provides leadership and assistance to the university in its efforts to comply with the intent and specific regulations of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The university provides services to over 300 students with disabilities through a wide range of disability-related accommodations as well as technical assistance and consultation. UDSS provides resource information for students, faculty, staff, and campus visitors, and for university departments seeking to improve accessibility for individuals with disabilities. (3c)

CREATING EFFECTIVE LEARNING ENVIRONMENTS: INFRASTRUCTURE

Several times in this self-study, the university has noted how Wyoming's mineral wealth has resulted in remarkable building projects at the university in the past decade. These brick-and-mortar improvements represent far more than an extensive form of home improvements. Teaching and learning have changed significantly over the past two decades, partly as a result of the digital revolution and partly from the need to develop collaborative and interdisciplinary skills. Investing in the infrastructure insures that the university's students will be prepared for the work and learning environments that they will enter beyond graduation.

Capital improvements and learning spaces (Core Components 2b, 2c, 3c)

Through significant support from the state legislature and private donors, a dramatic increase in construction and building activity has occurred over the past 10 years and will continue for several more. Recent and ongoing construction includes major new additions to Coe Library and the College of Business, a new anthropology building, and major renovations to the Classroom Building, Health Sciences Complex, and College of Law building. (2b) The 2008 Noel-Levitz Survey data show students have responded positively to these improvements in infrastructure. The Classroom Building, the major teaching center for undergraduates, has been renovated with modern furnishings, computer technology, student study spaces, and a café. The new anthropology building allows students to more easily access labs and collections as part of their coursework. The renovation and expansion of the buildings housing the College of Business, the College of Health Sciences, and Coe Library were all designed to enhance student learning by promoting social and academic interactions among students in different majors. (3c) In many ways, these new spaces have enriched the classroom and study lives of students. A visit to Coe Library at any time of day or night confirms that students highly value academic spaces constructed for collaborative work.

"Investing in the infrastructure insures that the university's students will be prepared for the work and learning environments that they will enter beyond graduation." Other areas of facilities improvements include a new Information Technology (IT) Center, completed in fall 2009. Over the last decade, the university has made IT a major priority in enriching the learning experience. The IT Center provides the anchor for the institution's computer infrastructure, and it includes technology-rich training rooms and technology conference rooms utilized by university programs and departments. (3c) The IT Center also includes a state-of-the-art, 24-7 computer lab with more than 150 software applications available and a new multimedia production station.

Renovations in the Wyoming Union, residence halls, and dining center are also correlated with increased student satisfaction as well as an increase in the number of students living on campus. Data show that students who live in the residence halls their first year are more likely to be retained past their first year than those who do not. A live-in policy requires all first-year students to live on campus unless they demonstrate special circumstances. During the last 10 years, fall-to-fall retention rates for first-year students living in the residence halls have averaged 77 percent, while students who have not lived on campus averaged 64 percent during the same time period. (2c)

Plans for new construction include the Berry Biodiversity Conservation Center, which will house zoological collections, the cross-college ecology program, interdisciplinary laboratory facilities, and additional faculty and student spaces. Design and construction of a new fine arts building has been identified in the university's capital improvement plans, with architectural design funding approved by the legislature in 2009. The building will be designed with natural light considerations and open classrooms for learning and practicing art. The building site location was strategically selected to facilitate interactions between the Art Museum and art courses. Ongoing renovations include lecture rooms in the College of Agriculture and Natural Resources, science labs in several locations, and a number of College of Engineering and Applied Science classrooms. (3c)

Technology to enhance learning

(Core Components 2a, 2b, 2c, 3c, 5a)

With improvements in computing infrastructure and bandwidth over the past few years, the university compares favorably with other institutions and has positioned itself well for the future. The university is a member of the Internet 2 Network, a collaborative project involving research universities and partners in industry and government to sustain a leading edge network capacity for the national research community, to direct network efforts to fully utilize the capabilities of broadband networks, and to rapidly transfer new network services and applications to all levels of educational use. Regionally, the university is a member of BiSON, a Bi-State Optical Network consortium of research and higher education institutions along Colorado's Front Range. The partnership with NCAR has already spawned new collaboration between the university, NCAR, and the University of Colorado-Boulder. (2b)

The Division of Information Technology (IT) has made substantial strides in its support of university users of digital technologies. According to the 2008 ACT Student Opinion Survey, 88 percent of students were satisfied or very satisfied with computer services compared to 80 percent nationally, which represents a statistically significant difference. (2c) Improvement in the university's wireless capabilities across the campus and in its remote access is particularly noteworthy. (2a) The expanded Laramic campus wireless system supports the growing use of laptops and handheld computing devices. Faculty and staff can use the Virtual Private Network to connect to their desktops remotely. Students can log on to the University of Wyoming Student Computing Lab System to access software packages from anywhere they have Internet connectivity. (3c) According to the 2008 EDUCAUSE Core Data Survey, only a small percentage of universities in the nation provide comparable remote access. In addition to online support, technology in the classroom has been enhanced in many buildings on campus and at the University of Wyoming Casper College Center. The university has identified comprehensive classroom technology standards that were implemented in all of the renovated and new classrooms in the Classroom Building. These standards are being implemented across campus in scheduled classroom renovations. (2b)

In 2006, the university launched the UW portal, WyoWeb, through which students can register for classes, view details about their financial aid, pay their bills, and complete many other university functions online. WyoWeb is also a key communication mechanism for the university. It contains university announcements, information on university events and various campus groups, a calendar, and access to University of Wyoming email accounts for students, faculty, and staff. (5a)

Through their WyoWeb accounts, faculty have access to elements of a basic online course management system. Collaboration between the Outreach School and the Ellbogen Center provides technical and pedagogical support for a more advanced system called eCompanion, and the university is also piloting a Sakai open-source option. (5a) Use of these online courses supplements has grown steadily over the last decade: more than 300 courses now have eCompanion or Sakai course management system components. The Ellbogen Center also supports other instructional media, with recent growth in the use of classroom performance systems (clickers), Podcasting, and videocasting. Internal assessments suggest that students are beginning to value learning environments that include multiple forms of communication. Pilot programs involving ePortfolios and a laptop computer initiative are scheduled for completion in 2010. (3c)

If the last 10 years are a gauge, in the next 10 years the university will experience an explosion of technological possibilities for enhancing learning. To choose wisely and manage effectively, collaborative planning and assessment will be required. Recent cooperation among IT, the Outreach School, and the Ellbogen Center instructional learning support staff has provided the groundwork for planning and decision-making that will become increasingly complex. (2a)

Learning at distant locations

(Core Components 2a, 3b, 3c, 3d, 5a)

The university has a long-standing commitment to distance learning. The Outreach School has primary responsibility for delivering university courses and programs to students not residing in Laramie. Over the past several years, the Outreach School has implemented new methods of delivery for distance learning to improve the quality of higher education throughout Wyoming. This effort has proved particularly useful at increasing student access, contributing to the growth in professional and continuing education, and drawing students from outside of Wyoming. In fall 2008, 14 percent of the university's 13,000 students enrolled in one or more online classes. (5a)

The university has dedicated a number of resources for its distance programs and capabilities with a substantive infrastructure to ensure that its capacity matches growing demands. The Outreach School offers a variety of modes for connecting with students engaged in outreach courses including online (eCollege platform), audio-teleconference, video conference, Web conference, videostream, Podcast (Wyocast), mail correspondence, and combinations of these modes in a variety of hybrid formats. (2a)

Interactive video conferencing is one of the University of Wyoming's most popular distance delivery services. Video conferencing provides the convenience of face-to-face classes and meetings, saving time and money. Prior to 2007, the Outreach School, in partnership with the Wyoming State Division of Telecommunications, operated and main-tained the Wyoming Video Conference System (WVCS). A congressional award allowed the Outreach School to launch a pilot video conferencing system using IP-based technology that connected several video endpoints in Casper directly to the main campus in Laramie. Based on the success of this pilot and the desire of the state to reduce its involvement in video conferencing, the Outreach School, in conjunction with IT, launched the Outreach Video Network (OVN) in 2007. Currently, the OVN has 40 video conferencing rooms on the main campus in Laramie. The network can also connect to Wyoming Equality Network endpoints located in every high school and community college in the state, assuring statewide coverage. (5a)

Distance-delivered academic courses and programs offered through the Outreach School are developed and offered by the university's academic programs and departments. The Outreach School provides assistance in design and implementation of all university distance learning programs. Instructional designers work with faculty and facilitate professional development workshops on course design for distance delivery as well as for choosing the optimal delivery modes. (3b, 3c) For example, the Technology Instructional Enhancements faculty program, designed to promote innovative approaches to distance education, assembles faculty interested in particular technologies, such as podcasting and Web conferencing, to aid them in creating effective learning environments. (3c) The Outreach School-funded Distance Education Grant Program also provides support for faculty and staff at the university and at Wyoming's community colleges conducting research on distance education.

"The university has dedicated a number of resources to its distance programs and capabilities with a substantive infrastructure to ensure that its capacity is in line with growing demands." The university is pivotally involved in planning for Wyoming's future technology-based learning environments. In early 2009, Governor Freudenthal appointed Associate Provost Murdock and Vice President for Information Technology Aylward as co-chairs of a state-wide distance learning taskforce. The scope of that group's duties covers distance education for the entire P-16 system as well as for state agencies and the professions. Among the early recommendations of the taskforce is for the state to establish a center of excellence in distance learning, most likely housed on the university's Laramie campus, to oversee a statewide network of transmission pathways and nodes that can bridge Wyoming's long distances and sparse population. (3d)

CONCLUSION AND KEY FINDINGS

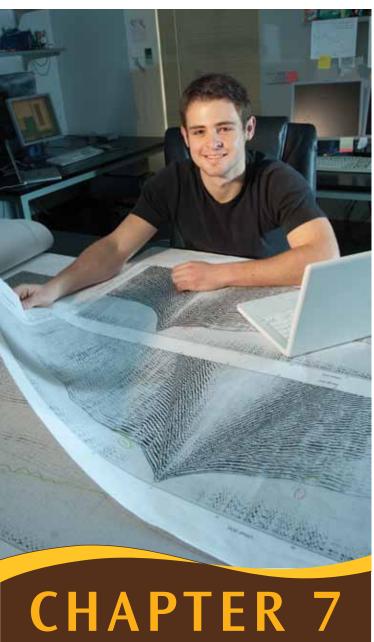
The University of Wyoming is proud of the variety and success of its services delivered to students in order to help them succeed academically. The development of these services has been strategic and deliberate over the last decade with the university relying on assessment data to inform decisions. LeaRN has provided much needed institutional structure to coordinate programs that improve pedagogies and encourage innovative practices aimed at helping students succeed academically. These programs support all learners and respect the diversity of experiences they bring to the institution. Furthermore, the LeaRN program is considered to be a best practice at the university in terms of implementing successful assessment practices, in particular the ability to demonstrate continuous improvement based on data.

The development of new facilities and services, as well as expansion of program and course distance delivery, has occurred with the needs of different learners in mind. While many programs have been targeted at traditional students and first-year students, they are available to most students. The university acknowledges that transfers are a substantial number of the undergraduate student body and that the number of outreach students continues to grow. As such, future decisions must be made with these student subgroups in mind. To aid in this process, the following key findings have been identified:

- Learning communities, both residential (FIGs) and non-residential (Honors Program, Synergy, etc.), engage faculty and students in more effective learning experiences as gauged by retention and student survey data. Assessment data indicate that these instructional programs provide necessary support and improve pedagogies. During the past decade, the university has found ways to support these programs through increased funding, largely in response to institutional planning. The university is planning on continuing a dialogue about whether all first-year students should be involved in learning communities and whether the concept of learning communities should extend past the first semester. (UP 3 Action Item 26)
- The university has expended significant resources on facilities and technology improvements during the last 10 years. In the face of many competing proposals for renovation and new construction projects, facilities that enhance

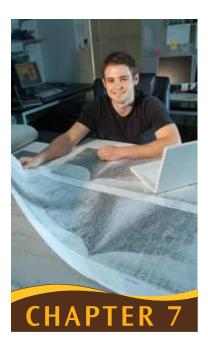
teaching and learning have received the institution's highest priority. One of the challenges will be to identify funding sources to upgrade the numerous class-rooms that do not reside in the new and renovated facilities. (UP 3 Action Items 74 and 81)

• The Outreach School has been successful at increasing the university's overall enrollment and continues to fill a critical void in connecting faculty with distance learners. Careful selection, specification, and design of coursework are critical for the Outreach School to provide access to higher education and support student development regardless of location. (UP 3 Action Items 12, 13 and 14)



Enriching the

Enriching the Undergraduate Student Learning Experience



"I came to UW in 1998 with a strong desire to understand business and the environmental issues in the world since economic and financial sense drive business and affect the environment. What tapped my interest was the ENR capstone course series. We studied coalbed methane development, rural sprawl and collaborative process. The knowledge I gained helped me to advance my career more quickly than I would have otherwise."

- John Knight, former ENR student, founder of Knight Land Services, and current development director of Element Power based in Oregon

Enriching the Undergraduate Student Learning Experience

THE UNIVERSITY'S COMMITMENT TO LEARNING (Core Component 1a)

Chapter 6 outlined the developments over the last decade in providing students with tools and learning environments to support their success. This chapter focuses on curricular revisions and developments that enrich the undergraduate learning experience. During the past 10 years, the university implemented a thorough review and revision of its general education program. It has worked to balance the demands of general education with the specialization required for majors and programs and to improve advising. The university has also expanded interdisciplinary programs, international learning opportunities, capstone experiences, and student leadership opportunities. And, with a decade's work on assessment, we have evidence that many of the university's departments and programs are creating cultures of assessment to improve student learning. (1a)

COMMITMENT TO GENERAL EDUCATION (Core Components 2a, 2b, 2c, 3b, 4a, 4c, 4d, 5c)

The university's general education program, known as the University Studies Program (USP), helps to ensure that students achieve a broad understanding of human knowledge through the completion of common requirements. As shown in Table 7.1, students must complete nine core components and an additional five embedded components to meet the requirements of the USP 2003 program. These requirements help students acquire the skills needed for full participation in a technologically complicated world and those necessary for personal and professional growth. (4c) The requirements further aim to facilitate students' abilities to function and participate in multicultural communities and civic environments. (4a) The

Core Components ¹	Hours	Embedded Components	
Intellectual Community (I)	1-3	Information Literacy (L)	
Writing 1 (WA)	3	Writing 2 (WB)	
Oral Communication (O)	3	Writing 3 (WC)	
Quantitative Reasoning 1 (QA)	3	Global Awareness (G)	
Quantitative Reasoning 2 (QB)	3	US Diversity (D)	
Science (S, SB, SP, SE)	4-8		
Cultural Context (C, CH, CS, CA)	9		
U.S. and Wyoming Constitutions (V)	3		
Physical Activity and Health (P)	1		
TOTAL	30-36		

Table 7.1. University Studies Components

Source: University Studies Program

¹Two core components may not be fulfilled by the same course.

²Embedded components are those that may be taught as part of another course.

goals of the University Studies Program substantially mirror the essential learning outcomes advocated in the National Leadership Council's report entitled *College Learning for the New Global Century.*

The University Studies Program was substantially revised in 2003 in response to the call in the Academic Plan I to review USP, necessitated by 10 years without review and the proliferation of courses that fulfilled distribution requirements. The 2003 revision retained many of the original features of USP, including coursework in writing, quantitative reasoning, global awareness, science, humanities, social and behavioral sciences, and fine arts. Important additions included coursework in oral communication, information literacy, and cultural diversity. (4c) The component originally designed to introduce students to university life was revised to be an intellectual community course in which students are introduced to different forms of academic thought. (2c)

The USP Committee is comprised of faculty representatives from the six undergraduate colleges and other units serving undergraduate students, such as the libraries, the Outreach School, and the Wyoming community colleges. Representatives are appointed by the colleges and approved by the Faculty Senate for three-year terms. The USP Committee is charged with reviewing and approving all USP-designated courses. Specifically, the committee looks for how well particular courses meet the criteria for each designation. (3b) Faculty and departments wanting to maintain USP designation for particular courses must submit course syllabi to the committee once every three years. Innovative teaching and distance learning pedagogies are welcomed and encouraged. Proposals are first reviewed by the various colleges for the dean's approval before the USP Committee review. For example, in the College of Arts and Sciences, a proposal for a new course addressing a USP requirement is

reviewed by the A&S Course Subcommittee and the A&S Central Committee before moving to the USP Committee and finally the University Course Committee.

The university established a general education articulation agreement with the seven Wyoming community colleges in 2001. Under this agreement, students who earn an associate's degree at a Wyoming community college and complete three additional mathematics credits transfer to the University of Wyoming having fulfilled the university's lower division general education requirements. The university recently reached a similar agreement with Pikes Peak Community College in Colorado. In the absence of an earned associate's degree, determination of course transfer is made on a case-by-case basis by the department where the course resides. If there is no university equivalent course, the community colleges then follow the standard university procedure for obtaining USP designation as described. (5c)

The oral communication requirement constitutes an example of how the university has strengthened curricula. The university has provided resources for the teaching of public speaking courses and for the Oral Communication Center that supports student learning in this area, and it systematically assesses student achievement each semester. (2c) Two strengths of the program for oral communication are especially notable. First, sections of public speaking courses are offered to two at-risk populations: conditionally admitted students involved in the Synergy program and students who self-identify as apprehensive about public speaking. Second, the Department of Communication and Journalism offers three to four Freshman Interest Group courses each fall semester to enhance retention. (2b)

University faculty and lecturers occasionally propose additions to the USP program. Recent suggestions include adding a component for ethics. Ethical reasoning is a learning goal not formally part of USP or most college-level requirements at the university, but ethics education is being developed in other ways. Several specific programs offer and even require coursework in ethics. Both anthropology and psychology majors, for instance, are required to take courses that introduce ethical issues of research with human participants. Similarly, an understanding of ethics in science is assessed in geology courses. The College of Business hired the Bill Daniels Distinguished Professor of Ethics to support significant ethical instruction in the college. From 2006-2009, the Ellbogen Center and the Philosophy department sponsored the Kaiser Ethics Project with external funding. In this program, 20 faculty groups developed and assessed new ethics components for courses in business, education, engineering, health sciences, humanities, writing, and biological science. The university has endorsed plans to expand this project. (4d)

Preliminary consideration also has been given to the addition of a technology requirement; future discussion will weigh this possibility against the merits of including and assessing technology experiences within specific disciplinary programs. Given the recent economic developments and the need for understanding the role of consumer credit in our society, financial literacy is another goal undergoing some discussion across the institution. (2a) These preliminary discussions are helpful as the university approaches another cycle of USP review in the next five years as part of the university planning process. "Over the last decade, one of the challenges in the university's planning efforts has been balancing depth and breadth of majors, degree programs, and course offerings. Through planning, departments and colleges regularly evaluate majors to better target and tailor educational needs to Wyoming's students."

COMMITMENT TO PREPARING STUDENTS FOR A DIVERSE FUTURE (Core Components 2a, 2b, 2c, 4c)

Undergraduates can choose from more than 75 majors across six colleges, ranging from architectural engineering to theatre and dance, from kinesiology and health promotion to political science. Although some majors (including several new ones) have relatively few students, others have hundreds, and some remain in flux. Undergraduate majors with the highest enrollments in fall 2008 were elementary education, psychology, business administration, kinesiology and health promotion, criminal justice, mechanical engineering, and nursing. Interdisciplinary majors such as environment and natural resources and international studies are enjoying increased enrollments. (4c)

Over the last decade, one of the challenges in the university's planning efforts has been balancing depth and breadth of majors, degree programs, and course offerings. Through planning, departments and colleges regularly evaluate majors to better target and tailor educational needs to Wyoming's students. For example, the university eliminated 21 majors and added 22 during the period between 1999 and 2009.

As is the case with the number of student majors, the number of faculty teaching students varies across departments. For example, there are seven tenured or tenure-track faculty in accounting compared to 17 in civil and architectural engineering. Growth of student numbers in certain majors does not necessarily lead to appointing additional faculty in that area. Although the university has central position management for the allocation of positions, enrollment in majors is one of several considerations for allocating faculty positions to a unit. Other factors include a unit's contributions to service curricula, its alignment with institutional areas of distinction, and the availability of appropriate start-up funding. (2b)

External accreditation agencies often praise certain programs at the university as exemplary. During the recent National Council for the Accreditation of Teacher Education (NCATE) site visit for the College of Education's reaccreditation, one of the major points of commendation was the series of concurrent majors between secondary education and content areas in both the Colleges of Agriculture and Natural Resources and Arts and Sciences. These concurrent majors are among the few that exist at colleges of education nationally. (2c)

The College of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB). AACSB accreditation is mission-based, focusing on continuous improvement and student learning. As the College of Business prepares for its AACSB accreditation visit in fall 2010, it is focusing on recent changes to its programs that keep it up-to-date. For example, the accreditation team will assess the college's new focus on sustainable business practices as well as the planned changes to the MBA program and the recently approved PhD in marketing. (2a)

Degree programs offered through the Outreach School have grown to accommodate statewide workforce development. An example is the new Bachelor of Applied Sciences degree which is administratively housed in the College of Agriculture and Natural Resources. This program allows site-bound individuals with significant work experience and Associate of Applied Sciences degrees from Wyoming community colleges to enhance credentials in leadership, management, and organizational areas and earn a bachelor's degree in the process. (4c)

Aiding student learning through advising (Core Components 1b, 2c, 5c)

Effective academic advising and career development are key components of academic success and student satisfaction. Colleges at the university employ several models to provide academic and career advising for students on the Laramie campus, at the University of Wyoming Casper College Center, and in the Outreach School. The Colleges of Agriculture and Natural Resources, Arts and Sciences, and Health Sciences have faculty advising models in which students are assigned a faculty advisor in their departments beginning their freshman year. The Colleges of Education and Engineering and Applied Science use centers staffed by professional advisors to provide academic advising for students in the first years and then assign faculty advisors in subsequent years. The College of Business utilizes a center staffed with professional advisors for all undergraduate students. In addition, faculty are assigned to provide career advice. Undeclared students are advised by the Center for Advising and Career Services under an agreement with the College of Arts and Sciences. All departments and programs participate in advising week each semester. (5c)

Academic advising conducted at the department level is supported through the Center for Advising and Career Services, a central unit that provides training for new faculty and provides all advisors with updates of new or changed general education requirements under the USP. Given the diverse nature of the student population, special populations of undergraduate students are provided additional advising opportunities. These groups of students include those enrolled in the Honors Program, student athletes, students who qualify for services under Student Educational Opportunity (first-generation students, low-income students, and students with disabilities), international students, and students who participate in domestic and international exchange programs. (1b) The university expects to provide additional advising services for returning veterans.

Advising for students not on the Laramie campus varies by student location. Those enrolled at the University of Wyoming Casper College Center have access to on-site advising in addition to Laramie campus advisors as described above. Students at other locations in Wyoming have access to regional center academic coordinators, the Outreach School academic advisor located in Casper, and Laramie campus advisors.

Student satisfaction on advising is important to the university. Students appear to be satisfied with advising overall. According to the 2008 ACT Student Opinion Survey, 77 percent of students were satisfied or very satisfied with advising services compared to 70 percent nationwide. In 2008, the College of Arts and Sciences implemented an online pilot survey designed to gain students' impressions of their advising experiences, which may serve as the basis for modifications in the future and for faculty development. (2c)

Interdisciplinary learning

(Core Components 1b, 4c, 4d)

As a research university, the University of Wyoming has begun the important process of creating new interrelated, interdisciplinary units. Interdisciplinary programs are valued for the following reasons: 1) to offer students more opportunities in learning, 2) to offer more courses that carry perspectives spanning more than one traditional department, and 3) to prepare students for contemporary technical professions. (1b)

Currently, the institution's interdisciplinary programs connect and integrate several academic disciplines, professions, and technologies. For example, the Haub School of Environment and Natural Resources (ENR) recognizes that natural resource issues inherently possess political, scientific, cultural, sociological, economic, and legal aspects. (4d) As a result, the ENR program requires students to complete a major in an affiliated discipline, which can be housed in any other department, while also completing coursework in interdisciplinary ENR classes. This program has realized steadily increasing enrollments in the last five years, with numerous ENR alumni achieving career success, as reflected in data collected from the Haub School's 2007 Alumni Survey. (4c)

Other interdisciplinary undergraduate majors include microbiology, earth systems science, energy resources science, and energy systems engineering. All provide students with opportunities to major in areas that cut across traditional disciplines. In the College of Arts and Sciences, seven units are formally designated as interdisciplinary. International studies, women's studies, and American studies offer undergraduate majors. Minors are offered in African American and diaspora studies, American Indian studies, Chicano studies, and religious studies. UP 3 calls for the consideration of new major programs in religious studies and American Indian studies. (4c)

While interdisciplinary academic programs are intellectually exciting, they pose challenges to the traditional academic management structures. Administration of cross-college interdisciplinary undergraduate majors follows several models, none currently entirely satisfactory. In the views of some, a new model employed for two programs, where management is the responsibility of a committee of academic deans with a lead dean, tends to diminish cross-college contributions, leading to a predominantly single-college interdisciplinary program. The university hopes to address this challenge during the implementation of UP 3. (4c)

International learning

(Core Components 2b, 4b, 4c, 5c)

In the last decade, the university has increased the number of students involved in international programs. In 2003-2004, only 61 students studied abroad. In 2008-2009, more than 300 students took advantage of these programs. Students can make overseas study a part of their regular degree program, regardless of their majors or second language skills. Opportunities include a full academic year or semester, summer programs, 10-day or two-week trips during the regular semester, or a spring or winter break experience. These curricular and co-curricular experiences add to the breadth and depth of student learning at the university. (4b) Former Vice President Dick Cheney and Lynne Cheney recently funded a gift that provides the university remarkable support for international education. This gift allowed colocation of all international education programs in the newly remodeled facilities now known as the Cheney International Center. With the Cheney gift of \$1.5 million fully matched by the State of Wyoming, \$3 million was available for the center. An additional \$1.7 million from the Cheney family was also matched by the state to establish a study abroad scholarship endowment. The goal is to build the endowment to \$10 million in support of study abroad students. (2b) To date, 350 students have benefitted from Cheney grants and fellowships with study in 45 different countries.

The Office of International Programs offers two study abroad options. One provides students with the opportunity to study in another country at a partnering institution. The university has 30 such formal partners. In this case, the student pays University of Wyoming tuition, fees, and housing costs to the host institution. A second option provides foreign students with the opportunity to study at the University of Wyoming. These two-way exchange programs provide global perspectives to both groups of learners. (4b, 4c)

The university also offers more than 400 exchange locations spanning the globe. The program is open to any country as long as it has an accredited institution that is willing to cooperate with the university. For example, a student might be interested in studying reproductive health in Mali or working as a wildlife researcher in Madagascar. (5c) There is strong student interest in study abroad, according to the 2009 NSSE results, indicating that the university has the opportunity to expand this program. Fifty-eight percent of freshmen have completed or planned to complete foreign language coursework while 45 percent of seniors have completed foreign language coursework. In addition, 40 percent of freshmen said they have completed or plan to participate in a study abroad program. However, only 12 percent of seniors said they have participated and 10 percent still plan to participate. Issues of money, time, distance from family, and possible delayed graduation may influence whether students actually participate in these offerings.

Learning through capstone and research experiences (Core Components 4b, 5b)

One of a research university's greatest strengths lies in the breadth of opportunities for students to engage in problem-based learning with faculty. Because of its small size, the University of Wyoming has a distinct advantage in connecting students with faculty researchers. (4b) According to the 2009 NSSE results, 81 percent of freshmen have participated or plan to participate in a practicum, internship, field experience, cooperative experience, or clinical assignment. Forty-seven percent of seniors said they have participated in such an experience with another 29 percent still planning to do so in the future. (5b)

Many departments and programs offer students culminating research or internship opportunities through a capstone course or relevant professional experience. Several majors have developed innovative approaches to a capstone experience, while others are in the development stage. "One of a research university's greatest strengths lies in the breadth of opportunities for students to engage in problem-based learning with faculty." The Honors Program and the College of Engineering and Applied Science have longstanding records of excellence with their capstone research experiences. Every honors student works with a faculty member for the equivalent of a three-credit course to write and present a substantial creative or research project for a senior thesis. All students in the College of Engineering and Applied Science complete a senior design project, which involves significant faculty mentoring and formal coursework. (4b) Students always work in teams for their projects. Professional engineers are invited to provide outside assessments of their final presentations. The college has created an innovative interdisciplinary option for these design projects. In spring 2008, students won first place in the Environmentally Friendly Drilling-Disappearing Roads Competition at Texas A&M University.

One of the most successful undergraduate research opportunities for attracting and retaining students under the university's science, technology, engineering, math (STEM) disciplines is the Wyoming Experimental Program to Stimulate Competitive Research (EPSCoR) funded by the National Science Foundation. The EPSCoR program offers opportunities for secondary science majors to pair with STEM graduate students in research projects. These future science teachers gain increased familiarity and confidence with scientific experimentation. In addition, undergraduate students majoring in STEM disciplines can apply for research fellowships for specific topics. Over the last 11 years, the program has provided 388 fellowships. Of the students who participated, nearly 100 percent graduated, with 89 percent continuing in STEM-related careers.

A second undergraduate STEM effort focused on biomedical education and training is the Wyoming Idea Networks of Biomedical Research Excellence (INBRE) program funded by the National Institutes of Health. Recently renewed for five additional years of funding, INBRE provides several programs that offer undergraduate students, as well as Wyoming community college students, access to biomedical-related education and research opportunities. The UW-Community College INBRE Transition Scholarship program provides support for students transferring from community colleges to the university. As part of the award, students are required to conduct mentored biomedical research in laboratories during their junior and senior years. In 2009, five transition scholars were enrolled at the university, including one at the University of Wyoming Casper College Center.

Undergraduate Research Day allows the university to recognize students for their research contributions. This on-campus event presents students with a unique opportunity to showcase their research along with their peers. Over the past five years, it has become increasingly popular with students and their faculty mentors. In 2009, 293 students presented their research at this May event, which is essentially a mini-conference with poster sessions and participant engagement.

Departments and programs have also increased the number of opportunities for students to engage in internships, juried contests and performances, and other programs that connect students to professionals from beyond the university. (4b) For example, students in the Department of Agricultural and Applied Economics have the opportunity to study

agricultural practices and economics in France, and veterinary science students work in the necropsy lab at the Wyoming State Veterinary Laboratory, researching wildlife diseases and domestic animals. The College of Business hosts a centralized internship program providing both course credit and stipends to students. The college offers a minor in entrepreneurship for students to think about ways to start their own business and sponsors a competitive grant open to all university students for \$10,000 in funding for business plan development. (4b) The Community Health Advancement Program, sponsored by the Division of Medical Education and Wyoming Area Health Education Center, creates opportunities for students to design, plan, implement, and evaluate programs for local agencies offering health care assistance and support.

Learning through leadership

(Core Components 2c, 4b, 5a, 5b, 5c, 5d)

Leadership development in both the curriculum and co-curriculum is a major part of the university's mission to prepare students for work and lifelong learning. There are numerous opportunities for students to receive formal training in leadership through coursework. Student opportunity for leadership development is enhanced by the more than 200 student organizations on campus. Students can participate in nationally-ranked club sports teams, award-winning service learning programs, and nationally recognized residence hall leadership programs. In fact, according to the 2009 NSSE results, the majority of students spend some time engaging in co-curricular activities (64 percent of freshmen and 57 percent of seniors). (4b, 5b) Table 7.2 provides detail about students' level of participation.

The Freshman Senate is an example of a program that actively engages new student leaders from the time they arrive at the university. Senators make valuable contacts with first-year students and serve as liaisons between freshmen and university departments to convey student opinions about what is working and what makes the transition to college life difficult. At the end of the school year, these leaders present their recommendations to the president of the university.

According to the ACT Student Opinion Survey, student satisfaction has increased with student government since 1998. In 1998, only 37 percent of students were satisfied with student government. That number has increased to 49 percent in 2008. Conversely, the student dissatisfaction rate has decreased from 13 percent in 1998 to 4 percent in 2008. (2c) Satisfaction with a student voice in college policies has also increased from 1998 to 2008. Twenty-nine percent of students were satisfied with the student voice in college policies in 1998. This number increased to 41 percent in 2008. Although progress has been made in this area, more work remains since half of the students have remained neutral about this issue.

Two programs that have gained momentum within the last 10 years are the Center for Volunteer Service (CVS) and the Wyoming Conservation Corps (WCC). The CVS partners with more than 80 agencies and entities in the greater Laramie/Cheyenne area. In 2007-2008, the Center for Volunteer Service recruited 1,782 volunteers who collectively

"Departments and programs have also increased the number of opportunities for students to engage in internships, juried contests and performances, and other programs that connect students to professionals from beyond the university."

Hours per Week	Freshmen	Seniors
None	35%	42%
1 to 5 hours	32%	32%
6 to 10 hours	14%	11%
11 or more hours	18%	14%

Table 7.2. Participation in Co-curricular Activities by Student Class Level

Source: National Survey of Student Engagement, 2009

performed 15,195 hours of service. Another CVS effort is the annual Alternative Spring Break. Launched in 2006 with partial funding through AmeriCorps, this program includes such efforts as hurricane relief work in Mississippi, trail restoration work in Utah, and legislative visits in Washington, DC. (5d)

Besides logging in service hours, volunteers in these programs participate in a rigorous training curriculum that addresses the following topics: effective communication, diversity appreciation, time management, financial management, public speaking, conflict resolution, team-building strategies, civic participation, political engagement, and best practices for volunteer generation. The curriculum operates under a service learning paradigm, pairing reading, discussion, and structured reflection activities to encourage volunteers to connect service with personal growth and assess community impact. (5d)

Launched in 2006, the Wyoming Conservation Corps (WCC) is modeled on the AmeriCorps program. Initial funding for the program was provided by the Wyoming State Legislature. The WCC mission is to provide students with leadership and natural resource management experience through public service opportunities on Wyoming's public lands. Each summer the WCC partners with state and national land management agencies. WCC fieldwork ranges from building trails and fences to clearing natural fuels in forests and restoring riparian habitats for wildlife. (5c) Since the WCC's implementation in 2006, 87 students and more than 50 university and statewide volunteers have completed over 64,000 hours of service to maintain and improve public lands in Wyoming.

The university assesses volunteer learning both qualitatively and quantitatively. In the AmeriCorps program, volunteers complete written reflections on a monthly basis in which they describe what they have learned as a result of their service and how it ties into principles of civic engagement. They also compose an essay at the end of their service term that describes a transformative moment in their service. In both programs, volunteers complete surveys to gauge their perceptions of their growth. An average of 75 to 85 percent of the volunteers reported that they have significantly improved in civic engagement. In 2008-2009, volunteers were asked to participate in a follow-up survey six months out from their service experience to determine how they have put these skills to use in their personal and professional lives and if they have continued to stay involved. (5d)

Student Leadership and Civic Engagement (SLCE) is the main organization that oversees student leadership development activities at the university. SLCE offers leadership programs and resources for individual students, support and training to student organizations, and management of student internships with a focus on leadership and citizenship. (4b) As a result of its 2007 report, SLCE implemented a number of activities that have strengthened student leadership development, including co-locating space within the Wyoming Union to facilitate new partnerships between the Center for Volunteer Service and the Campus Activities Center. (4b, 5a)

SLCE administrators are working with leaders across the university to examine existing co-curricular activities and leadership curricula to develop a long-term plan for student leadership and civic engagement. For example, a series of leadership seminars was piloted with students interested in being resident assistants (RA) in 2009-2010. Applicants were required to participate in five workshops prior to being interviewed for the RA position. With this requirement in place, 91 students applied for approximately 35 RA vacancies, a record year clearly demonstrating the need for this training. Other SLCE efforts may include developing new initiatives, incorporating a broader academic plan (along with new and existing curricula), and conducting a full comprehensive assessment of over-all leadership development at the university.

ASSESSMENT OF UNDERGRADUATE LEARNING

(Core Component 2c)

The university's assessment efforts aid the institution and its various constituents to gain specific knowledge of what students are learning. Assessment results are used by the university to develop ways to improve its learning opportunities. Assessment occurs at all levels of the university and includes a range of methods. The university has moved beyond using grades and indirect assessments such as surveys as its primary assessment tools. While these still have a purpose, direct measures of student learning have become critical, with the university examining more examples of student work over time. (2c)

University-level assessment

(Core Components 1a, 2c)

The university assessment specialist in the Office of Academic Affairs coordinates various institutional-level assessment projects, including the National Survey of Student Engagement (NSSE), the Faculty Survey of Student Engagement (FSSE), the Collegiate Learning Assessment (CLA), and the parsing the first-year experience study. The university has conducted the NSSE five times since 2000. The most recent administration in 2009 included participation in the Consortium for the Study of Writing in Colleges. The FSSE was administered in 2005 and 2009. The University of Wyoming was one of 50 institutions selected to participate in the first CLA longitudinal study that began in 2005. Also, in 2005, the university was selected to participate in Pennsylvania State University's parsing the first-year experience study. (2c) These studies have provided the university with an "The university's assessment efforts aid the institution and its various constituents to gain specific knowledge of what students are or are not learning, and assessment results are used by the university to develop ways to improve its learning opportunities." excellent mix of direct and indirect measures of student learning at the institutional level and have formed the basis for participation in the Voluntary System of Accountability. The university assessment specialist frequently presents results of these projects to the university community via brown bag sessions through the Ellbogen Center for Teaching and Learning and in assessment newsletter articles. In addition, various programs such as LeaRN routinely use these results in their work with faculty and students. (1a)

General education assessment (Core Components 2c, 3a, 4c)

The responsibility for the assessment of the general education University Studies Program (USP) resides with the USP Committee and the faculty who teach USP courses. (2c) The Department of English has accepted responsibility for assessing writing 1 (WA) and has conducted two assessments: one in 2005 and one in 2009, using a rubric developed by the faculty and instructors teaching composition. The Department of Mathematics has taken over responsibility for quantitative reasoning (QA and QB) assessment since the majority of designated quantitative reasoning courses reside within the department. Formal assessment of general education by the USP Committee began in 2004 with the awarding of two assessment assistance grants to the committee to develop writing 3 (WC) and oral communication (O) rubrics. (4c) The committee began using these rubrics to assess both requirements in 2005-2006. The University Assessment Coordinators Committee further encouraged the development of rubrics, as well as other mechanisms of assessment for other USP core or embedded components, with the awarding of additional assessment grants. Table 7.3 provides a summary of these projects from 2004 to 2008.

With regard to the WC requirement, in fall 2005, 182 students in 11 courses were evaluated. Based on class writing assignments evaluated according to a rubric developed by a team of WC instructors, 80 percent or more of students achieved an excellent or good rating (4 or 3 on a 4-point scale) on each of 11 outcome elements. In spring 2006, 212 students from 13 courses were evaluated with largely similar results, although percentages dropped below 80 percent for two of the 11 elements. Results for fall 2006 (231 students in 13 courses) were similar to fall 2005 results. (3a)

Assessment of student learning in oral communication (O) has been conducted nearly every semester since the rubric was developed in 2004. Data for 448 students who completed COJO 1010 in spring 2009 indicated that between 61 and 78 percent of students rated well done/exemplary or satisfactory/acceptable on each of the 15 dimensions of the assessment. (3a)

Academic Plan II identified the need for an extensive assessment of the USP program with the intent of using this information to improve and revise the program in future years. Based on successful assessments of the WC and O components, the USP Committee designed rubrics in 2008-2009 for direct assessment of student work in all core and embedded components. The committee also created a three-year schedule for assessing all USP courses beginning in 2009-2010. The committee conducted faculty development

Academic Years 2004-2005 to 2008-2009									
Core Components	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009				
Writing 1 (WA)	94 papers*				106 papers*				
Oral Communication (O)	Developed rubrics*	493 pieces of student work	912 pieces of student work	446 pieces of student work	448 pieces of student work				
Cultural Context (C, CH, CS, CA)		Identified best practices*							
Embedded Components	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009				
Information Literacy (L)			1,070 online tutorial tests*						
Writing 3 (WC)	Developed rubrics*	394 papers	231 papers						

Table 7.3. Summary of Completed University Studies Program Assessment

Source: Academic Affairs

* Assessment grants awarded by the University Assessment Coordinators Committee

workshops in spring and fall 2009 to inform faculty about the process of choosing and evaluating student work and the first round of assessment occurring in fall 2009. (4c) Table 7.4 shows the current USP assessment schedule.

College-level assessment

(Core Components 1a, 2c, 3a, 4c, 4d)

Many undergraduate programs of study are guided by additional college-level or program-level requirements put into effect by various accrediting agencies. The College of Engineering and Applied Science's curricula are tightly structured within subdisciplines to ensure the delivery of technical content regarded as essential for effective practice in engineering as well as to satisfy ABET, Inc. accreditation demands. Guided by NCATE criteria, the College of Education develops curricula to meet both national and state standards for teacher preparation. (4d) Similarly, the College of Business is guided by AACSB standards. (2c)

The College of Arts and Sciences has chosen to require additional coursework beyond USP requirements. The additional coursework is in foreign language, science, and non-western culture. In 2007-2008, the Arts and Sciences (A&S) dean's office sponsored assessments of the college-specific requirements through its standing teaching committee. (1a) Assessment of the foreign language requirement utilized data from 483 students.

Academic Year	Academic Years 2009-2010 to 2011-2012							
Core Components	2009-2010	2010-2011	2011-2012					
Intellectual Community (I)	✓	\checkmark	\checkmark					
Writing 1 (WA)	\checkmark	\checkmark	\checkmark					
Oral Communication (0)	\checkmark	\checkmark	\checkmark					
Quantitative Reasoning 1 (QA)	\checkmark	\checkmark	\checkmark					
Quantitative Reasoning 2 (QB)	\checkmark	\checkmark	\checkmark					
Integrated Science (S)		\checkmark						
Biological Science (SB)	\checkmark							
Earth Science (SE)		\checkmark						
Physical Science (SP)			\checkmark					
Integrated Cultural Context (C)	\checkmark							
Humanities (CH)	\checkmark							
Social & Behavioral Science (CS)		\checkmark						
Fine Arts (CA)			\checkmark					
U.S. and Wyoming Constitutions (V)			\checkmark					
Physical Activity and Health (P)			\checkmark					
Embedded Components	2009-2010	2010-2011	2011-2012					
Information Literacy (L)	√	\checkmark	\checkmark					
Writing 2 (WB)	\checkmark	\checkmark	\checkmark					
Writing 3 (WC)	\checkmark	\checkmark	\checkmark					
Global Awareness (G)		\checkmark						
U.S. Diversity (D)	\checkmark							

Table 7.4. University Studies Program Assessment Timetable for New Rubric Implementation

Source: University Studies Program Committee

Students self-reported about both their levels of ability and also problems with the transition between high school and college foreign language study, data that will inform the college's discussion of the utility and structure of the college's foreign language requirement. Assessment of the A&S science requirement utilized a rubric that assessed understanding of scientific process, mastery of content area, and application of science to decision-making. The committee rated hundreds of examples of student work in each category, discovering that the latter is the most problematic. (3a) Assessment of the non-western requirement involved the scrutiny of 270 examples of student work from seven different classes, revealing partial achievement of learning outcomes. Most students could describe non-western cultural traditions and compare them with their own, but it was not clear that they were acquainted with or understood the cultural tradition as people from within those traditions would. A college committee ultimately decided that each non-western course needs to undergo a comprehensive reauthorization process every three years to ensure that students demonstrate the desired learning outcomes. Assessment of the A&S requirements also addresses concerns by some college faculty and students about the purpose and the outcomes of these requirements, an issue noted in the 2000 site visit report. (4c)

Department and program-level assessment

(Core Components 1a, 2c, 3a, 4d)

Almost all departments and programs have a clearly established assessment plan, and each reports progress on implementation via the departmental annual report. The University Assessment Coordinators Committee submits specific questions for consideration and asks departments to provide an overview for each degree program. The committee has reviewed these reports for the last five years and has provided formal feedback and suggestions to department chairs. (3a) This process has been extremely helpful in clarifying issues, opening up communication, providing a constant reminder to chairs that assessment should be a priority, clarifying where departments are with assessment, identifying ways to assist departments in need, and documenting the university's assessment progress. (2c)

Most departments are well past the beginning stages of assessment. Almost all departments have clearly defined learning outcomes that are posted on their Web sites as well as the university's assessment Web site. An analysis of the 2009 annual reports, as detailed in Table 7.5, shows that 95 percent of undergraduate programs have established learning outcomes. (1a, 3a) Among undergraduate programs, 78 percent have collected some direct evidence of student learning while 64 percent have collected indirect evidence, with some having substantial information to aid decision-making among the faculty. While not all departments have completed an assessment cycle, 61 percent of the undergraduate programs have documented changes to their programs and curricula with the goal of improving student learning. (4d)

The methods of assessment vary by department and college. The colleges with undergraduate professional programs have well established processes due to other accreditation processes and, in some cases, licensure examinations. These programs often have extensive data collected, including test scores, portfolio performance, clinical and internship performance, student and employer surveys, tracking of students after graduation, etc. They also have clear processes for documenting their progress and making changes based on their assessment results. (2c) For programs not governed by disciplinary accrediting bodies, there is great diversity in assessment, and some of these departments tend to struggle more with assessment. Many departments use rubrics to assess different assignments while some give common exams. Some use portfolios of some type to assess student work, such as e-portfolios. Many also conduct student surveys, with fewer conducting employer surveys because of the difficulties in tracking students once they leave. Overall, the departments are employing a good mix of direct and indirect methods of assessment. (3a)

Assessment of learning in distance programs and courses (Core Components 2b, 2c, 3b)

Assessment of student learning in distance courses is the responsibility of the academic departments. The Outreach School is responsible for assessing the quality of the learning environment and technology used to deliver the course or program. Each semester students who take distance courses are surveyed via an online instrument. (3b) To assess the university's efforts to meet the educational needs of students and Wyoming residents

	Arts & Sciences	Agriculture & Natural Resources	Business	Education	Engineering & Applied Science	Health Sciences	Inter- disciplinary	UW
	N=30	N=10	N=3	N=3	N=5	N=5	N=3	N=59
Learning outcomes are identified on the department Web page.	100%	90%	100%	100%	100%	80%	33%	95%
The department has collected direct evidence of student learning.	93%	50%	100%	100%	80%	60%	0%	78%
The department has collected indirect evidence of student learning.	60%	50%	100%	100%	80%	60%	33%	64%
The department is using its assessment results and making changes based on results.	60%	30%	100%	100%	80%	60%	33%	61%
The department made progress from the previous year.	97%	50%	100%	100%	80%	60%	0%	81%

Table 7.5. Summary of Assessment Progress in Undergraduate Programs

Source: University Assessment Coordinators Committee

outside Laramie, the Outreach School also conducts statewide surveys every three years through the Wyoming Survey & Analysis Center to assess educational needs and perceptions of university distance efforts statewide. (2c) A biennial Outreach School Regional Center Survey, first conducted in 2008, is intended to collect data on the effectiveness and quality of service provided by the Outreach School's nine regional centers. Seven of these centers have academic coordinators located on community college campuses. (2b) The Outreach School also periodically surveys students who take its courses to assess the quality of advising received.

Assessment of academic advising (Core Components 1d, 2c, 3d)

While the mechanisms are in place for a comprehensive academic advising experience, evaluation of the success of academic advising has been sporadic at best. A university-wide advising evaluation was conducted at three-year intervals from 2000 until 2006. The information gained was of limited utility in that differences between departments were rarely significant. However, some colleges did use the results to improve practices of individuals. A variety of advising models are employed, from a centralized academic advising office in the College of Business with faculty engaged in career advising to the individual

faculty advisor model employed in the Colleges of Agriculture and Natural Resources and Arts and Sciences. Students are asked about their academic advising experience during the annual student satisfaction surveys—the ACT Student Opinion Survey, the Noel-Levitz Student Satisfaction Inventory, and the University of Wyoming Student Opinion Survey. (3d) Information from these surveys is generally shared in aggregate form, but breakdowns by college are available.

The College of Arts and Sciences instituted a pilot online advising evaluation for students in spring 2009. There had been particular concern expressed about the lack of information about advising information in the reappointment process in the college since advising is a formal component of most job descriptions. Beginning in 2009-2010, the college will utilize online advising forms completed by students for all academic personnel in the third, fourth, fifth, and tenure year and for promotion to full professor. Strengthening advising assessment and benchmark development within colleges is a key area for development in the next five years. (2c)

One recent improvement in the area of academic advising was the formation of a group to improve communication between key advising groups across the university. Instituted in 2005, the advising conversations group includes representation from advisors from each of the colleges and the Center for Advising and Career Services. The 2009 pilot Sure Start program to block-enroll new students into several courses will be assessed for its impact on advising, and current efforts are underway to research best advising practices at other institutions so that improvements can be made at the University of Wyoming. (1d, 3d)

Co-curricular assessment (Core Components 2c, 3d)

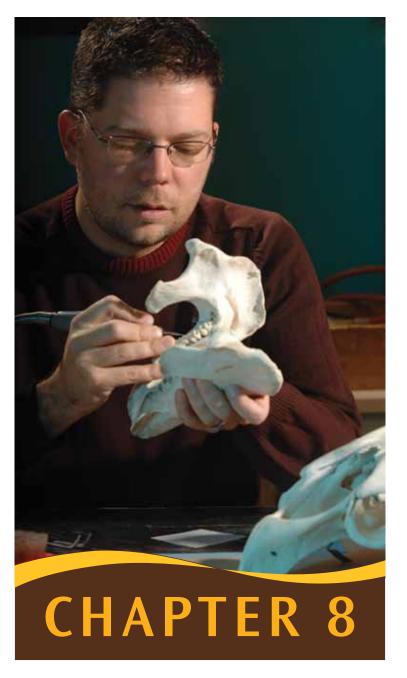
The Division of Student Affairs also engages in the assessment of student learning with an emphasis on the co-curriculum. In 2006, the department directors developed eight division-wide learning outcomes linked to the contributions of student affairs programs and services to student learning. The department directors also identified assessment strategies for one or two learning outcomes. (3d) Each learning outcome was supported by at least one department, as determined by mapping each of the learning outcomes to departmental assessment plans. The next step is to collect data to assess the learning outcomes identified in the existing plans. This more formalized effort dovetails nicely with existing assessment efforts, including comprehensive program reviews, participating in biannual student satisfaction surveys, and the annual review of action items from the university and division support services plans. In addition, two units—Residence Life & Dining Services and the Wyoming Student Union—use the Educational Benchmarking, Inc. assessment instruments. Service satisfaction surveys are also conducted by other individual units. (2c)

CONCLUSION AND KEY FINDINGS

The University of Wyoming has employed broad, diverse approaches to enrich the undergraduate learning experience over the last 10 years. These efforts include increasing attention to the University Studies Program (USP), providing a vast array of distinctive learning experiences to students at the university level and within programs and majors, and ongoing implementation and refinement of assessment of student learning processes. While significant progress has been made, the university has identified the following:

- The results of the USP assessment process should help inform the USP Committee regarding future changes to the USP program. While current USP content aligns with many of AACU's recommendations, the USP Committee must carefully monitor the currency and relevancy of its course offerings. Assessment results should aid these conversations by providing much needed information about student learning attainment in particular subject areas. (UP 3 Action Item 22)
- Because the university employs a variety of advising models, further assessment of advising effectiveness and efficiency should be conducted at the college level and for subsets of the student population, especially nontraditional populations. The university must ensure that advising, across the institution, focuses on student learning and the mastery of skills necessary for success. It is also critical that this guidance and support be offered in a flexible and coherent manner. While assessments at the university level are positive, they do not provide enough detail to fully understand the impacts of the different advising models on subgroups of students.
- The university needs to develop a consistent, effective model to administer cross-college undergraduate interdisciplinary programs, drawing on the strengths of the colleges and encouraging further program development. The university should also consider allowing cross-college interdisciplinary programs to grant degrees. In keeping with its mission, this approach capitalizes on the university's small size and helps to develop programs in a more cohesive, systematic manner. (UP 3 Action Items 42, 43, 46, 47, 51, 53, 56, 57, 58, 59, 87, and 91)
- The university should continue to support initiatives to increase awareness
 of leadership opportunities and access for students seeking leadership opportunities. Leadership is developed through internships, civic engagement,
 capstone research and outreach, volunteerism, and working with the private sector, all of which provide opportunities for faculty, staff, and students to engage
 with external constituencies. (UP 3 Action Items 106 and 107)

• The university has made substantial progress to date regarding assessment of student learning, but it needs to continue to develop strategies for enhancing processes and using the results to modify curricula and instructional methods. Specific issues of concern include using data from multiple levels (course, program, and institutional) to make improvements, determining how to streamline processes and coordinate with other accreditation processes to avoid burnout, and extending and adapting assessment of student learning to distancedelivered courses and programs with attention to special needs and experiences of distance students. (UP 3 Action Items 21 and 22)



The Graduate and Professional Student Learning Experience



"The limited size of the student body and the favorable studentfaculty ratio create an atmosphere of friendliness and informality. Students enjoy a degree of access to faculty that students would rarely find at a larger institution. Small classes, more personalized instruction, and a diverse curriculum are strong traditions."

—Jerry Parkinson, former Dean and Professor of the College of Law

The Graduate and Professional Student Learning Experience

THE UNIVERSITY'S COMMITMENT TO LEARNING (Core Components 2b, 2c, 4c, 4d)

The university has a strong commitment to academically rigorous graduate programs, including courses delivered by distance technologies to place-bound students in some disciplines. It has strategically adopted new graduate degrees to focus on areas of distinction, as outlined in UP 3. (4c) Over the last 10 years the university has created new programs, instituted regular program reviews, and implemented best practices to enhance graduate education. Two surveys were administered in fall 2008 to collect qualitative perceptions: the 2008 Graduate and Professional Student Survey and the 2008 Graduate Program Coordinator Survey. The analyses of the findings are described in sections that follow. (2c)

The university's graduate programs expect students to partner with faculty in the pursuit of new knowledge and in the translation of knowledge to enhance the public good. The essence of the university's graduate programs is to help students make the transition from novice to expert scholars, that is, accomplished, self-directed, lifelong learners. Graduate education at the university contributes not only to personal growth but to the public good through economic development, leadership, and contributions of an educated citizenry. (4d)

Until 2009, the Graduate School administered all graduate degrees except for two professional degrees and oversaw the designation of graduate faculty from all academic colleges. In spring 2009, as one response to the governor's request to reduce the university state budget by 10 percent, the university eliminated all positions within the Graduate School and the administrative personnel were retrenched. The administrative functions were redistributed to other offices. Chapter 10 provides

more detail about this budget reduction process. Shortly after this decision, the provost appointed the Graduate Education Taskforce convened by the associate provost and composed of senior graduate faculty scholar leaders and pertinent student services directors to address these changes. Their task was to define a graduate program administrative structure that is largely decentralized, partly to the academic colleges and partly to existing support offices.

The taskforce determined three elements of graduate education that logically need to be centrally administered by the provost: allocation of graduate assistantship budgets, orientation and recognition events, and overall program assessments. Deans, department heads, and program directors are responsible for administration within their units. Benefits of this restructuring include improved efficiency of processes, elimination of some duplication of paperwork and effort that existed previously, student program checks, updates to all graduate education regulations, and a single electronic university catalog for all students. The taskforce's ongoing recommendations are approved by the provost and then provided to the university community via the WyoWeb portal. The university will critically monitor these changes to ensure that program quality is maintained across the university. The university's intent is to retain all funding and functions essential for the advancement of graduate education, but to reduce the administrative overhead required. (2b)

THE DIVERSITY OF THE UNIVERSITY'S GRADUATE STUDENTS AND THE CONSTITUENCIES SERVED (Core Components 1b, 2a)

The university currently offers 59 degrees at the master's level, one Education Specialist degree, 30 degrees at the doctoral level, and two degrees at the professional level. Degrees offered include Master of Science, Master of Science in Teaching, Master of Arts, Master of Arts in Teaching, and masters of a designated area, including Master of Fine Arts in Creative Writing, Master of Music, Master of Music Education, Master of Planning, Master of Public Administration, Master of Business Administration, and Master of Social Work. Other graduate degrees offered include Education Specialist, Doctor of Philosophy, and Doctor of Education. In addition to these graduate degrees, the university offers two

professional degrees: the Juris Doctor and the Doctor of Pharmacy.

The university also offers interdisciplinary graduate degree programs (cross-departmental or cross-college). Some examples of these include doctoral programs in ecology, molecular and cellular life sciences, neuroscience, and reproductive biology, and masters programs in American studies, environment and natural resources, natural sciences, water resources, food and human nutrition, and international studies. in addition to these programs, the university offers an interdisciplinary studies degree which is available as either a Master of Arts or a Master of Science degree.

At the university, the traditional MA/MS, EdD, and PhD programs typically require a combination of coursework and a thesis or dissertation, or in some cases a rigorous service learning experience, depending on the program. Professional programs have varied requirements. Many require only coursework while others require a combination of coursework and professional work such as internships, clinical experiences, or service learning activities. The Outreach School provides graduate students in some programs with distance learning options as part of their degree and certificate programs. (2a)

As shown in Table 8.1, the number of graduate degrees awarded has increased over the last 10 years. There has been a 12 percent increase in the number of master's degrees awarded, a 10 percent increase in the number of Juris Doctor degrees awarded, and an 11 percent increase in the number of PharmD degrees awarded. (1b)

Preparing for the future: Enrollment trends

(Core Components 1b, 2a, 2c, 5a)

	Academic Years 1999-2000 versus 2008-2009								
10 Year	08-2009	2008	9-2000	199					
Change	% Degrees	Number	% Degrees	Number					
12%	68%	423	66%	377	Master's				
0%	0%	0	0%	2	Education Specialist				
-5%	11%	69	13%	73	Doctorate				
10%	13%	80	13%	73	Juris Doctor				
11%	8%	51	8%	46	PharmD				
9%		623		571	TOTAL				
-		51		46 571	PharmD				

Table 8.1. Graduate Degrees Awarded

Source: Office of Institutional Analysis

Because of the University of Wyoming's unique position as a relatively small public research university with a statewide expectation to offer programmatic breadth, some departments operate with less than optimal graduate enrollments. An increasing number of graduate students pursue a master's degree at the university, and while the university is working to expand doctoral and professional degree programs overall, both the quality and quantity of graduate enrollments remain issues. Interdisciplinary programs are alleviating the problem of low enrollments to some extent, but all departments require a critical mass of their own students for a vibrant graduate program. (5a)

From fall 1999 to fall 2008, enrollment in graduate programs at the university increased from 2,704 to 3,503, or 30 percent. The 3,503 graduate and professional students enrolled at the university represent more than 25 percent of the total student body. Table 8.2 shows other characteristics of the university's graduate students, including racial and ethnic diversity and gender. (1b)

Compared to national enrollments in post-baccalaureate programs as noted in the *Chronicle of Higher Education*, ethnic minority students at the University of Wyoming are particularly underrepresented. (2c) Ethnic minority student enrollment in graduate and professional programs mirrors the university's low undergraduate ethnic minority enrollment (9 percent for undergraduates and 6 percent for graduate and professional students).

	F	all 1999 versus Fal	2008		
	19	99-2000	20	10 Year	
	Number	% of Students	Number	% of Students	Change
Race/Ethnicity					
Minorities	148	5%	205	6%	39%
Caucasian, non-Hispanic	2,183	81%	2,415	69%	11%
International	172	6%	284	8%	65%
Ethnicity unknown or unreported	201	7%	599	17%	198%
Gender					
Females	1,530	57%	2,239	64%	46%
Males	1,174	43%	1,264	36%	8%
Site					
Laramie campus	1,884	70%	1,829	52%	-3%
Outreach	820	30%	1,674	48%	104%
Degree Level					
Master's students	1,112	41%	1,176	34%	6%
PhD/EdD	434	16%	537	15%	24%
Professional students	427	16%	442	13%	4%
Non-degree & professional development	731	27%	1,303	37%	78%
Graduate certificates			45	1%	_
TOTAL	2,704		3,503		30%

Table 8.2. Graduate and Professional Student Characteristics

Source: Office of Institutional Analysis

The low percentage of minority graduate students is possibly related to minority student undergraduate enrollment: many current graduate students report that they chose the University of Wyoming after attending as an undergraduate. Anticipated future increases in ethnic minority student enrollment among undergraduates, coupled with retention and graduation of underrepresented students, have the potential to enhance ethnic diversity in the university's graduate and professional degree programs. (2a)

Sixty-four percent of graduate and professional students are female, with Caucasian females representing almost 50 percent. The *Chronicle of Higher Education* projected that, nationally, women would earn over 60 percent of graduate and professional degrees in 2009. At the University of Wyoming, the rate at which female students earn post baccalaureate degrees is lower than this rate of enrollment. In 2008-2009, 57 percent of graduate and professional degrees were awarded to women and 43 percent awarded to men. Women earned master's and PharmD degrees at a higher rate than men, while men earned more PhDs. JDs were awarded at equal rates. (1b)

Academic Year 2008-2009								
Degree Program	Resident Tuition per Hour	Public Doctoral Percentile	Non-resident Tuition per Hour	Public Doctoral Percentile				
Graduate Program, General	\$174	3rd	\$498	12th				
College of Law	\$288	1st	\$643	3rd				
School of Pharmacy	\$262	_	\$586	_				
College of Business (EMBA)	\$550	—	\$550	—				

Table 8.3. Graduate Tuition

Source: University of Wyoming Fee Book and Office of Institutional Analysis

Meeting graduate constituencies' needs

(Core Components 1a, 5a)

The increasing cost of graduate education nationally has the potential to affect access in the future; however, as a land-grant university, the University of Wyoming remains a quality option at a relatively low cost. Many students have confirmed that they are drawn to the university because of the low cost of tuition according to the 2008 Graduate and Professional Student Survey. (1a) Currently, graduate tuition is \$174 per credit hour for residents and \$498 per credit hour for non-residents. Students receiving state-supported stipends are also granted tuition and fee waivers and health insurance. Three programs within the university charge differential tuition due to high market demand for limited capacity: the JD offered by the College of Law, the PharmD offered by the School of Pharmacy, and the Executive MBA program offered by the College of Business. Even when considering these differential rates of tuition for programs in high demand, a graduate education from the University of Wyoming is inexpensive compared to its regional comparators, as evidenced by the examples in Table 8.3. (5a)

Preparing for the future: Graduate assistantships (Core Component 2b)

The university provides financial support to graduate students through graduate assistantships, which are available on a competitive basis through each department. In fall 2008, approximately 40 percent of the university's graduate students were supported with a graduate assistantship, and additional students were funded through the university's research enterprise. The base stipend in 2008-2009 for a master's student was \$11,072 and \$15,408 for a doctoral student. An analysis of stipend levels in Figure 8.1 shows that the university has made significant progress in increasing stipends since 2000. In addition, health insurance is now offered as part of the standard graduate assistant (GA) package. While these improvements are substantial, the university must continue its efforts to further increase stipends since the university's graduate assistant funding for 2008-2009 was 9 percent below the average for the Association of Public and Land-grant Universities. In the 2008 Graduate Program Coordinator Survey, faculty graduate coordinators across the institution reported that low stipends and in some cases low numbers of GAs inhibit their

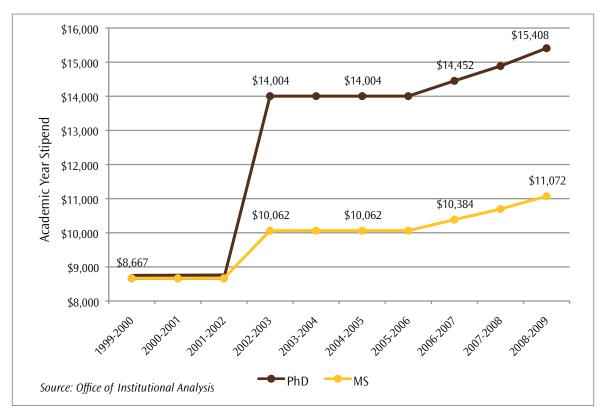


Figure 8.1. Graduate Assistant Stipends, Academic Years 1999-2000 to 2008-2009

ability to attract and retain qualified graduate students. From the student perspective, 50 percent of the students receiving stipends who responded to the survey indicated that the amount of the stipend was sufficient to cover basic living expenses. (2b)

The importance of graduate teaching and research assistants is woven into nearly every facet of the university. To that end, the university could receive additional benefits from an increase in the number of GAs, especially through the avenue of grant funding. The financial benefit of an assistantship, combined with the increased experiential learning, would certainly enrich the learning experience for many students while providing direct and tangible benefits to individual faculty and the university as a whole. The School of Energy Resources budget for assistantships and the recent hiring of endowed chairs may help to increase funding opportunities for graduate students. Similar to the challenges faced in appropriately balancing depth and breadth of majors and course offerings for academic programs is the challenge of balancing numbers of graduate students with the ability to recruit the most sought after graduate student applicants. (2b)

Financial support in the form of an assistantship is routinely identified as a key parameter contributing to graduate student success. In the 2008 Graduate and Professional Student Survey, financial considerations were consistently listed as barriers to success. To that end, increasing the number of GAs from all sources across the institution, along with careful attention to time-to-degree statistics to promote effective cycling of existing GA resources,

are important considerations for increasing graduate student retention. Furthermore, the quality of the benefit package in total should be improved, including better health benefits, more access to travel funds, and family-friendly benefits. Summer funding can also be a critical element of student success because summers are the peak months for research involving field work. Only 35 percent of graduate students surveyed say they have received summer funding. For many departments and programs, scholarships are largely awarded to undergraduate students, primarily because the donors financing the scholarships are more interested in supporting undergraduate students. Several colleges and departments are now working with donors to increase scholarships for graduate students. (2b) All issues related to funding will be important points of discussion as the university restructures the roles of departments, colleges, and central administrative offices in graduate education under the guidance of the Graduate Education Taskforce.

MAINTAINING AND STRENGTHENING THE QUALITY OF GRADUATE STUDENTS

(Core Components 2a, 2b, 2c, 5a)

According to the 2008 Graduate and Professional Student Survey, the top three reasons for attending the University of Wyoming were cost of attendance (49 percent), location (45 percent), and availability of assistantships and funding (40 percent). In contrast, graduate faculty coordinators identified the top three reasons for students attending the university as availability of assistantships (75 percent), quality of faculty in the field (57 percent), and specialized degree programs (55 percent). This difference of perceptions may explain, in part, some of the recruiting difficulties faced by some colleges and programs. The university must recognize why its students are attracted here and focus on those strengths while working on perceived weaknesses. (2a)

Students and graduate coordinators also differed in their evaluation of recruitment methods. For example, only 21 percent of the student survey respondents reported that they were actively recruited to attend the university, with 72 percent indicating that they learned about the university's graduate programs from being an undergraduate student, from the university's Web site, or from family, friends, and alumni. In contrast, 84 percent of the graduate program coordinators reported that they actively recruit graduate students, citing personal emails and meetings with students visiting campus as examples. A total of 75 percent of the coordinators placed the university's Web site in the top three modes of effective recruiting. Less than half of graduate coordinators—41 percent—were satisfied with their abilities to recruit students to their programs, and an even lower number (29 percent) were satisfied with their ability to recruit a diversified graduate student body. (5a)

In the last two years, several departments and colleges have begun to address issues of recruitment. Recognizing the importance of Internet-based recruitment, the College of Arts and Sciences is providing guidelines to help departments improve their graduate program Web sites. The restructuring of graduate education presents an opportunity for the

university to engage in some broad discussions about improvements in recruitment of quality graduate students through improved Web site designs and Web 2.0 tools.

The university offers a general orientation to incoming graduate students, which is voluntary, and a required orientation for all GAs with first-time teaching responsibilities. The College of Law requires all first-year students to attend a three-day orientation in which they are introduced to the study of law. Departments and programs that have a significant population of GAs with substantial teaching responsibilities, such as English, the life sciences program, mathematics, and communication and journalism, also require pre-semester seminars in which they provide the GAs with the tools to teach. (2b) Orientation provides a mechanism for students to learn about graduate program and department expectations, meet fellow students, and gain a better understanding of the distinctions between undergraduate and graduate cultures at the university. Perhaps not surprisingly, in their survey responses students and graduate coordinators differed in their perceptions of orientation effectiveness. For instance, 80 percent of the graduate coordinators believed graduate assistantship responsibilities are covered in the orientations, whereas only 37 percent of the students indicated this topic is covered. Similarly, 73 percent of the faculty said they discuss the academic program of study whereas only 46 percent of the students believed the program of study is covered in orientation. The apparent discrepancy between faculty and students perceptions of orientation indicate that this is an area for improvement. (2c)

Strong graduate student faculty mentoring and advising is expected at the university. The 2008 Graduate and Professional Student Survey responses suggest room for improvement. Only 63 percent of the respondents indicated they had a formal advisor. Graduate committee advisor and committee composition policies are described in the *Graduate Bulletin*. These policies are being revised with the intent of providing stronger graduate student committee composition and best mentoring practices.

IMPROVING THE GRADUATE LEARNING EXPERIENCE (Core Components 1b, 2c)

A high-quality learning environment for graduate students requires state-of-the-art technology and forward-thinking curricula in order to be competitive in today's world. It also requires available access to tools that support timely communication and information sharing. (1b) Designing learning experiences supported by information technology is becoming an important skill for all academics. The university has a range of quality measures being implemented, including the development of new programs and capital improvement plans designed to enhance student learning, but it needs to do more to examine its graduate-level instructional strategies and learning environments. (2c)

Strengthening the quality of the learning environments (Core Components 1d, 2a, 2b, 3c, 4d)

Noted several times in this report are the significant new building and remodeling projects over the past 10 years to create state-of-the-art learning environments. (3c) Five projects deserve

mention again for enriching learning at the graduate level: the Health Sciences Complex, the Archaeological and Anthropological Research Facility, the Information Technology Center, the College of Business Building, and the Berry Biodiversity Conservation Center. (1d)

The Health Sciences Complex allows co-location of most of the various health disciplines that were spread across the campus prior to 2005, except the Department of Kinesiology and Health, which needs to use physical activities spaces on the east side of campus. The facility gives students the opportunity to study in interprofessional environments that reflect the way health care services are delivered in the field, and it facilitates interdisciplinary research. The vision of the health science facility is an example of infrastructure improvements that enrich the graduate experience beyond technological improvements. (2b)

The anthropology building is especially noteworthy in light of the university's approval of the PhD program in anthropology in 2001. For the first time, all of the anthropology collections, containing three million artifacts, are now accessible for faculty and student research in one building. Anthropology faculty have increased laboratory space, and the building also includes major labs, technology spaces, and lounges for graduate students. (2b)

In Academic Plan II, the university identified computational science as an area of distinction for the university. Building on this strength, over the last six years the university has hired 15 faculty members in such computational science fields as fluid mechanics, geosciences (including climate change) materials science, biosciences, and bioinformatics. (2b)

Modeling complex phenomena in science and engineering requires enormous computational resources. In the last two decades, these resources have evolved from centralized computer mainframes to decentralized computer clusters utilizing large parallel architectures. The increase in numbers of computer clusters has been commensurate with the increased hiring of computationally-oriented faculty. Computer clusters pose serious resource challenges. Each cluster ordered by an investigator requires special space which has increased power and air conditioning demands. Remodeling enough rooms for this purpose is simply not feasible. In addition, security of these machines, both virtual and physical, is a major issue as the cost of these machines can be several hundred thousand dollars, and each machine is a potential gateway for hackers. To address the growth of computers and their demanding environmental needs, the data center was moved to the Information Technology Center in 2008. The data center was designed with 6,000 square feet of machine space to house IT's servers-enough room to support the growth of university computing for several decades. The Division of Information Technology now provides state-of-the-art facilities for research-based computer clusters, for any faculty research group that wants it. Most of the university's computationally intensive research groups use this facility. (2a)

While the new center provides high-tech computational facilities on the Laramie campus, an important future computational resource for the university's graduate education is the recent decision to build the next NCAR supercomputer in Cheyenne. In addition to the NCAR facility itself, the university is developing student and faculty exchange "In Academic Plan II, the university identified computational science as an area of distinction for the university. Building on this strength, over the last six years the university has hired 15 faculty members in such computational science fields as fluid mechanics, geosciences (including climate change) materials science, biosciences, and bioinformatics." opportunities with NCAR researchers. Collaborations with these researchers and access to the NCAR supercomputer will provide opportunities for graduate students that are rarely available on a national scale. (4d)

The new building for the College of Business was designed with space to allow faculty and student growth in anticipation of a new doctoral program focusing on sustainable business practices offered by the Department of Management and Marketing. The building supports current learning enhancement technology, a behavioral research lab, and a trading room that will support graduate and undergraduate programs. (4d)

The planned Berry Biodiversity Conservation Center is another example of the growing graduate facilities at the university. This new center will provide a place for interdisciplinary research and education across the sciences. The center will house university and visiting scientists from a variety of fields supporting biodiversity study. It will also house core research facilities, such as the university's Stable Isotopes Laboratory. In addition, the center has an outreach mission spanning from K-12 through adult education, providing a learning service covering Wyoming and the Rocky Mountain region. (4d)

New graduate programs focusing on the university's areas of distinction (Core Component 2d)

Because graduate programs are so fundamental to the identity of the University of Wyoming's research enterprise, careful planning needs to guide its decision about augmenting existing programs and creating new ones. The university has allocated resources among the six areas of distinction defined in Academic Plan I to achieve balance and academic excellence in graduate education. (2d) With the infusion of resources that came with the establishment of the School of Energy Resources (SER), several graduate programs are benefitting from a substantial number of new GAs. Some of the more striking recent and proposed developments in the university's graduate programs are highlighted in the following brief sections organized by area of distinction.

Critical areas of science and technology (Core Component 5a)

Doctoral programs in chemical and petroleum engineering have been rejuvenated with faculty additions through increased legislative funding, through the School of Energy Resources, and through additional grant funding from such sources as the state's energy sector. Also in this area of distinction, UP 3 identifies development of a graduate program in computational science as a priority for the next five years, building on an undergraduate minor recently developed by faculty members in mathematics, mechanical engineering, and botany. Another priority is the development of a cross-college interdisciplinary water resources PhD program, a task that is currently underway with leadership in civil and architectural engineering. (5a)

Cultural assets, arts, and humanities (Core Component 3c)

The MFA in Creative Writing, established in 2005 with an infusion of award-winning faculty hires and GA support, is now drawing exceptionally talented writers to the two-year studio program. Special features include a flexible curriculum, cross-genre workshops, opportunities for interdisciplinary study, and a state-endowed Eminent Writers in Residence program, which brings distinguished authors to the university as visiting faculty to work closely with the students. (3c)

Environment and natural resources (Core Component 4c)

The Haub School of Environment and Natural Resources (ENR) offers the choice of a double major and a minor. The ENR program now offers a dual degree with the College of Law and new faculty expertise in collaborative resource management. (4c)

History and culture of the Rocky Mountain region (Core Component 4c)

Academic Plan I identified a doctoral program in anthropology as a niche with a solid base and immense potential. The focus of the doctoral program is on Paleoindian, plains, and hunter-gatherer archaeology. (4c)

Life sciences (Core Components 2b, 5a, 5d)

One of the major strategies in the university's plans has been to knit together faculty expertise in coherent focus areas of the life sciences—expertise that resides in as many as 10 departments in four colleges. A key element of this strategy is the establishment of interdisciplinary doctoral programs. A notable addition to graduate education is the Program in Ecology (PiE), an interdisciplinary doctoral program focusing on the scientific study of the relations between organisms and their environments. A critical component of the development of PiE was a four-year, \$7 million grant from the NSF EPSCoR to determine how global climatic and other environmental changes affect past and present ecosystems. (2b) In just four years, the interdisciplinary PiE boasts a collection of noteworthy successes—including a group of 27 outstanding and enthusiastic PhD students from the U.S., Canada, Argentina, Sweden, and India. The first group of doctoral students graduated in May 2009. The program has received national attention and is already considered a top program in the West. (5d)

Also noteworthy is the expansion of the interdisciplinary program in neuroscience, fueled by two stages of institution-level grant funding and faculty hiring supported by the NIH COBRE program. A third interdisciplinary PhD program in the life sciences, added in 2005, is molecular and cellular life sciences. This program, spanning the Colleges of Agriculture and Natural Resources, Arts and Sciences, and Health Sciences, capitalizes on cross-college faculty expertise in genomics, proteomics, and bioinformatics. Finally, among the significant action items in UP 3 is the establishment of an interdisciplinary PhD program in biomedical sciences to capitalize on institution-level funding through the NIH INBRE program. (5a)

Professions critical to the state and region

(Core Component 5a)

In response to critical needs in the region, the School of Nursing has been challenged to prepare a proposal for a new Doctor of Nursing Practice program. In addition, the school created an accelerated BS degree in nursing for nontraditional students with baccalaureate degrees in other fields. In the College of Education, the addition of four endowed faculty chairs with emphases in science and math education and literacy education are beginning to add growth to the college's graduate programs. (5a) In addition, the Board of Trustees recently approved a doctoral degree in management and marketing focusing on sustainable business practices in the College of Business.

Improving curricula for future leaders in a changing society (Core Components 3c, 4b, 4c)

The curricular requirements for graduate students are as varied as the programs they enter. A small number of programs, such as the Executive MBA, are delivered entirely online while others require full-time residency. A few have a mixture of on-campus and distance delivery. Some degree requirements can be met in as little as one year while others require an indeterminate number of years to complete. The university has monitored average time-to-degree completion, especially in doctoral programs, and an action item in UP 3 calls for explicit time limits on financial support for graduate students. In all cases, students are expected to master the knowledge and skills required of the discipline or interdisciplinary area. (4c)

Over the past decade, graduate learning environments have increasingly incorporated assignments that involve team work, problem-based learning, service learning, interviewing or observing of professionals at work, and applied projects that ask students to make connections between theory and practice. For example, the Master of Public Administration (MPA) program focuses on training policy administrators for all levels and fields, including state and local government. Graduate students in accounting and the MBA program routinely work on team projects and case studies. Students in the MS program in the School of Nursing present two-hour seminars in which they teach their fellow students about topics in advanced therapeutic care. The change in the nature of assignments that has occurred in some graduate programs has added significantly to the number of opportunities for graduate students to obtain leadership experience. (3c) Most, but not all, graduate and professional programs require a culminating experience as part of the degree program, or as an expectation upon graduation to demonstrate mastery of the subject matter. Graduates of the College of Law sit for the bar examination, and students in several professional health programs are required to complete a clinical experience. All PhD students are required to write a dissertation, and some degree programs, such as the PhD in geology and geophysics, require students to publish their work as a condition of graduation. (4b) This last requirement directly gauges students' readiness for the research expectations they are likely to face after they earn their degrees.

Role of clinical work, practica, and internships (Core Components 2a, 4a, 4b, 4c, 5a)

Required practical experiences are staples of graduate education in the health and education disciplines. Of necessity, students in such fields as psychology, pharmacy, nursing, social work, communication disorders, counselor education, and educational leadership receive significant practical training in the field as part of their degree programs. (2a) The work of university graduate students in on-campus clinics and in clinical assignments at off-campus sites benefits the state's communities as well as the university's graduate students. The Speech, Language, and Hearing Clinic, the Psychology Clinic, and the Counselor Education Clinic are examples of programs on the Laramie campus that offer free services to community members, drawing clients from as far away as Rawlins and Saratoga, Wyoming. (5a)

For several graduate programs, an elective internship experience holds more value than writing a traditional thesis because such experiences lead to a life of learning and in many cases social responsibility. As a result, increasing numbers of internship opportunities are listed as part of the Plan B options. Students in the Department of Accounting can complete an internship or a service learning project in lieu of preparing a capstone project or taking a comprehensive examination. (4b) The international studies program advertises the Master's International Peace Corps degree as an alternative to the traditional degree which combines coursework, two journal-length papers, including an applied research project, and Peace Corps service. For programs that require a thesis, voluntary internships often become the basis for this work. Law students are encouraged to participate in externships after their first year of law school and to secure paid internships after their second year. The College of Law also sponsors five elective clinics for its third-year students. Several of the programs that encourage voluntary internships devote considerable department resources to help students secure positions. (4a)

Almost all graduate programs provide the opportunity for their graduate students to register for variable internship credit as part of their degree requirements. In programs where internships are not actively encouraged, the decision to an include internship experience may be made by the student and his or her graduate committee. (4c) "The work of university graduate students in on-campus clinics and in clinical assignments at off-campus sites benefits the state's communities as well as the university's graduate students."

Ethics instruction (Core Component 4d)

In the 2008 Graduate Program Coordinator Survey, faculty were asked to identify how they provide instruction in ethics, important for professional conduct in both research and practice. About a third of the programs require students to take formal credit bearing courses. A majority of the programs, 68 percent, embed ethics instruction in other coursework, and a small percentage, 16 percent, create department workshops. Most programs also provide ethics instruction through one-on-one mentoring. As a result of the Kaiser Ethics Project, the pharmacy program started an ambitious plan of infusing ethics into their entire curriculum. In addition to these departmental efforts, the Office of Research & Economic Development now offers a series of university-wide ethics workshops on a variety of issues. (4d) This office has also revised and expanded its Institutional Review Board Policies and Procedures Manual to guide the increasing number of faculty and graduate students who conduct human subjects research.

Leadership activities to encourage lifelong learning (Core Component 4b)

Co-curricular and professional activities are designed to enhance students' graduate experience. The university's graduate programs include opportunities for students to both engage in voluntary leadership activities as well as receive formal and informal instruction in leadership development. (4b)

Involvement in professional, disciplinary communities (Core Components 4d)

Graduate faculty strongly advise their students to join professional, disciplinary organizations and to present poster or paper presentations at professional conferences. Approximately 86 percent of the programs have found it important or very important that their students deliver research or teaching presentations at conferences. For the professional programs, student chapters of national professional organizations offer important leadership opportunities. (4d)

Involvement in departmental, college, and university committees (Core Component 4a)

Participation in committee work, which involves governance, curriculum development, planning, and assessment, is a significant way for graduate students to develop leadership skills and to become acculturated to the full life of the department and of the academic institution. Half of the graduate programs reported that their students formally serve on departmental, college, or university committees. Graduate students also participate in committee work on an ad hoc basis. Graduate students in the Department of English are important members of the committees that shape and govern the department's delivery of English 1010, the required first-year writing course. When seeking new faculty, nearly all departments with graduate programs arrange meetings between candidates and graduate students as part of the hiring process. (4a)

Notably, only 11 percent of the students responding to the 2008 Graduate and Professional Student Survey reported that they have served on formal or informal committees of any kind, including hiring or admissions committees. This low number may reflect the fact that although there are opportunities for students to participate on committees, only a few are elected to do so. A department may elect one graduate student per year to serve on one committee. The fact that only half of the departments formally include students in their committee work, which constitutes important service opportunities as well as leadership development, suggests a need for institution-wide discussion of graduate student roles in departmental governance. The university should explore additional opportunities to involve graduate students in committee work at the departmental, college, and university level. These experiences are particularly important for those students preparing for a career in academia. (4a)

Student organizations and civic engagement (Core Components 4b, 5b)

Graduate students belong to many of the Recognized Student Organizations (RSOs), in which they have the opportunity to serve as officers, lead projects, and promote social responsibility. In focus groups, graduate students reported that undergraduate students often regard them as mentors who have more knowledge and greater experience. Certainly one of the major benefits of a research university with a variety of graduate programs is this kind of dynamic mentoring relationship between undergraduate and graduate students. The mentoring relationship is especially strong in the disciplinary-based student organizations, some of which include both undergraduate and graduate student membership. The presence of disciplinary-based student organizations parallels the classroom learning experiences in several programs that have cross-listed 4000 and 5000 level courses. (4b)

According to the student survey, 55 percent said that civic engagement is important to them. Some departments actively encourage civic engagement. For example, graduate students in accounting serve the local community through the Voluntary Income Tax Assistance Program and law students also participate in periodic events organized to provide free legal advice in the community. Less than half of the students report that the university or their departments provide tools and resources to promote their engagement in civic activities. Students were asked to identify the civic activities they engage in. The resulting list is impressively diverse, and it suggests that given some encouragement and resources, more students might participate in volunteer or civic activities, both at the university and in their communities. (5b)

Career services (Core Component 2a)

The professional programs in law, pharmacy, and business have created substantial career service offices that offer multiple ways for students to network with professionals and gain leadership experience. A few other departments have created in-house mechanisms for students to receive formal or informal career mentoring that includes advice about job searches and interviewing. In many departments, career counseling is primarily the role of advisors who work closely with their graduate students and who can offer important connections and resources in their career pursuits. (2a) The university's graduate programs in general are tasked in UP 3 to better follow their graduates' careers.

ROLE OF GRADUATE STUDENT TEACHING ASSISTANTS IN UNDERGRADUATE LEARNING (Core Components 3b, 3c)

Graduate student teaching assistants (GAs) are an indispensable component of the university's teaching and research enterprise. Graduate students are directly responsible for teaching approximately 10 percent of the credit bearing classes at the university. Graduate teaching assistants play an important role in the delivery of the University Studies Program through their teaching efforts in science laboratories, mathematics courses, writing and oral communication courses, and discussion sections of large lecture classes. GAs are involved, either as the responsible teacher or in a teaching support role, in an estimated 30 percent of the university's lower division courses. (3b)

Most departments in which GAs teach courses conduct orientation and professional development sessions to prepare them for the task, and many provide faculty mentors. The supervised teaching experience is a critical element in the preparation of future faculty. Student evaluations reveal that GAs are doing a good job of teaching undergraduate students. The university encourages and rewards excellent teaching by graduate students with departmental and all-university recognition, such as the annual Ellbogen Graduate Student Outstanding Teaching Award. (3c)

In addition, GAs often serve in key mentoring roles for undergraduate students in laboratories, field work, music performance groups, and other experiential education. The Department of Music distributes mid-year questionnaires to both its general graduate student population and to its GAs. Students are asked to assess program content, relationships with advisors, their own preparedness and progress, and leadership or mentorship opportunities. Other graduate programs could benefit by adopting this model to assess the multiple roles that graduate students play. (3b)

"Most departments in which GAs teach courses conduct orientation and professional development sessions to prepare them for the task, and many provide faculty mentors. The supervised teaching experience is a critical element in the preparation of future faculty."

ASSESSMENT OF GRADUATE STUDENT LEARNING

(Core Components 1d, 2c, 3a, 3d, 5a, 5b)

The university's philosophy and history of assessment is fully described in Chapters 3 and 7. Institutional resources allocated to establishing successful assessment processes and practices apply to both undergraduate and graduate programs. (1d, 3d) When the university first began implementing its assessment processes, it focused on the undergraduate programs. As assessment evolved, departments and programs began including assessment of graduate programs at both the master's and doctoral level, but generally progress is a few years behind that of the undergraduate programs. (3a)

Assessment of graduate and professional programs occurs within the departments and programs. The process described for department and program assessment in Chapter 7 also applies to the graduate and professional programs. Department chairs provide an annual update of their assessment progress in their annual reports due to the deans each summer. The University Assessment Coordinators Committee reviews the assessment section of the annual reports and provides separate feedback to the departments regarding graduate program assessment. In addition to this internal review, select programs and colleges go through external accreditation review processes, making them accountable to other constituencies and communities. (5a, 5b) Examples include pharmacy, law, counselor education, and communication disorders.

The methods of assessment at the graduate level are varied and include multiple measures in order to provide the university reliable evidence regarding student learning. (2c) The primary direct assessment methods include the use of culminating experiences such as the dissertation, thesis, Plan B papers, qualifying or preliminary exams, portfolios, and internships and practicums. With regard to indirect assessment, individual programs and central university offices examine indicators such as time-to-degree, attrition, faculty productivity, number of student publications, passing rates on licensure exams, and student job placement or continuation in further graduate studies. Other indirect assessments conducted at the program level include alumni surveys, exit interviews, and focus groups.

From a 2009 review of the departmental annual reports, the University Assessment Coordinators Committee concluded that 68 percent of graduate programs have established student learning outcomes, although some programs are still trying to distinguish between master's and doctoral level outcomes. (3a) About 44 percent have collected direct evidence to demonstrate the achievement of some of the stated student learning outcomes, and 58 percent have collected indirect evidence. The number of programs that have used their data to make decisions regarding program changes (approximately 37 percent) is less than the number collecting data. (2c) Reasons vary for this lack of progress. Many programs are finding it challenging to locate students once they leave the university in order to conduct any meaningful follow-up. In many cases, the number of data points collected during one year is low because of low graduate populations. These programs must continue to collect data over time in order to have an adequate number of

	Arts & Sciences	Agriculture & Natural Resources	Business	Education	Engineering & Applied Science	Health Sciences	Law	Inter- disciplinary	UW
	N=23	N=7	N=3	N=5	N=6	N=6	N=1	N=6	N=57
Learning outcomes are identified on the department Web page.	87%	43%	100%	100%	17%	83%	100%	0%	68%
The department has collected direct evidence of student learning.	48%	14%	100%	80%	17%	50%	100%	0%	44%
The department has collected indirect evidence of student learning.	70%	14%	100%	100%	0%	67%	100%	17%	58%
The department is using its assessment results and making changes based on results.	35%	14%	0%	80%	0%	50%	100%	17%	37%
The department has made progress from the previous year.	87%	14%	100%	100%	0%	50%	100%	0%	61%

Table 8.4. Summary of Assessment Progress in Graduate Programs

Source: University Assessment Coordinators Committee

data points to draw any conclusions. Table 8.4 provides a detailed summary of the status by college and for the university, where differential progress can be noted.

At the institutional level, the university conducted a survey of all graduate and professional students in fall 2008 to assist with the self-study process and to provide additional indirect measures of student learning. The Carnegie Foundation study entitled *The Formation of Scholars* served as a foundation for the development of many of the questions included on the 2008 Graduate and Professional Student Survey and the accompanying 2008 Graduate Program Coordinator Survey. The results from these surveys were instrumental in examining specific aspects of the graduate experience from the student perspective and aided significantly in the examination of the university's graduate and professional experience of the self-study, as evidenced by the many references to and interpretations of the survey included throughout this chapter. (2c)

Because the university first focused on the assessment of its undergraduate learning experience when it developed its assessment processes a decade ago, assessment at the graduate level is not as developed as at the undergraduate level. The university acknowledges there is more work to be done in this regard. On a positive note, faculty seem to be clear about the distinction between undergraduate and graduate assessment and are working to strengthen assessment at the graduate level. Department annual reports and the accompanying feedback now distinguish between undergraduate and graduate programs, and University Assessment Coordinators Committee members supply specific feedback regarding progress on graduate assessment. (2c)

A few other areas for further improvement are worth noting. One area of graduate education that remains problematic for some programs is the delivery of diverse courses. Fortythree percent of the graduate faculty coordinators indicated that they are dissatisfied with the ability to deliver the array of courses their department or program desires. Comments from students and faculty provide additional motivation for the university to strengthen its emphasis on learning goals in graduate programs and to continuously review course offerings to ensure that they correspond to the program goals. (2c)

From the review of the annual reports over time, it is clearly evident that most programs are using the dissertation or thesis experience as a primary method of direct assessment. In working with many of these programs, the university assessment coordinators and university assessment specialist have encouraged programs to design either rubrics or another type of scoring guide by which faculty would assess these particular culminating experiences. This would help focus faculty on specific aspects of the experience related to particular learning outcomes and would provide overall consistency to the assessment. (3a) Another observation is that very few programs are currently using events where students present their research in front of larger audiences as a natural opportunity for direct assessment of student learning.

CONCLUSION AND KEY FINDINGS

Graduate education at the University of Wyoming is a quality option at a relatively low cost. This study indicates that graduate students attend the university largely because it is a good value, it is convenient, and it offers the specific programs they are seeking. The university has used its planning processes to help allocate resources for expanding programs and creating new ones. The creation of the School of Energy Resources, the hiring of endowed chairs, and the completion of major building projects have elevated the profile of graduate education, and several of the recently established graduate programs are rapidly establishing excellence. While significant progress has been made, the university has identified the following:

• There is a need to improve the recruitment of graduate students and the retention of those students by identifying the best uses of additional funding to support graduate education. This effort could address the need to better retain a diverse, high-quality student body through increased marketing efforts of exemplary graduate programs, as well as by fostering and preparing undergraduate students at the university for a graduate education. (UP 3 Action Item 61)

- The quantity and level of the university graduate assistantships is a critical aspect of the university's success. While significant improvements in GA stipends have occurred since 2000, the institution can still improve in this area. Specifically, master's and doctoral stipends should be increased to the national average of land-grant universities. The university would also benefit from increasing the number of GAs and effectively cycling graduate students through the GA funding that currently exists. (UP 3 Action Item 61)
- Established assessment of student learning processes must continue to evolve and be applied to the university's graduate programs. While it is evident that progress is being made in the graduate area, assessment at the graduate level does not yet match the progress at the undergraduate level. The university is confident that improvements at the graduate level will happen over time as the processes and mechanisms in place have a track record of making widespread institutional improvements. (UP 3 Action Item 63)



CHAPTER 9

The University's Commitment to Lifelong Learning



"It is our responsibility, and it is our time to instill our passion for education in others. Our reach has to extend across Wyoming and beyond, to our public schools, to our community colleges, to our businesses, to our towns and cities, and most of all, to our children."

—Tom Buchanan, President of the University of Wyoming

The University's Commitment to Lifelong Learning

THE UNIVERSITY'S COMMITMENT TO ITS CONSTITUENCIES (Core Components 1a, 4a, 5b)

As the state leader in higher education, the university provides Wyoming residents with a diverse array of opportunities in education, professional development, and connections to the arts and cultural history of Wyoming. (1a) To achieve its goals in human and community development in these areas, the university works closely with the governor, state legislators, and state agencies that have similar goals on behalf of their constituencies. (5b) This area of the self-study has proven to be the most challenging to conduct for several reasons. First, it has been difficult to develop an inventory or catalog of the large number of diverse informal and formal learning opportunities offered by university units. Second, because of the diversity of partnerships and collaborations represented by these opportunities, a rigorous evaluation of their success has been difficult.

This chapter begins with a discussion of continuing education opportunities for university employees. The bulk of the chapter discusses the university's significant outreach programs in three categories that reflect the core of the university's mission: library services, cooperative extension services, and programs related to the university's areas of distinction. For both internal and external constituents engaged in enrichment, development, and continuing education, the university works toward quality, consistency, and competency in its offerings. (4a)

UNIVERSITY STAFF DEVELOPMENT AND LIFELONG LEARNING (Core Components 1c, 2b, 4a)

University staff and faculty members have a variety of opportunities to enhance their knowledge and skills and to acquire new expertise. (4a) The university encourages

employees to take classes of interest while in their current positions. Employees also have opportunities to pursue a degree. In 2008, the university expanded its tuition waiver program for all benefitted personnel. The number of credit hours that a staff member may take increased from three to six credit hours per semester. Staff members can take classes during work hours with pay. In fall 2009, 219 employees took advantage of this opportunity, representing a 4 percent increase over faculty and staff enrollments for fall 2008. (2b)

Personal and professional development classes are offered through such offices as the Department of Human Resources, the Outreach School, and Cooperative Extension Service. (4a) The Department of Human Resources offers classes in leadership development, and the Division of Information Technology offers an extensive program of classes on software applications providing an important resource for the university community seeking to advance in specialized areas of professional skills development.

Like Faculty Senate and ASUW, Staff Senate represents an opportunity for staff members to engage in university governance and leadership development. (1c) Senate members work with the Board of Trustees, administration, faculty, staff, and students in the development and advancement of university policies and procedures. The senate encourages communication among all university units, advocates for staff development, and addresses staff concerns in a formal democratic setting. Past senators have commented that Staff Senate allowed them to expand their leadership skills and to broaden their perspectives on the university. Staff Senate has had a direct impact on important university decisions, including the 2009 budget reductions described in Chapter 10. It also tackles such issues as salary policy, university regulations, budget planning, and capital improvements, providing needed input to the university's governance system. (4a)

OUTREACH IN SERVICE OF THE UNIVERSITY'S CORE MISSION (Core Components 1a, 1b, 5b)

The University of Wyoming takes a leadership role within the state in providing learning opportunities for the citizens of Wyoming. First and foremost, the university adheres to its responsibilities as a land-grant institution. As such, it has a comprehensive set of Cooperative Extension Services available throughout Wyoming, funded in partnership with counties and the federal government. (1b) In addition, the university provides a wide array of opportunities aimed at developing personal and professional interests. (1a) Some of these outreach activities are general in nature such as access to the university library system while others are specific to more targeted audiences. (5b) This section describes many of the activities provided throughout the state. However, it is important to note that these descriptions do not exhaust the scope of the university's outreach efforts.

Statewide access to the university's library (Core Components 5b, 5c)

In facilitating the university's commitment to lifelong learning and professional development, every person in the state has access to the university's library resources, including books, e-journals, article databases, audiovisual materials, and reference or research assistance. Faculty, staff, and students have free access to all library resources, regardless of format. University affiliated patrons can access licensed databases from off-campus via a proxy server. This is particularly beneficial to graduate students and researchers who work electronically. Wyoming residents also have borrowing privileges once they obtain a library card free of charge. (5b) The general public can use licensed electronic resources at the libraries' public access computer workstations. Across the state, residents have access to a large selection of databases in their local public libraries through the Wyoming Libraries Database (WYLD) system, including some research databases paid for by the university for statewide access. (5c)

The university's land-grant mission and the Cooperative Extension Service (Core Components 1c, 5a, 5b, 5c, 5d)

The university partially fulfills its mission as a land-grant university by way of the Cooperative Extension Service (CES). Through Cooperative Extension Service agreements with 26 county offices, 12 outreach locations throughout the state including the Wind River Indian Reservation, and the seven community colleges, every county in the state has a local university representative who works with local communities. (1c) This distribution allows the university to have a prominent presence across the state. CES educational programs are focused on five major initiatives: 1) profitable and sustainable agriculture systems, 2) sustainable management of rangeland resources, 3) 4-H and youth development, 4) nutrition and food safety, and 5) community development and education. (5b, 5d) Some of the CES programs related to these initiatives are described below.

- Efforts to address issues among small-acreage owners have resulted in sustaining the land's productive qualities, particularly in subdivisions, while minimizing impacts to surrounding lands and wildlife. A publication entitled *Barnyards and Backyards* addresses small-acreage issues associated with community growth in Wyoming. In 2008, 99,200 copies of this publication were distributed as inserts in 24 Wyoming newspapers. (5a)
- In 2008, the 4-H program included nearly 7,000 youth, ranging in age from 9 to 19 years old, and included more than 3,000 4-H leaders.
- The Cent\$ible Nutrition Program (CNP) administered under the CES umbrella has helped thousands of Wyoming families with limited resources through education and lifelong learning. During the 2007 grant year, 19,481 adults participated in one-time lessons with 70 percent reporting a change in behavior. On average,

"Every person in the state has access to the university's library resources, including books, e-journals, article databases, audiovisual materials, and reference or research assistance." CNP clients saved \$44 per month on food. In 2008, approximately 1,200 individuals enrolled in a minimum five-week educational series, resulting in 97 percent reporting some form of positive behavior change.

• The Snowy Range Nonprofit Institute provides low-cost training in nonprofit organization management, an important resource for the more than 4,000 non-profits operating in the state, many with staff and budgetary constraints.

The Cooperative Extension Service also includes the Agricultural Experiment Station, which maintains four research and education centers in Powell, Sheridan, Goshen County, and Laramie. Scientists at the centers conduct agricultural research in laboratories as well as field research on private farms and ranches. University educators provide research-based programs and information, and they serve on advisory boards offering expert advice and recommendations on future research and development needs. (5a)

The Engagement Database, developed by the CES, is designed to be an internal tool for university employees to utilize when addressing client requests. Faculty and staff are invited to join the searchable database and list areas of expertise so that inquiries to the university can be forwarded to the appropriate expert. It is hoped that this comprehensive database will help everyone at the university to connect citizens' needs with appropriate university resources. (5a, 5c)

The Cooperative Extension Service actively engages stakeholders in assessing needs and identifying issues of importance to the state. Every five to seven years, the university conducts a statewide CES needs assessment to gain input from Wyoming's residents. Initiative teams prioritize the information as well as identify emerging issues so programs remain relevant, current, and timely. The CES also receives feedback through annual county or area advisory council meetings, constituent surveys (both written and electronic), program evaluations, and county-based planning and steering committees. With these methods, CES strives to develop a high level of responsiveness to the constituencies that depend on its services. (5c)

Areas of distinction

Many of the university's outreach activities support one or more of the areas of distinction defined in its planning documents. The following sections contain highlights from the university's wide array of outreach activities.

Critical areas of science and technology (Core Components 1b, 5b, 5d)

The areas of science and technology encompass a broad umbrella that includes some of the university's longest-standing areas of expertise. In addition to the expertise of several departments in this area, many units provide education, training and information, and technology transfer activities to support the adoption and use of science and technology information. (1b) This knowledge is utilized by a wide range of users in academia, government, business, and the general public. In addition, experts in these units disseminate information on

new and developing technology, respond to direct requests, provide reference materials and online resources, and conduct workshops throughout Wyoming. (5d)

Education and information on enhanced oil recovery is provided by the Enhanced Oil Recovery Institute. The Wyoming Geographic Information Science Center provides education, training, and information and technology transfer to support local community needs, as well as support for the analysis of statewide land use and other resource issues. The goal of the Wyoming Water Resources Data System is to educate and inform the citizens of Wyoming on matters related to water, climate, and drought. The Wyoming Technology Transfer/Local Technical Assistance Program assists local Wyoming agencies and individuals with technical issues related to Wyoming's transportation infrastructure. (5b)

A recent program that reaches hundreds of middle school and high school students and communities is the university's Science Posse, which in 2005 received \$4.3 million in federal grant money over five years for implementation. Graduate students coordinate with teachers across the state to participate in classroom discussions and lead workshops on their science and research endeavors. This opportunity brings state-of-the-art science to young students, and the graduate students gain additional hands-on teaching experience and leadership skills in reaching many of the state's rural school districts. Twenty-one schools participate in this program, with more than 180 events that reach nearly 4,000 students statewide. (5d)

It is worth mentioning again the High Plains Gasification Advanced Technology Center, to be constructed east of Cheyenne. This facility will enable researchers from the university and General Electric to develop advanced technologies for the gasification of Wyoming coal—a process that is critical to the future viability of coal-based energy in a carbon-constrained society.

Cultural assets, arts, and humanities (Core Components 1b, 2b, 5a, 5b, 5c, 5d)

The university is Wyoming's most prominent hub for the fine and performing arts and creative endeavors in the humanities. With award-winning academic programs in the visual and performing arts, a new MFA degree 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. (1b)

The university has a reputation for offering high-quality performances that are comparable to other larger institutions in the nation. To bring these performances to a statewide audience, the university has created a variety of outreach programs that reached 6,375 people in 2008 in communities distant from the Laramie campus. The university's cultural programs and fine arts outreach offices make it possible for guest artists, faculty, and students to tour in Wyoming, providing an important connection to the university through the presentation of dance, theatre, and musical performances. These guest artists often provide master classes for university students and on occasion across the state. (5b) In addition, every spring the university's symphony orchestra completes a week-long tour in Wyoming, performing in schools and community centers in all corners of the state. The university also creates opportunities for Wyoming and regional students and teachers to participate in intensive cultural study on campus. Through Fine Arts Outreach, students and teachers connect with world-renowned artists and university faculty. They participate in workshops, mentorship programs, master classes, and performances through such programs as the Vocal Jazz Workshop, the Festival of Strings, the Festival of Winds, and the Festival of Voices. Every summer, the Department of Music hosts the popular Music Camp for middle school and high school musicians. (5a) The Annual Snowy Range Dance Festival, hosted by the Department of Theatre and Dance each summer, offers intensive study with professional dance faculty and performers for 80 to 100 dance students and teachers from around the mountain west. In addition to ballet, modern, jazz, and tap technique classes at various levels, festival activities include classes with guest faculty, student showcase performances, guest faculty lectures, discussion groups, and special performances and concerts for the public.

The Art Museum, recently re-accredited by the American Association of Museums, is located in the Centennial Complex on the Laramie campus. It is known throughout the region for exhibiting high-caliber visual art by national, regional, and international artists. The museum's education program has become a model for responding to the needs of teachers, students, and communities through a variety of in-house and outreach activities that include the Ann Simpson Artmobile and traveling exhibits. In 2007-2008, 10,054 people participated in Art Museum educational activities. (5c, 5d) The success of these programs in a time when the national trend has been a decrease in K-12 school participation in museum offerings is attributable to the addition of a master teacher, who bridges the gap between museum and schools, the shift to an enquiry model of teaching and learning, and ongoing assessment that has been responsive to the needs of the university's constituencies. On the other end of this education spectrum, the Art Museum implemented an internship program for graduate students and advanced undergraduates to encourage museum studies options for business and other related fields.

The willingness of the Art Museum to take a leadership role for the region often results in innovative programming not usually associated with rural states and communities. In 2008, the Art Museum expanded its exhibition programming beyond the gallery walls with *Sculpture: A Wyoming Invitational*. This exhibition of large scale sculpture included 18 major works by artists of international, national, and regional reputation installed on campus and at locations around Laramie. The first major exhibition of contemporary public art in Wyoming, *A Wyoming Invitational* served as the backdrop for a Public Art Symposium in spring 2009, where artists, scholars, city and county administrators, facilities managers, legislators, faculty, staff, students, and members of the public gathered to consider the role of public art in communities. (5b)

The Wyoming Humanities Council serves the state from its location on the main campus in Laramie. The Wyoming Humanities Council engages the university and statewide communities through public forums, reading and film groups, teacher institutes, exhibits,

"The museum's education program has become a model for responding to the needs of teachers, students, and communities through a variety of in-house programs and through outreach programs that include the Ann Simpson Artmobile and traveling exhibits." grants projects, and other programming. By providing housing for the council, the university enables partnerships that support the understanding, appreciation, and cultivation of the humanities in Wyoming. Saturday University, initiated in 2009 in Jackson, Wyoming, is jointly sponsored by the Wyoming Humanities Council, the University of Wyoming, the University of Wyoming Foundation, the Teton County Library, and numerous Teton County businesses. In the inaugural session, three university faculty delivered classes to over 65 attendees. Participants who attended all three terms were eligible to receive college credit from Central Wyoming College.

The university also reaches out to the state and its rural communities through Wyoming Public Media (WPM). Administered by the Outreach School, WPM is the university's administrative umbrella for its several public radio and Internet networks and services. Wyoming Public Radio is the state's only National Public Radio member. It currently has a weekly listenership of nearly 60,000. WPM coverage of the state increased during the past decade, now reaching approximately 80 to 85 percent of the state's population through 15 stations and seven translators. Major federal grants and Wyoming legislative support enabled WPM to convert 14 of its stations to digital broadcasting. (2b) Wyoming Public Media's annual budget of \$2.1 million is nearly 80 percent self-funded, primarily through private donations by approximately 5,600 listeners and 200 Wyoming businesses. WPM operates a second statewide public radio network, "Classical Wyoming," a 24/7 quality classical music service with hourly newscasts from the BBC and statewide Wyoming news. WPM has acquired another new broadcast license for KUWL-FM in Laramie. Its service is "Jazz Wyoming," which offers full-time 24/7 jazz programming.

Environment and natural resources (Core Components 1b, 5a, 5b, 5c, 5d)

The university's expertise and reputation in environment and natural resources is continuing to gain prominence. An emerging strong connection between the Haub School of Environment and Natural Resources and the School of Energy Resources is essential in the future management of natural resources in Wyoming and the region. (1b) This partnership can help advance effective decision-making on environmental and natural resource issues through research, policy analysis, education, process support, and outreach. (5b)

Several units provide technical information and database resources. For example, the well known Wyoming Open Space Initiative, through the university's Ruckelshaus Institute for Environment and Natural Resources, strives to improve the effectiveness of Wyoming citizens in maintaining the state's open spaces through research, information, education, and decision-making assistance. Open space issues that may be considered by this interdisciplinary group include agricultural sustainability, community planning and development, recreation and tourism, wildlife, and other related cultural, economic and environmental issues of importance to Wyoming. Units also provide access to university resources on issues such as reclamation and restoration, ecology of rare plants, and geography and earth sciences. (5c)

The University of Wyoming-National Park Service Research Center is a cooperative effort with the National Park Service. Headquartered on the main campus in Laramie, the research center was established to foster research in national parks in the Rocky Mountain region. In addition, the center operates a field research station at the AMK Ranch in Grand Teton National Park. Each year, this facility attracts scientists and students from around the world to study aspects of the Greater Yellowstone Area. (5d)

The university also provides access to the study of utilizing natural resources through several diagnostic clinics and laboratories, such as the Soil Testing Laboratory, the Arthropod Diagnostic Service, the Wyoming Cooperative Fish and Wildlife Research Unit, and the State Seed Analysis Lab in Powell. (5a) The Wyoming State Veterinary Laboratory is researching disease agents in livestock, integrated methods of parasite control for improved livestock production, animal disease investigations and diagnostic techniques, and food and water safety through discovery and control of natural and induced toxins and agents.

The university is taking national leadership in addressing climate change and pursuing sustainable practices. As a signatory of the American College & University Presidents Climate Commitment, the university is showing its commitment to reducing its carbon footprint. In addition, the university has formed the Campus Sustainability Committee comprised of faculty, staff, and students who serve in an advisory capacity to all departments, colleges, and other entities in an effort to advance environmental and economic sustainability at the university. The committee is working on such initiatives as implementation of green building practices, reduction in energy consumption, waste reduction and increased recycling, water conservation, expanded xeriscape landscaping, and education of the university community regarding sustainability objectives. These initiatives augment the many supply-side research initiatives associated with sustainability, such as the Enhanced Oil Recovery Institute, research into cleaner coal technologies, wind energy research, and a carbon sequestration field project. (5c)

The university houses a number of environmental and natural resource museums, collections, and research centers for scholarly and public use. (5b, 5c, 5d) The Rocky Mountain Herbarium contains the largest collection of Rocky Mountain plants and fungi in existence, as well as a good representation of the floras of other parts of the northern hemisphere. The Louis O. and Terua P. Williams Conservatory facilitates teaching and research needs and assists numerous visitors seeking information and advice on plants for their homes and gardens. The conservatory also offers tours for school children, university students, clubs, and classes. The Insect Museum is the only research collection of insects in the state of Wyoming. The museum allows for visitor use of the collections, loans of specimens, and contributions to faculty and student research projects. Additionally, it contributes to the community by providing educational opportunities for youth. The University of Wyoming Planetarium offers astronomy displays for community groups and for K-12 and college classes. The Geology Museum continues to maintain public hours for research and viewing of the collections while it undertakes an in-depth assessment and planning process to envision a new future after the recent budget cuts (see Chapter 10).

"As a signatory of the American College & University Presidents Climate Commitment, the university is showing its commitment to reducing its carbon footprint." The university sponsors numerous summer institutes held in Laramie for high school students and teachers that combine intellectual inquiry with recreation and the opportunity to meet people from across Wyoming. These institutes keep students and teachers engaged in current issues affecting Wyoming communities. In addition, the university has developed course transfer agreements with the Teton Science School and a credit transfer agreement with the Wyoming-based National Outdoor Leadership School (NOLS), one of the world's leading innovators in outdoor education. (5c)

History and culture of the Rocky Mountain region (Core Components 1b, 5b, 5d)

Western history and cultural resources abound in Wyoming, with the university serving as the conduit in education related to the Rocky Mountain West. The American Heritage Center (AHC), located in the Centennial Complex, is the university's repository for archives, rare books, and manuscripts. AHC collections support a wide range of research and teaching activities in the humanities, sciences, arts, business, and education. More than 120,000 boxes of various collections stored in the AHC are accessible to residents. Areas of specialty include Wyoming and the American West, the mining and petroleum industries, U.S. politics and world affairs, environment and natural resources, journalism, transportation, the history of books, and 20th century entertainment such as popular music, radio, television, and film. The AHC recently completed a systematic review and strategic deaccessioning project to focus its collections and to permit more effective cataloging and curatorial practices. (1b)

The AHC's mission is to make all the archival material a visible, vital, and accessible resource for students, scholars, and the public. In 2008, scholars and other researchers from 48 states and 21 nations used the AHC's collections. The AHC also creates a variety of education and outreach programs, including a speaker's bureau, History Day, traveling exhibits, participation in the Wyoming Partnership for Civic Education, and summer teacher institutes. The AHC has received national coverage through documentaries featured on PBS's American Experience and the History Channel, and the director is chairing the national archivists' organization. (5d)

The University of Wyoming Archaeological Repository is one of two federally recognized repositories in the state. In addition the Anthropology Museum exhibits highlighting Wyoming's archaeology have been completely upgraded as part of the new anthropology building. (5b)

Professions critical to the state and region (Core Components 4a, 5b, 5c)

The university offers a variety of programs for professionals in the state and region, many of whom require continuing education for their careers. Attorneys, certified public accountants, medical professionals, and teachers fall into this category of learners who require

"The American Heritage Center's mission is to make all the archival material a visible, vital, and accessible resource for students, scholars, and the public." access to quality lifelong educational resources. (4a) Opportunities at the university range from programs that qualify participants for professional development licensure credit to forums and conferences geared toward specific industries operating in the state. There are certificate programs in the areas of geographic information systems, nursing, professional teaching standards, continuing education, and real estate.

The state's teachers and attorneys especially rely on university programs for continuing education and professional development. The College of Education and other colleges and departments provide multiple teacher training opportunities ranging from summer institutes to weekend workshops. Educators are able to advance their teaching skills and pay scales by taking for-credit classes. These include programs in mathematics, music, and engineering; workshops and institutes presented by the Art Museum, Fine Arts Outreach, and the art department; and institutes sponsored jointly by the American Heritage Center and the Wyoming Humanities Council. The College of Law offers legal education classes throughout the year that are central for the state's attorneys to continue their licenses. These law classes, the majority of which are free, average 200 participants a year. In addition, the college offers legal assistance in criminal and civil cases through the Wyoming Prosecution Assistance Program, providing services to Wyoming county offices, prosecuting attorneys, the Wyoming Attorney General, and the United States Attorney for the District of Wyoming.

Leadership Wyoming, jointly sponsored by the University of Wyoming and the Wyoming Heritage Foundation, provides opportunities each year for a diverse group of 40 Wyoming professionals to participate in a nine-month educational experience. Training sessions provide practical, nonpartisan, hands-on understanding of a broad spectrum of public policy issues and help people develop an appreciation for trusteeship, with lasting commitments to civic involvement at the state and local level. After nearly a decade, Leadership Wyoming has created a cohesive community of influential citizens from virtually all professions and all major communities.

The university has a special role and responsibility in providing social science data and policy analysis. Data collection through the Wyoming Survey & Analysis Center allows students and researchers to evaluate local, state, national, and international policies as well as their impact on Wyoming's quality of life. Through the generous support of the Simpson family, the university has sponsored numerous nationally and internationally known speakers such as James Baker, Sandra Day O'Connor, Donald Kendall, Gerald Ford, and George H.W. Bush.

The Office of Research & Economic Development works with faculty, staff, and students in all seven colleges and the university's outreach programs to link research, technology transfer, and economic development efforts. In addition, several units and partners provide education, technical assistance, and networking for Wyoming businesses, entrepreneurs, inventors, business women, and the general public. (5c)

- Manufacturing Works is a catalyst for growth and development for manufacturing and technology enterprises in the immediate Rocky Mountain West.
- Wyoming Research Products Center (RPC) is a collaborative effort between the University of Wyoming research office and the Wyoming Business Council. The RPC assists Wyoming entrepreneurs or inventors across the state to help them identify, protect, and commercialize their intellectual property.
- The Wyoming Small Business Development Center entails partnerships among the U.S. Small Business Administration, the Wyoming Business Council, and the university. It works to strengthen Wyoming businesses and create economic growth by providing management assistance, educational programs, and helpful resources for Wyoming small businesses and entrepreneurs. The center has served between 2,259 and 3,669 total clients yearly since 2003. During a five-year period (FY 2004-FY 2008), it averaged 1,284 clients counseled, 1,499 clients trained, 147 workshops, 433 jobs created or retained, with a capital impact of nearly \$14 million.
- The Wyoming Technology Business Center (WTBC) is a not-for-profit business incubator that assists in the process of start-up and growing technology-oriented companies. The university supports a state-of-the-art data center at WTBC that provides robust internet connections and high-capacity, fully redundant broadband services to WTBC clients. The incubator's new 30,000 square foot facility, including 19,000 for client lease, was completed in 2006. Two of the nine on-site clients have since graduated as successful businesses, no longer in need of the support provided by the center. In addition, the WTBC co-sponsors a \$10,000 competition to stimulate student entrepreneurial projects with potential for development to market. Of the three student team award winners to date, at least one has expanded to a regionally successful enterprise. (5c)

In addition to supporting businesses and manufacturing activities in the state, the university is the leader in developing quality health care for residents. Health education, assistance, and service are provided in the areas of physical health, disability, nutrition education, drug information, speech and hearing, and telemedicine. (5b) The major units providing health care and education include the Family Medical Residency Programs in Casper and Cheyenne, the Wyoming INstitute for Disabilities (WIND), the Drug Information Center, the Speech, Language, and Hearing Clinic, the Center for Health and Education Studies, the Center for Rural Health Research and Education, and the new Wyoming Geriatric Education Center. These health initiatives range from providing direct service to individuals and families to providing training for professionals through conferences, workshops, and other classes. (5c)

"The university is also partnering with the governor, state agencies, and nonprofit organizations for Building the Wyoming We Want, a statewide initiative to address responsible growth in Wyoming in consideration of the state's vast natural resources and cultural and historic landscapes."

ASSESSING AND MEETING THE NEEDS OF CONSTITUENCIES (Core Components 5a, 5b, 5c)

The university prides itself on providing residents with a diverse array of opportunities in lifelong learning and professional development. Toward this end, the university works closely with state and local decision-makers to assess the needs of statewide constituencies. (5a)

In 2005, the Outreach School enlisted the university's Wyoming Survey & Analysis Center to conduct a survey of Wyoming households on how well the university connects with the citizens through various university academic and non-academic programs, offerings, and services. Not surprisingly, sports and athletics were the university programs most widely recognized for connecting with state residents. The next most secure connection between the university and state residents was Wyoming Public Radio administered through the Outreach School. Survey respondents gave high ratings to several other services and programs as well. More than 95 percent responded that they were very satisfied or somewhat satisfied with noncredit classes; 92 percent with academic events and programs for school children; 91 percent with cultural services for the general public; 89 percent with university health-related programs; 88 percent with off-campus classes; 84 percent with agricultural services; and 79 percent with the university's use of media to communicate with state residents. (5a)

In 2009, the Outreach School initiated the Building Partnerships project to bring together Wyoming's community colleges, members of state agencies, and university personnel engaged in lifelong learning education to discuss statewide needs and potential collaborations in noncredit and workforce education. Additional assessment of the state's continuing education needs is being undertaken by the Wyoming governor's office, which has made continuing education a priority. In 2009, a taskforce was assembled to collect information on academic and lifelong noncredit education. The university is also partnering with the governor, state agencies, and nonprofit organizations for Building the Wyoming We Want, a statewide initiative to address responsible growth in Wyoming in consideration of the state's vast natural resources and cultural and historic landscapes. (5b)

Because distance learning technologies are so important in a geographically large state with a small population, the lack of consistent distance learning platforms has become an increasingly important issue for the university and for the state. Governor Freudenthal has appointed a small taskforce to examine and make recommendations regarding the various efforts taking place in Wyoming concerning distance education, video conferencing, and general Internet Protocol-based communications. The taskforce, with the help of two consulting firms, collected data on stakeholder perceptions of distance education and video conferencing in Wyoming. With the elimination of the Outreach School Division of Conferences and Continuing Education, which was one of the budget reduction measures, the university may have the opportunity to utilize distance learning technologies for reframing the Outreach School's role in continuing education. (5c)

CONCLUSION AND KEY FINDINGS

The university as a whole, as well as individual colleges and entities, dedicate substantial resources in support of lifelong learning. The university is generally responsive to statewide, community, and institutional concerns, especially in its areas of distinction. In addition to attracting state and regional populations to campus for its collections, museums, and programs, the university takes its offerings out to the state. One challenge for the university is being able to respond to the demands of Wyoming's citizens without straying from the university's core mission. Additionally, the following issues have been identified:

- Although the university sponsors an impressive number of outreach activities through a wide variety of partnerships, many of these programs have not been rigorously assessed for their contributions to learning. The university believes it is meeting many of the needs of the people of Wyoming and has information to verify this perception through various formal needs assessments. The university knows collectively less about the outcomes of many of these programs. While assessment of these diverse programs can be challenging, the university needs to expand the assessment dialogue to include outreach programs. (UP 3 Action Item 21)
- The technology and infrastructure for effective delivery of course offerings throughout the state and beyond is available to deliver these offerings; however, consistency in presentation, support, and delivery needs to be developed with involvement from all colleges and units. Two gubernatorial taskforces are currently evaluating distance education and video teleconferencing infrastructure statewide. The outcomes from these studies will help the university assess the effectiveness and efficiency of technological advances that support lifelong learning environments to better plan for the future. (UP 3 Action Item 14)



Budget, Federal Compliance, and Conclusion



The University's Funding and Response to State Funding Reduction



"Challenging times reveal the character and commitment of a university. Let me be clear, our commitment is to the educational enterprise. Faculty and students are UW's two most important assets—they are at the core of our mission. We tested this commitment last spring when it became clear that budget reductions would be a reality."

—Tom Buchanan, President of the University of Wyoming

The University's Funding and Response to State Funding Reduction

This chapter reviews the size, sources, and scope of the university budget using FY 2009 data. In addition, this chapter specifically addresses the impacts of a statemandated 10 percent reduction in the university's budget as a result of decreases in state revenue. We emphasize the planning process that the institution followed to guide the required budget reductions and explain the specific measures undertaken to address the mandate.

OVERVIEW OF THE UNIVERSITY'S FUNDING SOURCES AND EXPENDITURES

This overview is organized by category and source of the university's assets and expenditures. Figures 10.1 and 10.2 provide additional detail about the general operating budget (Section I budget) by source and expenditure category and by program.

Assets

The university's assets for all of the university's programming, operations, and building can be categorized by four sources: Section I, Section II, special appropriations, and capital construction.

Section I is the university's general operating budget comprised of the following funding sources:

- Legislative appropriations from the state's general fund. These represent the single largest asset category for the university, accounting for 76 percent of the Section I total.
- Federal formula funds for the College of Agriculture and Natural Resources, consisting of several congressional appropriations. The McIntire-Stennis

and Hatch appropriations are restricted to uses supporting agricultural research. The Smith-Lever Act appropriates funds restricted to agricultural extension programs.

- The University of Wyoming Income Fund, representing revenue from three sources: 1) tuition, the largest source by far in this category, 2) sale of agricultural products, and 3) income from intercollegiate athletic events. The use of these funds is unrestricted except that athletic income is utilized only for intercollegiate athletics.
- Other revenues, including federal mineral royalties, land-grant and agricultural land income, and sales and services funds. These funds have various restrictions on their uses. Federal mineral royalty revenue is from mineral production on federal lands in Wyoming. These restricted revenues are used for the payment of principal and interest on bonded debt, constructing and equipping new buildings, repair of existing buildings, and purchase of improved or unimproved real estate. The university currently uses a portion of this fund for maintenance, operation, and repair of the plant. Sales and service funds are derived from indirect costs recovery and interest income from the investment of funds held by the university. Other sources include library fines, parking fines, bad check charges, utility sales to fraternities and sororities, and the sale of livestock and agricultural products produced as a result of instructional activities. This fund is unrestricted and may be used for any university purpose.
- Unrestricted income from the University of Wyoming Foundation is also under Section I of the university budget.

It is common to refer to the legislature-funded portion of the Section I budget as the block grant, since the university has the authority to move money around within this account without seeking line-by-line approval from the legislature. Figure 10.1 provides additional detail about the breakdown of Section I revenue in dollars for FY 2009.

Section II is the university's self-sustaining budgets comprised of the following:

- Sponsored research grants and contracts, primarily from federal agencies but also from the state and corporations. This includes foundation funding supporting sponsored research and specific educational and service programs. Sponsored research generally involves work for hire.
- Revenue from auxiliary, self-sustaining enterprises, such as the auto repair shop, motor pool, university golf course, transportation services, residence halls and apartments, dining services, and other enterprises.
- Student fee revenue allocated for purposes explicitly defined by the Board of Trustees, including support of student organizations, intercollegiate athletics, etc.

Special appropriations represent the operating budgets for specific activities authorized by the legislature outside of the Section I and Section II budgets. Included in this category is the university administered portion of the Western Interstate Commission for Higher Education, Enhanced Oil Recovery Institute, and medical education. The university may

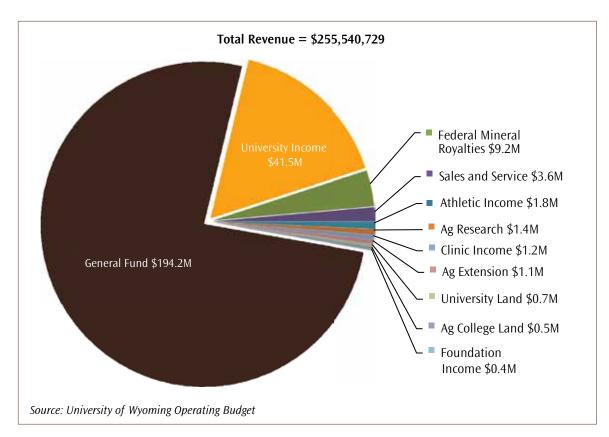


Figure 10.1. Section I Revenue by Source, Fiscal Year 2009

not transfer funds among these accounts or between these accounts and the Section I budget. In addition, these accounts have constraints that do not apply to the block grant, such as caps on the number of employees.

Capital construction budgets fund direct construction, architectural and engineering fees, equipment and furnishings, contingencies, and associated costs. Funds for financing such projects may come from state general funds, bonds issued against predictable sources of revenue—such as student use fees and federal mineral royalties—gifts and state matching funds, or a combination of these sources.

Expenditures

University expenditures from any of the asset categories previously listed support a set of functional categories, as defined by the National Association of College and University Business Officers (NACUBO). There are nine functional categories in the university's budget: 1) instruction, 2) research, 3) public service, 4) academic support, 5) student services, 6) institutional support, 7) operation and maintenance of the plant, 8) scholarships and fellowships, and 9) intercollegiate athletics.

Instruction accounted for nearly 43 percent of the total expenditures in Section I spending, comprising the largest category of expenditure. The next largest category is academic support (12 percent) followed by institutional support (11 percent) and maintenance

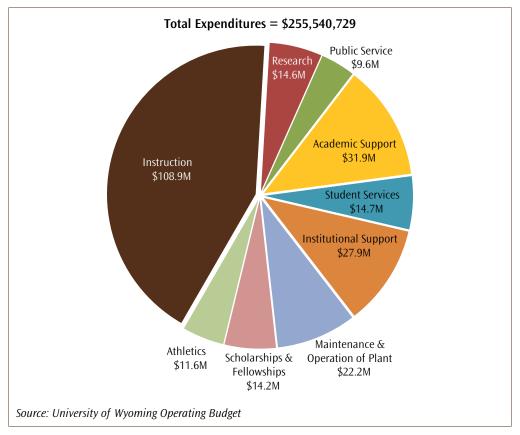


Figure 10.2. Section I Expenditures by NACUBO Functional Category, Fiscal Year 2009

operation of the plant (9 percent). Figure 10.2 provides additional information on expenditures in dollars by category for FY 2009.

OVERVIEW OF BUDGET REDUCTION IMPACTS

(Core Component 2b)

In June 2009, Governor Freudenthal directed all state agencies to reduce their budgets in anticipation of significant reductions in state revenues for fiscal years 2010, 2011, and 2012. The basis for the projected revenue losses was a drop in mineral tax revenues expected to result from the effect of the national recession on prices of energy commodities, especially natural gas.

For the University of Wyoming, the reduction amounted to a 10 percent cut in legislatureappropriated funding—\$18.3 million per year from the university's main operating budget, the block grant. This amount is slightly more than 7 percent of the university's total Section I budget, which also includes tuition revenue and several other sources of money. The reductions also cut proportional amounts from three much smaller accounts associated with medical education, the Western Interstate Commission for Higher Education, and the Enhanced Oil Recovery Institute. This mandate left intact the university's capital construction budgets, the federally funded budget for the School of Energy Resources, and revenue-based budgets, such as those for externally sponsored research. (2b) The state-mandated budget cuts per se had no effect on distributions from the endowment managed by the University of Wyoming Foundation, which reached \$16.3 million in FY 2008. However, sharp declines in investment markets have reduced those budgets as well. In 2009, the Wyoming State Legislature provided important relief by modifying the statute that governs endowments. This legislation allowed the foundation to revise the spending policy that it uses to compute the annual payout from endowed gift accounts. Although the new spending policy does not eliminate all market effects on endowmentgenerated revenues, it allows for smoother, more predictable changes in payout in response to investment market fluctuations. (2b)

THE UNIVERSITY'S BUDGET PLANNING PROCESS

(Core Components 1d, 1e, 2a)

Anticipating these recession-driven effects, President Buchanan asked Provost Allen in January 2009 to oversee a budget planning process. The purpose of the process was to involve all sectors of the university community in analyzing institutional priorities and in formulating recommendations for how to manage the expected reductions. (1d, 1e) In response, Provost Allen called on 11 constituency groups to develop white papers that identified the following: 1) three tiers of university activities—programs in the core mission, programs required to sustain the core mission, and enhancements to the core; 2) elements of university operations, institution-wide, that belong to these three tiers; 3) elements of the constituency group's bailiwick that belong to the three tiers; and 4) specific ideas for budget reductions that may not neatly fall into this three-tier framework. (1e, 2a) Table 10.1 lists the constituency groups.

Constituency Group	Leader
Associated Students of the University of Wyoming	Former President Kelsey Day
Division of Administration	Former Vice President Phill Harris
Division of Government, Community, and Legal Affairs	Vice President Rick Miller
Division of Information Technology	Vice President Robert Aylward
Division of Intercollegiate Athletics	Director Tom Burman
Division of Institutional Advancement	Vice President Ben Blalock
Division of Research & Economic Development	Vice President Bill Gern
Division of Student Affairs	Vice President Sara Axelson
Staff Senate	Former President Jauque Schuman
Faculty Senate	Former Chair Hannelore Mundt
Deans and Directors Council	Dean of Education Kay Persichitte
Source: Academic Affairs	

Table 10.1. Constituency Groups for University Budget Planning Process

Guiding principles

(Core Components 1d, 1e)

At the same time, the Office of Academic Affairs proposed a set of six key principles to guide the anticipated budget reductions. These key principles appeared both in the feed-back that Provost Allen sent in response to first drafts of the white papers and in a document distributed at the spring faculty meeting (to which all members of the university community were invited) on April 1, 2009. (1d, 1e) The key principles are summarized here.

Planning as priority setting (Core Component 2d)

Any measures undertaken to manage a reduction in the university's legislature-funded budget must mesh with the institution's strategic plans. Planning is the vehicle for establishing and pursuing priorities, not simply for directing new resources. Hence, the university's plans should guide choices of what to preserve, what to strengthen, and what to reduce. Budget control measures that rely exclusively on unplanned events such as hiring freezes that permanently penalize units only because they suffer ill-timed retirements and resignations defeat this principle. If new measures are required to constrain hiring or other resource flows, they must include mechanisms to ensure consistency with the university plans. (2d)

Centrality of academics (Core Component 2b)

As an academic institution, the university has a responsibility to manage budgets in a fashion that verifiably advance its academic strength. As it has in more promising economic eras, the university will continue to make prudent decisions about the appropriate distribution of resources among its academic programs and will continue to follow its prescribed processes for adding and eliminating them. It is academic planning and not budget reductions that should drive these decisions. (2b)

Job quality (Core Component 2b)

The university must preserve its ability to compete with the best institutions in the world for talented employees, and it should strive to be Wyoming's model employer. Toward these ends, the university should avoid reductions in compensation. History shows that failure to maintain attractive salaries and benefits leaves the institution vulnerable to the immediate loss of some of its best employees and leaders, and it results in persistent discrepancies between the university's salaries and those that prevail nationally. The university should seek to improve its employees' compensation at every opportunity. It is better to have a smaller number of well-treated employees than to preserve a larger number at the expense of compensation. (2b)

Tuition policy (Core Component 2b)

A coherent tuition policy is a necessary part of any rational university budget planning. From 1986 to 2006, the university's resident undergraduate tuition increased at an average rate of 8 percent per year. Since then, the tuition rate has remained constant. This more recent policy enjoys some rationale in times of rapidly increasing fiscal support from the state. However, if the university must manage state-mandated budget reductions, a judicious, multi-year plan for tuition increases must be part of the discussion. (2b)

Cost-effective practices (Core Component 2b)

Managers continually examine the university's operating practices and their outcomes to identify more effective and efficient ways to accomplish the mission. Budget planning furnishes an explicit opportunity for all members of the university community to undertake this type of self-scrutiny. Examples of measures worth exploring include the establishment of pools of business-service staff that serve several departments simultaneously, central coordination and support of information technology professionals, greater restraint in the delivery of small-section classes, and careful pruning of the curriculum to offer fewer classes overall. Many such measures are worth instituting even in the absence of mandatory budget reductions, and many others can prove valuable as pressure-relief mechanisms, even if they do not yield easily quantified cost savings. (2b)

Infrastructure (Core Component 2b)

Excellence in academics requires sophisticated infrastructure. This realm extends beyond the obvious need for heat, light, plumbing, and roofs. It includes modern classroom technology, high-performance data networks and computing equipment, distance learning facilities, and state-of-the-art offices, laboratories, studios, and collections. Effective budget planning must preserve and, if possible, enhance the institution's capacity to maintain and upgrade the infrastructure required for learning at all levels, from the entry-level curriculum to the frontiers of knowledge and creativity. (2b)

Finalizing the budget reduction plan (Core Components 1d, 1e, 2b)

In response to the final white papers, on May 1, 2009, Provost Allen delivered a report to President Buchanan with structural recommendations for reducing the university's budget. The Office of Academic Affairs distributed this report electronically to the university community. The provost's report analyzed the elements of the operating budget according to functional categories defined by NACUBO. The report identified instruction, research, and public service as core functional categories. The report cautioned that not all activities belonging to these categories are equally central to the university's mission,

nor should all activities in these categories necessarily be immune to budget cuts. One of Provost Allen's most important recommendations in the report was as follows:

Eliminating programs and functions, even nonacademic ones, inevitably arouses controversy. If one accepts the premise that instruction lies at the core of UW's mission, there is a compelling reason to resist the elimination of academic degree programs as a budget reduction measure per se. UW continually adds and eliminates degree programs based on the institution's academic plans and areas of distinction; I propose that we retain this policy unless faced with unexpectedly drastic budget reductions. In any case, rejecting program elimination just to avoid controversy will severely limit the university's ability to adhere to the key principles outlined earlier.

During the regular meeting of the Board of Trustees held May 7 - 8, 2009, and again at the Trustees' retreat on May 29 - 30, 2009, university administrators met with the board to discuss elements of a budget reduction plan. At their business meeting on May 30, the Trustees approved the budget reduction plan proposed by President Buchanan, subject to yet-to-be-received information from the state on the required magnitude of the reduction.

On June 4, 2009, Governor Freudenthal issued specific directives to state agencies to reduce their budgets. On that same day, President Buchanan distributed a memorandum to the university community detailing the university's plans for meeting the mandate. The next section is a summary of those plans. (1d, 1e, 2b)

BUDGET REDUCTION MEASURES

The university's budget reduction strategy consists of three elements:

- Reductions in budgeted expenditures, beginning in FY 2010
- A buffer fund to allow full implementation over the course of two fiscal years
- Measures to reduce pressure on budgets (program efficiencies)

Reductions in budgeted expenditures

The first element involves reductions in expenditures ultimately totaling \$18.3 million per year. Because personnel costs—salaries and benefits—account for 77 percent of the Section I operating budget, it was unrealistic to implement these reductions fully at the start of FY 2010. Instead, the target reduction for FY 2010 is \$10.7 million per year, with full implementation of the \$18.3 million per year reduction slated for FY 2012. Table 10.2 summarizes the budget reduction measures and accompanying targets for FY 2010.

Buffer fund

For many of the measures listed above, it was not feasible to accrue the savings listed immediately at the start of FY 2010. In some cases, implementation will occur throughout FY 2010, for example as additional positions become vacant that can replace positions captured and frozen in April 2009. For some measures, for example tuition increases and support

Table 10.2. Budget Reduction Measures

Fiscal Year 2010		
Measure	Amount	
Central salary management for staff ¹	\$0.5M	
Restricting starting salaries to 15 percent into range defined for each pay grade		
Staff hiring squeeze1	\$1.7M	
Elimination of selected positions through attrition		
Elimination of Section I overtime budgets		
Libraries acquisition budget reduction		
Following \$4.3M increase in FY 2006		
Tuition increases ¹		
Implemented in FY 2011 and beyond		
Includes shifts in funding for JD and PharmD faculty via tuition differentials		
General reductions in support and other budgets ¹		
Following \$1.5M/year increase in FY 2008		
Additional reductions of \$1.7M/year in FY 2011		
Reduction in Intercollegiate Athletics ¹	\$0.6M	
First year's installment of a 10 percent reduction (\$1.1M) from FY 2011 onward		
Reductions in specific units		
Center for Conferences and Continuing Education (elimination of positions and program)		
UWTV (reduction in force)		
Graduate School (elimination of positions and redistribution of administrative functions to other offices)		
Geology Museum (elimination of Section I funding for positions)		
Office of Institutional Analysis (reduction in force)		
Enhanced Oil Recovery Institute (shift in funding for director's salary)		
WYSAC (shift in funding for director's salary)		
Alumni Affairs (shift in funding)		
WyNDD (shift in funding)		
Wyoming Technology Business Center (shift in funding)		
ASUW (shift in funding for business manager's salary)		
WRI (increase in rent)		
Centennial Singers (elimination of program)		
UW Visitors Center (reduction in force)		
Weeks of Welcome (elimination of program)		
Wildfire Dance Team (elimination of program)		
President's Office (reduction in force)		
Foundation funding for development		
Elimination of fundraising positions in academic units		
Creation of foundation-funded positions in Institutional Advancement		
Elimination of Section I funding for foundation operations		
Faculty hiring squeeze1	\$0.3M	
Tax on captured pool of vacated faculty salaries		
Decrease in tax by a factor of 2 in FY 2011 and again in FY 2012		
TOTAL	\$10.7M	

Source: Academic Affairs

¹Not implemented immediately on July 1, 2009

Note: The data in this table differ in some instances from data presented in President Buchanan's memo of June 4, 2009. The data here reflect corrected estimates provided by the Budget Office and the Office of Academic Affairs.

CHAPTER 10 | THE UNIVERSITY'S FUNDING AND RESPONSE TO STATE FUNDING REDUCTION

Table 10.3. Buffer Fund Source

Fiscal Year 2010	
Source	Amount
Delay in library acquisitions increase	\$2.3M
Budget reserves in nonacademic divisions	\$0.3M
Redirected endowment matching funds	\$5.0M
TOTAL	\$7.6M

Source: Academic Affairs

budget reductions slated for subsequent fiscal years, the savings required to meet the budget reductions will not be available until FY 2011 or later. To accommodate these cases, the university is drawing on a one-time buffer fund. These monies make up the \$7.6 million per year difference between the \$10.7 million per year in reductions effected in FY 2010 and the \$18.3 million per year target. Table 10.3 lists sources of this buffer fund for FY 2010.

Pressure reduction measures and program efficiencies (Core Components 1d, 1e)

Recognizing the difficulties that budget reductions will impose on the university's operations, President Buchanan directed the university to implement several additional measures to relieve some persistent sources of inefficiency and pressure on the operating budget. In most cases, it is difficult to assign a specific dollar amount to the savings that these initiatives will yield, either because those amounts are unpredictable (as in utility costs) or because there may be unforeseen opportunities to accomplish the functions more efficiently. Among those measures are the following:

- Central management of IT purchases (including research computing)
- Central consolidation of IT personnel throughout the university
- Consolidation of accounting and business service positions
- Continued use of major maintenance funds to reduce utility bills
- Class size management and reductions in low-enrollment sections
- Reductions in number of sections offered
- Elimination of the athletic training concentration in the Department of Kinesiology & Health
- Direct deposit of all paychecks
- Management of work-study funds in the Department of Human Resources
- Increases in parking and transportation fees
- Redirection of student fees from the Wellness Center to disability services
- Elimination of x-ray services at the Student Health Service

After announcing these measures, President Buchanan directed staff members in his office to analyze the correspondence between the recommendations contained in the 11 white papers and the budget reduction measures actually implemented. The analysis revealed that 92 percent of the dollar-weighted reduction measures appeared as recommendations in at least one white paper. (1d, 1e)

This statistic comes with two important caveats. First, not every member of the university community feels that any of the white papers reflects his or her views. Each constituency group's white paper reflects a consensus among the people who wrote it, informed by the people who participated in a process that was time-constrained by Governor Freudenthal's mandate. Second, some people who advanced specific recommendations in the white papers may have found the impact of the resulting budget reductions surprising. Few white papers included precise estimates of the magnitudes of various budget reduction measures. In some cases, the full implications of some specific measures, such as the job eliminations that result from the elimination of an administrative office, may not have been clear in advance to everyone who advocated them. These two observations help explain the surprise and dismay that some employees experienced upon learning of the budget reduction plan, despite having had opportunities to influence that plan.

RESPONSE TO THE BUDGET REDUCTION PROCESS AND IMPACTS (Core Components 2b, 3d)

The process described above emphasized preservation of the institution's core program categories—instruction, research, and public service—and identified a set of principles to guide budget reduction decisions. Among those principles was an emphasis on the importance of strategic planning, the centrality of academics, attention to the quality of jobs, the need for a clear and rational tuition policy, the institution's responsibility to cultivate cost-effective business practices, and the importance of infrastructure.

The final decisions reflect these principles, but in some instances they caused tension and controversy. The discussion below outlines some aspects of the budget reductions that provoked discussion within the university community after the budget cuts were announced.

The university has not attempted to meet its obligations to reduce annual operating budgets by shifting the burdens to one-time construction funds. In most instances, such shifts are not legally permissible. Therefore, existing construction projects remain intact. The university capital construction requests to the state legislature, the institution's leadership role in the governor's statewide distance education and telecommunications taskforce, and the institution's engagement in long-range development planning reflect a commitment to emerge from the recession positioned as strongly as possible for the infrastructural needs of the future. (2b)

The budget reductions left intact the budgets for major university initiatives, including the School of Energy Resources, the NCAR Supercomputer Center, and the GE Energy-University of Wyoming High Plains Gasification Advanced Technology Center. The reductions left in place all proposals for new degree programs listed for consideration in UP 3. The reductions did not impact the increases in faculty workforce implemented since 2006. (2b)

All academic majors at the baccalaureate and graduate level remain intact. The reductions also left intact the infrastructure for the assessment of student learning established during the past decade, including the university assessment specialist and the University Assessment Coordinators Committee. (3d)

In spite of the university's efforts to preserve the centrality of the academic mission, the impacts of budget reductions on academics are hardly insignificant. Controversy has arisen in connection with the reductions in several units and programs that were not directly responsible for credit bearing instruction, including the Geological Museum, college-level fundraising, the university libraries, the Wyoming Survey & Analysis Center, and the Center for Conferences and Continuing Education. This controversy was compounded, in the view of some, because the university administered salary raises averaging four percent (and totaling \$6.7 million per year in salaries and benefits) for FY 2010. In addition, the Board of Trustees considered and passed a motion permitting the administration to institute a voucher system for health care benefits for domestic partners as soon as the university's budgets permit. Some critics denounced the administration for distributing raises and for considering possible new benefits upon learning that the budget reduction measures entailed a reduction in force of 45 employees.

Three major categories of reduction in particular—the staff hiring squeeze, the reduction in the libraries' collection budget, and the reduction in general support budgets—will affect the academic mission. Some administrators with experience at other universities have observed that the University of Wyoming is sparsely staffed in comparison with their previous institutions. The planned reductions in classified staff positions will only exacerbate this perception. The libraries' collection budget and academic support budgets have been beneficiaries of successful, high-priority budget requests to the legislature, based on the argument that these budgets are important to sustain high-caliber academics. Yet budget reduction undid many of these gains. President Buchanan has made it clear that these budgets will be the top priority for future budget requests when the state's economy improves.

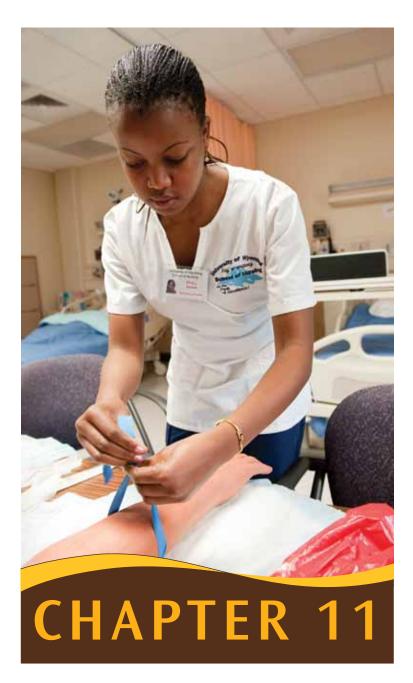
The tax on the captured pool of vacated faculty salaries is likely to result in the loss of a small number of faculty positions, perhaps as many as five, over the next two or three years. However, careful use of the university's central position management process can help minimize these losses. It can even offset the losses by creating new positions if the university can control the need for expensive, senior-level faculty hires by more effectively cultivating faculty leaders from within the university.

"In spite of the university's efforts to preserve the centrality of the academic mission, the impacts of budget reductions on academics are hardly insignificant."

CONCLUSION AND KEY FINDINGS

The University of Wyoming was faced with difficult fiscal challenges in 2009 due to the current recession. Until this year, Wyoming had largely escaped many of the problems that other states had already been facing given decreases in state revenues. Nonetheless, the 10 percent reduction in state funding was significant to the university and its operations. The university believes it responded appropriately to the reduction mandate and in looking back at the decisions made as part of the process recognizes the following:

- The university remained true to its established planning processes. The priorities established in UP 3 were central to all debate. Because of this, participants in the discussions about budget reductions examined a multitude of possibilities and assessed these possibilities critically in light of these well known, agreed upon institutional priorities.
- The process employed to address budget reductions was participatory and transparent. While not everyone agreed with the outcomes or foresaw all of the implications of their suggestions, the decision-making process and the outcomes of the process were well documented and distributed to the university community, despite the relatively short time period during which the decisions had to be made.
- The university adhered to its mission. The cuts approved by the Board of Trustees preserved, to the greatest extent possible, the budgets dedicated to instruction, research, and public service—the three functional categories most central to the learning enterprise.



Compliance with Federal Regulations



"The University of Wyoming is dedicated to fulfilling the requirements of the Higher Education Opportunity Act of 2008. To that end, we have established systems for review and implementation of current policies and procedures to ensure that we meet both the letter and spirit of the act."

> —Sara Axelson, Vice President for Student Affairs

Compliance with Federal Regulations

The University of Wyoming qualifies for a variety of federal financial aid programs and grants programs, in part due to its affiliation with the Higher Learning Commission (HLC). The university is fully committed to complying with the requirements of the HLC and federal law. This chapter provides an overview of the practices, policies, and documentation of requirements for federal compliance, including those policies required by the Higher Education Opportunity Act of 2008 as described in the HLC document entitled Federal Compliance Program 2009-2010. Additional documentation for all of the requirements discussed in this chapter will be available to the team in the resource room.

CREDITS, PROGRAM LENGTH, AND TUITION

The University of Wyoming *General Bulletin* outlines the requirements established by the faculty for completion of baccalaureate and graduate degrees. Programspecific degree requirements are also published in the bulletin, along with more general requirements. In order to address educational goals, nearly all undergraduate programs and the majority of graduate programs have clearly established learning outcomes listed in the bulletin and on department Web sites.

The minimum credit hours required for awarding a baccalaureate degree is 120. The general basis for one credit is 15 contact hours of formal instruction, delivered on the average of one hour per week in a 15-week semester, a typical Carnegie unit. Focused undergraduates who pursue full-time study should be able to complete the baccalaureate degree in four years by taking an average of 15 to 16 credits per semester. The number of semester credit hours required for the majors are consistent with good practices in higher education. Nearly all the programs in the Colleges of Business, Education, Engineering and Applied Science, Health Sciences, and Law are accredited by professional accrediting bodies. This accounts for more than half of the university's programs. Part of this accreditation considers the semester hours required for each program.

As specified in API, the university conducted an internal review of required credit hours by program, establishing a target ceiling of 128 credits in order to ensure more consistent standards across the university. Nearly all programs now comply with this limit. A few programs in the College of Education are exceptions, partly due to accreditation and certification constraints, and partly due to the college's requirements that secondary education majors complete a concurrent major in their content area. These programs warrant continued attention since maintaining appropriate accreditations is necessary.

As mentioned in previous chapters of the self-study, resident undergraduate tuition and fees at the University of Wyoming are the lowest of any U.S. public, doctoral institution. Likewise, resident graduate tuition and fees rank 145th out of 152 at such institutions.

Law, PharmD, and the MBA programs are the only programs for which differential tuition is charged. The tuition and fees for these programs rank low, falling below the 15th percentile for both residents and non-residents. At the Board of Trustees meeting in March 2005, the Board of Trustees approved a policy statement regarding the principles for the design and implementation of differential pricing mechanisms. In summary, differentials must consider the following: programmatic goals and objectives; base tuition and full cost of attendance; importance of access to education; significance of revenue generation and return of revenue to the program; and market position. Differentials should not be used at the undergraduate level and should be avoided as an enrollment management tool.

The university is currently instituting a multi-year approach to tuition increases to address specific institutional needs. This approach has the additional advantage of giving students a chance to plan for costs in the future.

STUDENT COMPLAINTS

The Student Handbook and Planner, available to all students, encourages students to first attempt resolution of concerns with the person or office involved in the following statement: "We recommend that if you have a problem, take it directly to the faculty member, department head, dean, or director/manager of the unit involved." Most minor complaints are readily resolved in this manner.

More formal and unresolved complaints from students and other stakeholders are directed to a variety of places depending on the nature of the complaints. Among the offices that handle such complaints are the president, academic affairs, student affairs, and administration, and when appropriate to the offices of academic deans, and other university officers. The recipient of a complaint either responds directly and copies pertinent university officers, or directs the complaint to the appropriate office for resolution and the response. Documentation of substantive formal student complaints and the institutional response is recorded in a database in student affairs. A file of the aggregated student complaints, response, and resolution for the past three years is available in the resource room.

TRANSFER POLICIES

Chapter 5 of the self-study provides an overview of the programs supported by the university to facilitate efficient transfer from postsecondary institutions. Specific policies published in the *General Bulletin* and on the university Web site are described in this section.

The University of Wyoming accepts transfer courses for credit from regionally accredited institutions that are college-level, non-technical in nature. Remedial courses, as well as technical courses, are generally not transferable. There are two exceptions. Technical courses may be accepted for transfer into two degree programs: the Bachelor of Science in Industrial Technology offered at the University of Wyoming Casper College Center and the Bachelor of Applied Science in Organizational Management. This policy is published on the transfer credit page on the Office of the Registrar Web site.

The university established a general education articulation agreement with the seven Wyoming community colleges in 2001. Under this agreement, students who earn an associate's degree at a Wyoming community college and complete three additional mathematics credits transfer to the University of Wyoming having fulfilled the university's lower division general education requirements. The university recently reached a similar agreement with Pikes Peak Community College in Colorado.

The University of Wyoming follows American Association of Collegiate Registrars and Admissions Officers (AACRAO) guidelines for acceptance of credit and degrees from international institutions. AACRAO publications and the AACRAO Edge Web site are used to determine the degree equivalencies, credit hours, grading scale, and acceptance. It is left to academic departments to determine degree applicability for international credit, including study abroad. Staff in the Office of the Registrar work closely with faculty and specialists in international programs, international students and scholars, and the academic departments in order to determine appropriate transfer of credits and degrees.

VERIFICATION OF STUDENT IDENTITY IN DISTANCE OR CORRESPONDENCE EDUCATION

The University of Wyoming Outreach School delivers approximately 30 undergraduate and graduate degree and certificate programs at a distance. A list of these programs can be found on the Outreach School's Web site. Several delivery systems are employed, and include correspondence, audio conferencing, video conferencing (referred to as the Outreach Video Network, or OVN), and Web-based delivery methods. With Web-based delivery, the university offers completely online courses and programs, Web-assisted components of correspondence, audio, and video conferencing courses, and a hybrid course approach in which part of the course is solely online and the remainder involves other modalities.

The Outreach School provides for a system of secure personal log-in and password access, provided by the eCollege course management system, for Web-based courses. Online testing services, also facilitated through the eCollege course management system, require the secure personal log-in and password access. In cases where site-based testing is required, proctors obtain picture ID verification of all students. The Outreach School also maintains a testing policy manual and provides it to proctors to promote and maintain the integrity of testing processes.

The Outreach School will continue to explore the possibilities of using non-intrusive forms of identity verification (i.e., avoiding the use of Web cameras, retinal scans, or thumbprint scans). Possibilities include the Kryterion system, which verifies identity through keystroke pattern analysis, and Axicom, which verifies identity through questions about personal data. In regards to testing integrity, the Outreach School will be pilot testing eCollege's ExamGuard system in spring 2010 with selected School of Nursing courses. This system provides for lockdown browser capability, so that students at testing sites or at a distance will be unable to seek help from other sources via the Internet during testing or to copy and distribute tests afterwards.

TITLE IV PROGRAM AND RELATED RESPONSIBILITIES

The university participates in all Title IV student financial aid programs except the Federal Direct Loan Program. Supplemental materials including the Eligibility and Certification Approval Report, the Program Participation Agreement, letter of approval from the U.S. Department of Education, and information on student awards are available in the resource room.

General program responsibilities and financial responsibility requirements (1 & 2)

The U.S. Department of Education (ED) reviews the single audit report of the University of Wyoming each fiscal year. The audit report is prepared by an independent professional audit firm in accordance with the Office of Management and Budget Circular A-133. Upon completion of its review, ED issues a letter advising the university of the final audit determination concerning the portions of the audit report that relate to the programs authorized pursuant to Title IV of the Higher Education Act of 1965, as amended (Title IV, HEA programs).

ED reviews corrective action plans designed by university management to address audit findings and significant deficiencies or material weaknesses in the internal control system over major programs such as Title IV financial aid. ED reminds the university that it must take the necessary actions to correct all of the deficiencies noted in the audit report, even if the final determination letter does not address each of the auditor's findings. As required by Sections .315(b) and .320(c) of OMB Circular A-133, the university prepares and submits a Summary Schedule of Prior Audit Findings in each year's single audit report package. The external auditors comment on all actions taken to correct each finding. It

is through this process that the auditors may identify repeat findings from a prior year. The University of Wyoming administration takes repeat findings very seriously, as ED may initiate adverse administrative action if the university fails to satisfactorily resolve any findings.

ED has raised no specific concerns about unresolved findings and no adverse administrative action has ever been initiated. However, audits of fiscal years 2008 and 2009 both contain repeat findings. The university has undertaken an examination of the corrective action plans that were designed to correct the findings and these plans will be revised in order to achieve resolution of the repeat findings. The university's internal auditor will monitor all corrective action plan implementations throughout the year and provide quarterly updates to the university's Board of Trustees Fiscal and Legal Affairs Committee.

ED has not raised any concerns regarding the university's financial ratios. The university continues to have a strong and stable financial position even in the face of a global recession and budget reductions. Net assets have increased each year beginning with fiscal year 2003. This increase shows that the university continues to build upon its strong financial foundation. This financial health reflects the prudent utilization of financial resources, including careful cost controls, sensible management of its endowments and investments, and conservative utilization of debt.

Finally, during the past five years, the university had no ED program review or audits that required corrections or fines. The university has not been involved in any limitation, suspension, or termination (LST) of eligibility for federal Title IV programs.

Student loan default rate (3)

The most recent cohort default rate for the Federal Family Education Loan Program for fiscal year 2007 was issued in September 2009. The most recent three years' default rates are as follows:

- FY 2007 2.5%
- FY 2008 2.7%
- FY 2009 3.2%

No corrective plan is required for the university as the default rates are well below the thresholds for corrective action. The official notification letter from ED, dated September 2009, is provided in the resource room.

Campus crime information and related disclosure of consumer information (4)

Campus safety is highlighted on the university's Web site very prominently. Consumer information requested by Title IV is published annually in electronic and paper format, distributed widely to the student body and employees, and made available to prospective students and employees. The university has no findings with regard to consumer disclosures.

Satisfactory academic progress and attendance policies (5)

The university has established satisfactory academic progress (SAP) policies necessary for continued consideration for participation in student financial aid programs administered by the university's Office of Student Financial Aid (OSFA) in accordance with federal regulations. Calculation of SAP is determined by cumulative grade point average (2.0 minimum for undergraduates and professional students, 3.0 minimum for graduate students); completion of 67 percent of all credit hours attempted; and completion of the enrolled program in no more than 150 percent of the average length of the program enrolled. Detailed description of SAP is provided in the resource room.

The university does not require faculty to take classroom attendance. However, to meet the Title IV attendance measure, the OSFA contacts the faculty members teaching students receiving Title IV aid who are listed as receiving failing grades. Faculty are asked to report the student's last date of attendance using the best available evidence. Attendance records, assessment result data, and writing assignment responses by the student are all utilized, for example.

Contractual relationships (6)

The University of Wyoming does not have any relationships as defined by this requirement.

INSTITUTIONAL DISCLOSURES AND ADVERTISING AND RECRUITMENT MATERIALS

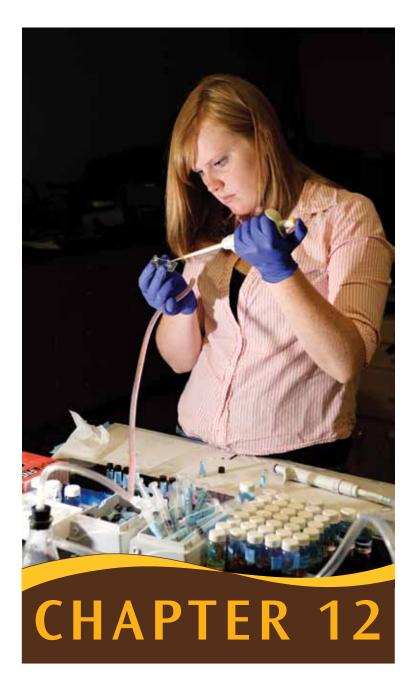
The university bulletin and recruitment materials identify the university as Accredited by the Higher Learning Commission, a member of the North Central Association. Over the past year, the Commission's mark of affiliation has been incorporated into the University of Wyoming Web site, materials for prospective students, and other appropriate promotional materials.

RELATIONSHIP WITH OTHER ACCREDITING AGENCIES AND STATE REGULATORY BOARDS

The university holds no accreditations with institutional accrediting agencies other than the Higher Learning Commission. A list of all programs holding disciplinary or professional accreditation, the schedule for reaccreditation, and the accrediting body are provided in the resource room.

PUBLIC NOTIFICATION OF AN EVALUATION VISIT AND THIRD PARTY COMMENT

A broad range of university constituencies were informed of the comprehensive visit for reaccreditation by the Higher Learning Commission. The constituencies were identified by the President's Executive Council, and included state policymakers, the Board of Trustees, students, parents, alumni, college deans and advisory boards, the University of Wyoming Foundation Board, and others. Newspapers with state and regional circulation were employed to communicate with the various boards and constituent groups, as well as with the public at large.



Conclusion and Request for Continued Accreditation



"Our thematic self-study was valuable for the university in a number of ways. We were able to analyze and appreciate the breadth and depth of our efforts to enhance the university's learning environments. The number of faculty, staff, and students that have participated in these efforts was impressive. We identified specific areas and efforts that need continual attention and have linked them to our ongoing university planning."

> —Rollin Abernethy, Associate Provost, Academic Affairs

Conclusion and Request for Continued Accreditation

The University of Wyoming formally requests continued accreditation from the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools. The university has fulfilled its obligations of engagement in self-study as required by the HLC. The self-study document and supporting documentation is available at www.uwyo.edu/accreditation and in the resource room. This collection of evidence demonstrates that we have met the five criteria and 21 core components and have fulfilled other HLC requirements for accreditation.

REFLECTIONS ON THE SELF-STUDY PROCESS (Core Component 4a)

The University of Wyoming decided to engage in a unique, thematic self-study. The theme of the self-study, "Enriching the University of Wyoming Learning Experience," was derived in part from the university's leadership position within the state. As the state's flagship institution and the only graduate degree granting institution in Wyoming, the university is well positioned to cultivate an educated citizenry in terms of breadth and depth of their learning experiences. (4a) In addition, the university saw an opportunity for the self-study process to support its well established university-wide planning processes. The university chose to start its self-study by focusing on access, excellence, and leadership, three organizing principles that were an integral part of developing the university's strategic planning document for the next five years, *The Creation of the Future: University Plan 3, 2009-2014.*

As described more fully in Chapter 1, the self-study process was led by the HLC Self-study Steering Committee, which charged nine subcommittees with the tasks of conducting most of the research, writing reports, and drawing conclusions based on the three themes. During their deliberations, committee chairs reported that their central challenge was establishing distinct definitions of access, excellence, and leadership. A pivotal point in the process came with production of the first draft of the self-study report, which contained significant overlap of content from the nine subcommittees. After much deliberation, the HLC Self-study Steering Committee decided to rework the structure of the report to ensure a cohesive thematic self-study that reflects how the university has addressed the five criteria and accompanying core components. The final report is a roadmap for the university to make improvements in critical areas tied to widely supported university priorities and planning processes.

The HLC Self-study Steering Committee is pleased with its decision to conduct a thematic self-study. The subcommittee participants engaged in the self-study in the context of both the theme of enriching the learning process, as well as the larger university planning process. In addition, the theme allowed the institution to focus on critical issues in relation to the HLC criteria and core components rather than the criteria and core components driving the self-study. In the end, such an approach proved meaningful to the institution.

INSTITUTIONAL OBSERVATIONS BASED ON THE SELF-STUDY (Core Components 1c, 1d, 2d, 5b, 5c)

Throughout the self-study, the HLC Self-study Steering Committee identified a set of key findings at the end of each chapter. These findings identify both strengths and weaknesses in the context of undergraduate, graduate, and professional and lifelong learning. In many cases, the key findings also identify specific steps for improvement, and most of the findings support action items identified in UP 3. (2d) This section provides a short introspective analysis of several broad institutional strengths and weaknesses identified as part of the self-study process.

Without question, the university-wide planning processes and mission provide a solid direction that continues to guide the institution into the future. (1d) Although they are just a decade old, these planning processes are well established and widespread throughout the university community, and they carry weight among decision-makers. The establishment of UP 3 ensures that the university has a strategic direction for the next five years. In addition, the maturity of these planning processes over time has allowed the institution the ability to approach other long-term projects such as the self-study and the response to budget reductions in the context of planning. As a result, the university finds itself both reflective of the past and focused on the future. (1d, 2d)

The University of Wyoming has a unique role in the State of Wyoming as it is the only baccalaureate, master's, and doctoral degree-granting institution. This role frames the way the administration, faculty, and staff view the mission of the institution, the way they approach their jobs, and the ways in which they serve constituents statewide. (1c) The

responsive nature of the university in meeting its constituents' needs has generated good will within the state, resulting in healthy budgets in terms of both operating and capital expenses. (5b, 5c) The university must also be careful to balance these needs with its institutional priorities and to work within the confines of its budget. In summary, the university takes its leadership role very seriously and accepts the accompanying responsibilities and obligations that come along with this role. In particular, the university recognizes the following responsibilities as especially important over the next several years.

Promoting access to higher education (Core Component 5a)

The University of Wyoming and the State of Wyoming have been active and successful at addressing preparation and recruitment issues statewide in hopes of both increasing the student body and enhancing diversity at the university. However, more work remains in this important endeavor. It is important for all partners in education to swiftly implement the recommendations from the advisory committee assembled to review the Hathaway Success Curriculum, as well the program's scholarship awards. (5a)

Funding the college experience

(Core Component 2b)

The university takes pride in its reputation as one of America's "best college buys," but it is concerned that affordability is impacting perceptions about the quality of its programs. Tuition policy is central to any discussions around this issue. Specifically, the university should examine whether increases in undergraduate tuition actually enhance the institution's image as well as provide a more diverse funding profile during tough economic times. (2b)

Reinforcing areas of distinction

(Core Component 4b)

Over the last 10 years, the university has grown in its teaching and research endeavors in six areas of distinction: 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; and professions critical to the state and region. These areas have become the backbone of the institution's operations. It is vital to carry forward the successful research and scholarly activities in these areas in which the university has excelled. (4b) To do this, departments will need to continue to align with these areas to the greatest extent possible and implement curricular offerings that are focused on excellence. It should also continue to hire talented faculty and attract quality graduate students, knowing that these areas of distinction promote effective recruiting and hiring into scholarly communities, instead of trying to attract talented scholars to fill intellectually isolated pigeonholes in a vain pursuit of greater breadth.

Reinforcing interdisciplinary programs (Core Components 2b, 4b)

To tie these scholarly communities together, the institution offers many interdisciplinary programs for an organization of its size. These programs allow more choice for students, and they allow the university to increase its offerings within budget constraints and economic limitations. (2b) In addition, the nature of these programs allows for increased collaboration among existing faculty. (4b) While interdisciplinary programs have several advantages, the university is still trying to determine best practices for their administration. Determining best practices will help to mitigate some of the challenges associated with offering such programs, including issues of administrative oversight, budgets, and the assurance of specialization for graduate students.

Promoting a learning-centered organization

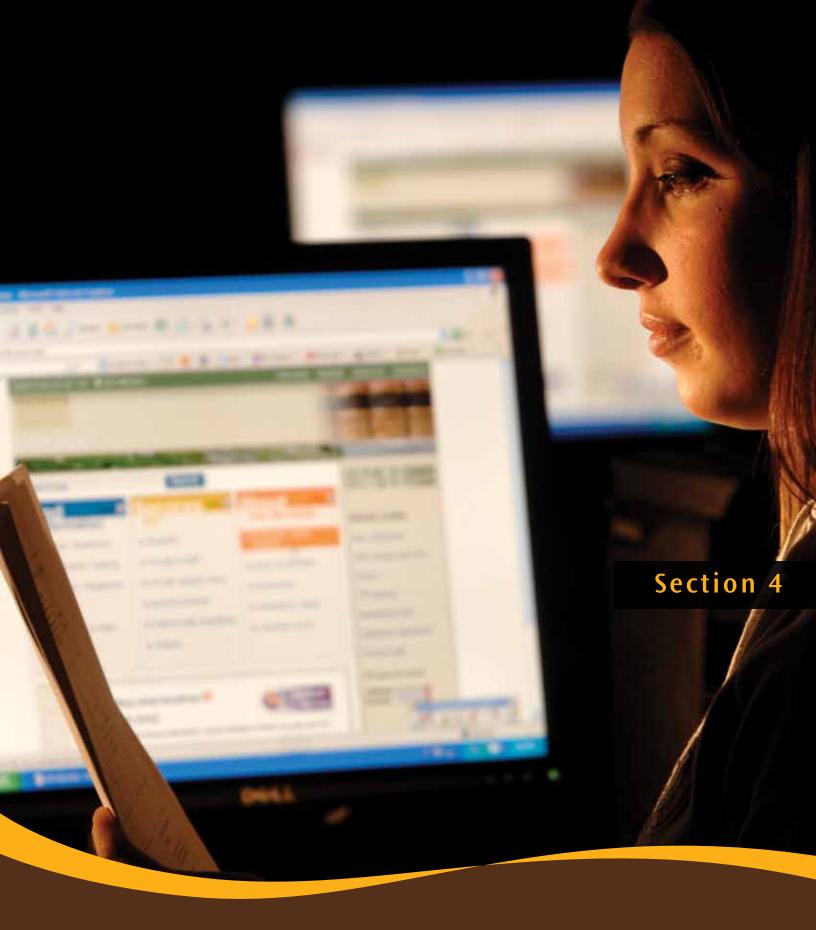
(Core Components 3c, 3d)

While learning has always been paramount at the University of Wyoming, the institution has made major strides over the last decade in becoming a truly learning-focused organization. (3c, 3d) The university attributes this evolution in part to the development and implementation of its assessment of student learning processes, especially at the program level, and in part to an increased emphasis to connect research to credit bearing instruction. The university has worked to build a learning-centered culture where faculty ask critical questions about learning and engage in the assessment of that learning because it is important and meaningful. Evolution over the past decade of LeaRN and transitions summit programs are prime examples of using outcomes information for continuous program improvement. (3c) The institution sees the value in assessment for continual improvement and remains committed at all levels to moving these processes forward. Formal conversations about learning are occurring broadly throughout the institution. The task now is to capture more of these conversations in the context of established assessment processes, and to cultivate departments and programs still reluctant to join in these important efforts.

SUMMARY

While the self-study was an all encompassing project for the University of Wyoming for the last two years, we have truly benefitted from the process and this introspective. The process itself compelled administrators, faculty, and staff to reflect on the last decade with an eye on using these reflections to strengthen the university's future direction. In addition, it expanded the important university-wide dialogue about critical issues and allowed the university to refine existing documentation processes.

The university's leaders are optimistic about the institution's future and the future of the State of Wyoming. While the last few years have been fraught with many national economic and political challenges, the University of Wyoming has emerged as a strong leader capable of serving as a champion for Wyoming and its citizenry through adherence to its long-term vision and plans. We are committed to following through on the key findings of the self-study. We also look forward to the comments and suggestions of the HLC site visit team. With the institution's commitment to quality, the university recognizes the importance of regional accreditation and takes very seriously its obligation to meet the policies of the Higher Learning Commission.



Change Request



"I'm an adventurous media consumer, but many of my students feel challenged when they simply participate openly in threaded discussions. Future students will undoubtedly embrace a wider array of tools in their learning and their daily lives. I'll be there, a step ahead, ready to stretch them as I did those who came before them."

—Debra Beck, Area Coordinator of Public Relations, College of Education, co-founder of the University of Wyoming's Snowy Range Nonprofit Institute, and an online instructor

The University of Wyoming Requests Change in Affiliation Status with the Commission

OFFICIAL CHANGE REQUEST

(Core Components 1a, 1b, 5b, 5c)

As noted frequently throughout the self-study, outreach and service to the people of Wyoming is a critical part of the university mission. The university has delivered degree programs away from the main campus for decades. (1a) Given the depth of its experience in creating, managing, and assessing distance-delivered courses and programs, the university is requesting a change in affiliation status with the Commission in order to have greater flexibility as we respond to the learning needs of site-bound students. (5c) The ability to respond to learners' needs is especially important since the University of Wyoming is the only public baccalaureate and graduate degree-granting institution in Wyoming.

Currently the University of Wyoming has a Stipulation on Affiliation Status regarding approval of distance degree programs:

Prior Commission approval required for distance education programs other than the BS in Business Administration, BS in Family and Consumer Sciences (Professional Child Development Option), the RN/BSN completion program, MS in Education (Specialization in Instructional Technology), MS in Nursing (Nurse Educator option), and Executive MBA.

The University of Wyoming requests a change in this stipulation, specifically a *change in educational offerings* as specified in **policy 3.2(d)2**, such that no Commission approval is required for distance education program offerings.

An altered affiliation status would not change the university's mission; instead, it would allow greater flexibility in realizing that mission. The University of Wyoming, like many institutions, has a rapidly increasing enrollment in its distance programs. Many of the students in these distance programs are older adults, single parents, and individuals with jobs and families, and a majority of the students in distance programs are women. These students reflect the changing demographics of university students nationwide, but they also reflect challenges of the sparsely populated mountain west, where long distances can leave citizens isolated from opportunities for university-level learning. (1b)

The Outreach School is charged with the delivery of degree programs to site-bound students. The Outreach School pursues partnerships with the university's academic units and the state's community colleges, among others, in order to facilitate the delivery of programs and to foster the sustainability of those already delivered. (5b) The granting of this change in affiliation status will permit the Outreach School and its partners more flexibility in their response to the learning needs of the university's constituents across Wyoming and beyond. In addition to fostering innovation, this change in affiliation status may allow for increased outreach enrollment and thus more access to higher education for learners.

CONTEXT AND REASONS FOR THE CHANGE REQUEST (Core Components 2d, 5a, 5b)

There are a number of reasons why the University of Wyoming is proposing this change, all based on the principle that distance learning is essential to the statewide mission of the university. The university takes seriously its responsibility to serve the entire state. The small but dispersed Wyoming population means that it is a fiscally sound strategy to support instructional sites to provide access to baccalaureate and graduate degree programs to learners statewide. (5a) The university has also integrated its mission of service to the state into its academic planning processes. (2d) It has good partnerships with the state's community colleges, which foster distance delivery in a number of ways. (5b) The university has a long history of distance delivery and has experience with a variety of distance technologies. It structures the relationship between its outreach delivery units and the academic departments and colleges in a manner that ensures program rigor and quality. Finally, the university has made great strides in its distance delivery of student support services.

Academic planning

(Core Component 2d)

The university's commitment to distance delivery of degree programs is reflected in its academic planning. Academic Plan II contained a number of action items related to distance delivery of courses, including permanent support for faculty outreach positions, the move to a single online course platform, a commitment to the sharing of courses and degrees with outside groups such as WICHE, and a heightened commitment to the exploration and assessment of effective pedagogies for distance learning. The commitment in AP II reflected a continuation of the university's first academic plan's focus on outreach, where the integration of the university's core faculty into outreach instruction was a central planning theme. (2d)

Educational outreach and distance delivery continue to be an area of focus in the current plan, UP 3. Action items involve the development of a statewide curricular outreach project, to be planned in consultation with the state's community colleges, a focus on the space needs for the Outreach School as it serves the state, and the technological infrastructure necessary for the implementation of best practices in distance delivery. (2d)

Partnerships with Wyoming community colleges

(Core Components 5a, 5b, 5c)

In providing distance-delivered degree opportunities, the university partners effectively with Wyoming's seven community colleges to offer academic programs to Wyoming learners, with the community colleges providing the first two years of degree programs and the university providing upper division and graduate courses for students to meet baccalaureate and graduate requirements. (5a, 5b) The Outreach School has space on all of the community college campuses for audio and video conference rooms and office space for Outreach personnel. In addition, the Outreach School has classroom space in smaller community college satellite sites around the state. Academic coordinators across the state help to recruit and advise students, in addition to informing them of student support services that are available at a distance from the university. Under the terms of the cooperative agreements that the university has with the community colleges, university students can access support services on some of the community college campuses. These good relations have proven vital in helping the Outreach School serve student needs. In addition, the university also conducts a statewide needs assessment periodically to determine student needs and how to best meet those needs. (5c)

University experience with distance delivery and maintenance of its quality (Core Components 2c, 3a, 3d)

The University of Wyoming has been involved in distance learning since it began offering correspondence courses early in the 20th century. Distance degree programs are delivered by the university through a variety of media, which have evolved with technological change, but which also aim to serve even the most remote learners. Some delivery methods are synchronous, such as teleconferencing and video conferencing. Other delivery methods are asynchronous, including correspondence, online, streaming audio and video, podcasting, and Web conferencing tools. Many classes are now offered in a hybrid format, with a variety of delivery methods utilized in order to provide the best learning environments for students.

The university is structured to ensure the integrity and quality of its educational programs offered at a distance. (3d) The foundation of this structure is the principle that the academic units that teach the outreach curriculum are precisely those that teach the Laramiebased curriculum. The Outreach School has been given responsibility for delivering several degree programs statewide and has a commitment to offering programs rather than unconnected courses. The academic aspects of distance programs are controlled by academic departments and colleges. The curricula of distance degree programs are the same as university programs offered on the main campus and are determined by colleges and departments. The faculty teaching in distance programs are either regular university academic personnel or are approved by the appropriate academic departments to teach outreach courses. Assessment of distance delivered courses and programs occurs within the academic department assessment processes to ensure distance efforts are meeting the same learning outcomes and goals as on-campus courses and programs. (2c, 3a) The Outreach School conducts student evaluations of distance technology and course delivery effectiveness each semester for every distance-delivered course. The Outreach School also administers a biannual evaluation of the quality of service provided by Outreach School regional academic centers. That evaluation includes respondents from the community colleges. The Outreach School dean also serves as an associate provost for academic affairs. This ensures that outreach programs are well represented in university decision-making. The dean is also a member of the university Deans Council and Executive Council.

Student support services at a distance

(Core Components 2c, 4d, 5a, 5b)

Library support for distance degree programs is long-standing and effective. Coe Library has made a strong institutional commitment to serve learners at a distance, including the creation of library positions charged with outreach service development and support. (4d) Student support services for distance students have improved significantly since the last accreditation visit. This has been and continues to be an area of institutional focus, as evidenced by UP 3 Action Item 11. Also, as previously described, many outreach students can access some student support services offered at the state's community colleges, under the terms of the cooperative agreements the university has with those institutions. (5b)

With the implementation of the Banner student information system database, processes for enrollment services for both on-campus and outreach students were carefully reviewed. The services include those associated with the offices of the registrar, student financial aid, admissions, and the financial services business office. In addition, a comprehensive review of support services for outreach students was conducted over the last few years by the Outreach School and the Division of Student Affairs. (2c) Support has been expanded to deliver relevant Laramie campus support services to outreach students. These include the Writing Center services, supplemental instruction, academic and career advising, counseling, leadership and civic engagement opportunities, and admission and transfer of credit processes. (5a)

Approvals for the change request

The University of Wyoming has long experience with the effective offering of degree programs, has a statewide mission, and desires to continue to offer degree programs to meet student demand. In short, the university has the experience, the structures, and the

processes in place to responsibly determine what degree programs should be offered at a distance. For those reasons, this change request has been approved by the provost and vice president for academic affairs, the president, and the Board of Trustees. No approvals external to the university beyond the HLC are necessary for this change request.

POSSIBLE IMPACT ON AREAS IDENTIFIED AS CHALLENGES IN THE LAST COMPREHENSIVE VISIT

Chapter 3 addresses the areas of concern noted by the Higher Learning Commission in its 2000 comprehensive review and visit. The following areas might be impacted by this request:

Enrollment decline and recruiting (Core Component 5c)

The largest growth in enrollment at the University of Wyoming has been in the distance programs delivered through the Outreach School. This enrollment is tapping a largely nontraditional student group, providing these learners access to more baccalaureate and graduate level learning opportunities. (5c)

Institutional standards for purchase and support of software and hardware

All software programs utilized in distance education (including the online platform) are now reviewed and agreed to by the University of Wyoming Technology Planning Council.

Consistent implementation of assessment (Core Components 2c, 3a)

Distance programs utilize the same assessment instruments as those utilized on the main campus. Academic colleges and departments determine the assessment tools and those tools are administered to students in distance programs. In addition, the Outreach School conducts regular assessment focused on the quality of the distance learning environment. (2c, 3a)

IMPLEMENTATION, SUSTAINABILITY, AND EVALUATION OF PROPOSED CHANGE IN STATUS

(Core Components 2b, 2c, 3a, 3b)

This change is not a change in University of Wyoming priorities or processes. Rather, the university will continue to utilize its academic colleges and departments, in partnership with the Outreach School, university administrators, and colleagues at the state's community colleges, to determine the need for distance programs. The Outreach School will continue to research, develop, and implement new distance learning delivery technologies that are pedagogically appropriate. The proposed change will merely allow the Outreach School to pursue innovative programs with greater flexibility and responsiveness.

The university, the Outreach School, and the academic colleges will continue to discuss and determine the most appropriate funding and compensation models for distance education. The sustainability of programs is a central consideration for administrators, and proposed models for revenue sharing with academic units incorporate plans for ensuring sufficient revenue flows to maintain programs with viable enrollments. (2b) Also, the university has implemented processes for recognizing outreach teaching, advising, and research in the tenure and promotion process. This helps to ensure that the university's core faculty are committed to teaching at a distance, an issue identified in the university's first academic plan as crucial to the viability and quality of distance-delivered programs. (3b)

The University of Wyoming evaluates its distance education programs in a number of ways, each of which targets a different aspect of distance program delivery and support. Learning assessment occurs through assessment plans developed by academic departments with the support of the University Assessment Coordinators Committee. (2c, 3a) Continuous evaluation of program quality is also facilitated through articulation with Wyoming community colleges and partnerships with academic colleges and departments. Changes in departmental composition might positively or negatively affect program delivery. Discussions with departments and colleges have led to the cessation of distance delivery of degree programs or halted the proposed development of a program. Community college colleagues are effective advocates for students during the transfer process and communicate such issues as poor advising and other practical issues in the delivery of a program.

The university has arranged its distance delivery of programs as a series of partnerships internal and external to the university. While this often makes the development of new programs for delivery a cumbersome process, it also has proven crucial to the ongoing and effective evaluation of program quality.

CONCLUSION

The University of Wyoming believes that the self-study, this official change request, and forthcoming supporting documentation provided to the evaluation team offer sufficient evidence of its capabilities to deliver effective distance education programs. Because the systems and processes to do so are mature, the university is officially requesting a stipulation change in affiliation status. Such a change will allow the university to become more flexible in meeting the needs of the citizens of the State of Wyoming. The granting of this change allowing the university to move forward with new distance education programs without prior commission approval will not impact the quality of these programs in any way. The university takes seriously the policies of the commission and the standards for accreditation, and will continue to adhere to them in the future.



INDEX

Criteria and Core Component Index

CRITERION ONE: MISSION AND INTEGRITY

The organization operates with integrity to ensure the fulfillment of its mission through structures and processes that involve the board, administration, faculty, staff, and students.

Core Components	Page Numbers
1a: The organization's mission documents are clear and articulate publicly the organization's commitments.	1, 11, 36, 43, 89, 100, 101, 103, 115, 133, 134, 185
1b: In its mission documents, the organization recognizes the diversity of its learners, other constituencies, and the greater society it serves.	3, 21, 22, 23, 30, 44, 57, 69, 73, 93, 94, 113, 114, 118, 134, 136, 137, 139, 141, 186
1c: Understanding of and support for the mission pervade the organization.	11, 12, 13, 19, 134, 135, 178
1d: The organization's governance and administrative structures promote effective leadership and support collaborative processes that enable the organization to fulfill its mission.	3, 5, 17, 20, 34, 35, 36, 44, 58, 105, 119, 127, 155, 156, 158, 161, 178
1e: The organization upholds and protects its integrity.	3, 5, 46, 62, 155, 156, 158, 161

CRITERION TWO: PREPARING FOR THE FUTURE

The organization's allocation of resources and its processes for evaluation and planning demonstrate its capacity to fulfill its mission, improve the quality of its education, and respond to future challenges and opportunities.

Core Components	Page Numbers
2a: The organization realistically prepares for a future shaped by multiple societal and economic trends.	11, 13, 14, 15, 16, 17, 21, 23, 24, 30, 31, 33, 35, 47, 55, 61, 62, 64, 71,73, 75, 83, 84, 91, 92, 113, 114, 117, 119, 123, 126, 155
2b: The organization's resource base supports its educational programs and its plans for maintaining and strengthening their quality in the future.	12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 30, 31, 33, 34, 35, 43, 44, 45, 47, 49, 57, 61, 62, 63, 64, 77, 81, 82, 83, 91, 92, 95, 104, 112, 116, 117, 118, 119, 121, 134, 139, 154, 155, 156, 157, 158, 161, 162, 179, 180, 190
2c: The organization's ongoing evaluation and assessment processes provide reliable evidence of institutional effectiveness that clearly informs strategies for continuous improvement.	13, 31, 36, 48, 58, 59, 74, 77, 78, 82, 83, 90, 91, 92, 93, 97, 99, 100, 101, 103, 104, 105, 111, 113, 118, 127, 128, 129, 188, 189, 190
2d: All levels of planning align with the organization's mission, thereby enhancing its capacity to fulfill that mission.	5, 11, 12, 19, 25, 30, 35, 74, 120, 156, 178, 186, 187

CRITERION THREE: STUDENT LEARNING AND EFFECTIVE TEACHING

The organization provides evidence of student learning and teaching effectiveness that demonstrates it is fulfilling its educational mission.

Core Components	Page Numbers
3a: The organization's goals for student learning outcomes are clearly stated for each educational program and made effective assessment possible.	20, 34, 35, 36, 100, 102, 103, 127, 129, 188, 189, 190
3b: The organization values and supports effective teaching.	36, 43, 44, 45, 46, 49, 51, 78, 79, 84, 90, 103, 126, 190
3c: The organization creates effective learning environments.	16, 24, 34, 48, 58, 69, 72, 74, 75, 76, 78, 79, 80, 81, 82, 83, 84, 118, 121, 122, 126, 180
3d: The organization's learning resources support student learning and effective teaching.	16, 20, 36, 51, 73, 74, 75, 78, 79, 80, 85, 105, 127, 162, 180, 187

CRITERION FOUR: ACQUISITION, DISCOVERY, AND APPLICATION OF KNOWLEDGE

The organization promotes a life of learning for its faculty, administration, staff, and students by fostering and supporting inquiry, creativity, practice, and social responsibility in ways consistent with its mission.

Core Components	Page Numbers
4a: The organization demonstrates, through the actions of its board, administrators, students, faculty, and staff, that it values a life of learning.	4, 5, 46, 50, 56, 57, 59, 60, 75, 89, 123, 125, 133, 134, 142, 177
4b: The organization demonstrates that acquisition of a breadth of knowledge and skills and the exercise of intellectual inquiry are integral to its educational programs.	43, 49, 50, 51, 59, 77, 94, 95, 96, 97, 99, 120, 123, 124, 125, 179, 180
4c: The organization assesses the usefulness of its curricula to students who will live and work in a global, diverse, and technological society.	51, 78, 89, 90, 92, 93, 94, 95, 100, 102, 111, 121, 122, 123
4d: The organization provides support to ensure that faculty, students, and staff acquire, discover, and apply knowledge responsibly.	49, 50, 91, 94, 101, 103, 111, 120, 124, 188

CRITERION FIVE: ENGAGEMENT AND SERVICE

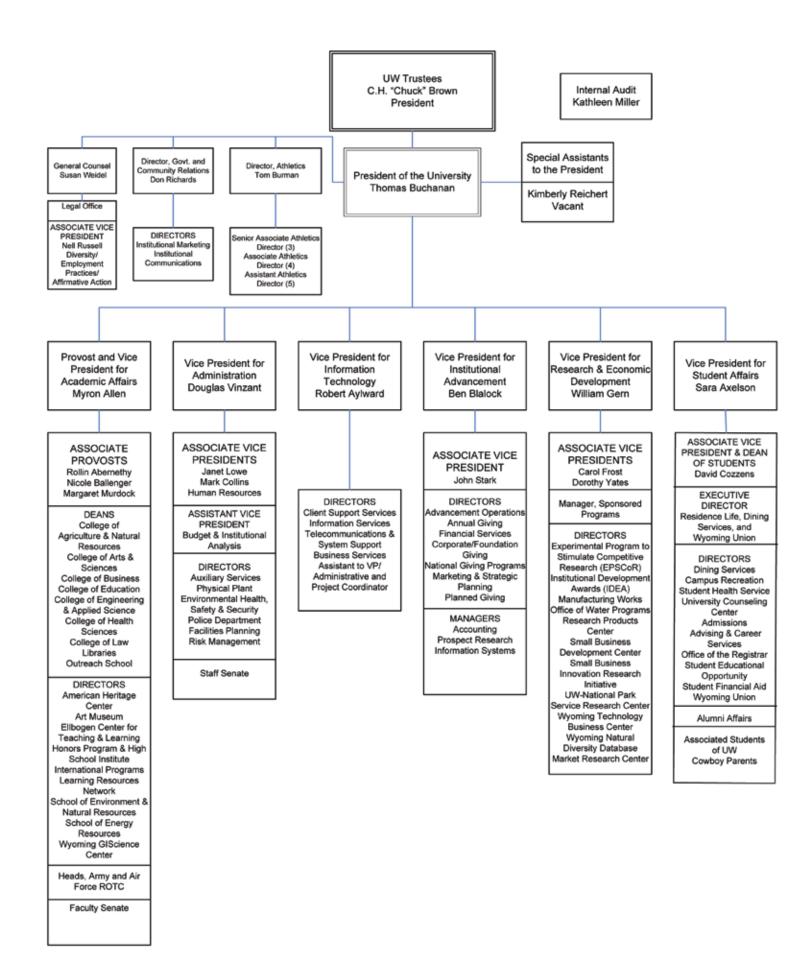
As called for by its mission, the organization identifies its constituencies and serves them in ways both value.

Core Components	Page Numbers
5a: The organization learns from the constituencies its serves and analyzes its capacity to serve their needs and expectations.	2, 48, 55, 56, 57, 60, 70, 76, 77, 83, 84, 99, 113, 115, 117, 120, 122, 123, 127, 135, 136, 138, 140, 144, 179, 186, 187, 188
5b: The organization has the capacity and the commitment to engage with its identified constituencies and communities.	16, 23, 32, 56, 59, 95, 97, 125, 127, 133, 134, 135, 137, 138, 139, 140, 141, 143, 144, 179, 185, 186, 187, 188
5c: The organization demonstrates its responsiveness to those constituencies that depend on it for service.	3, 14, 17, 18, 22, 24, 25, 31, 56, 91, 93, 95, 98, 135, 136, 138, 139, 140, 141, 142, 143, 144, 179, 185, 187, 189
5d: Internal and external constituencies value the services the organization provides.	3, 18, 98, 121, 135, 137, 138, 140, 141



A P P E N D I C E S

APPENDIX A: UNIVERSITY OF WYOMING ORGANIZATIONAL CHART



F-STUDY SUBCOMMITTEE MEMBERSHIP AND ORGANIZATION	AREAS OF FOCUS	GRADUATE EDUCATION & RESEARCH PROFESSIONAL & LIFELONG LEARNING		Co-chair: Penne Ainsworth, College of Business Co-chair: Wendy Bredehoft, University Art Museum	Membership: Membership:	Judith Antell, American Indian Studies Megan Hanneman, Division of Administration	Jesse Ballard, Information Technology Richard Johnson, Auxiliary Services	 Pilar Flores, Student Educational Opportunity Susan Conley, Wynne University Libraries			Co-chair: Andy Hansen College of Engineering and Applied Co-chair: Dorothy Yates, Office of Research & Economic Science Development Development	Membership: Membership:	David Aadland, Economics & Finance Rhonda Shipp, Cooperative Extension Service		Robert Mayes, Science & Math Teaching Center Jim Scott, Physical Plant	Don Roth, Graduate School (former)	Mona Schatz, Social Work	Sara Williams, University Libraries				Co-chair: Jane Nelson, Ellbogen Center for Co-chair: Mark Collins, Division of Administration Teaching and Learning	Membership: Membership:	Stacy Baker, Management & Marketing John Burman, College of Law	Jay Puckett, Civil & Architectural Engineering Deb Fleming, Wyoming Institute for Disabilities	Rick Ewig, American Heritage Center Nell Russell, Governmental, Community & Legal Affairs	Susie Young, Educational Leadership Mary Scott, Information Technology	Katrina Zook, Music Alan Tanner, Enhanced Oil Recovery Institute	Glen Whipple, Cooperative Extension Service	
APPENDIX B: HLC SELF-STU		UNDERGRADUATE EDUCATION & RESEARCH GRA	ACCESS	Co-chair: Beth McCuskey, Residence Life & Dining Services, Co-c Wyoming Union	Membership: Men	Noah Buckley, Admissions	Dianne Davis, UW Casper College Center	 Audrey Kleinsasser, Wyoming School/University Partnership Pila Tammy Scott. Office of Institutional Analysis	John Spitler, Mathematics Matthew Whisenant Athletics	EXCELLENCE	Co-chair: Audrey Shalinsky, College of Arts & Sciences Co-c Sciences Sciences	Membership: Men	Tammy Aagard, Registrar	onal Programs		Technology	emistry	April Heaney, LeaRN Dobert Scott Sovilla Outword, School	Ismee Wannherer College of Anriculture and Natural	Jainto Wangoug, Conceo of Astrantatic and Natural Resources	LEADERSHIP	Co-chair: Maggie Farrell, University Libraries Co-c	Membership: Men	Dolores Cardona, Multicultural Affairs	Jo Chytka, Advising & Career Services	Rebecca Hilliker, Theatre & Dance	Brent Pickett, UW Casper College Center Susi	Business Center	Debbie Shoefelt, School of Nursing	

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/.

Comments are welcome at

Office of Academic Affairs Dept. 3302, University of Wyoming 1000 East University Avenue Laramie, WY 82071 up3@uwyo.edu

Myron Allen	Provost, Professor of Mathematics
Rollin Abernethy	Associate Provost, Professor of Plant Science
Nicole Ballenger	Associate Provost, Professor of Agricultural and Applied Economics
Maggi Murdock	Associate Provost, Professor of Political Science

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:

- II. A **vision** for the University of Wyoming.
- 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.

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 <u>http://www.uwyo.edu/AcadAffairs/Univ_plan/</u>. 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 offcampus 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:
 - 1. 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.
 - 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 entrylevel 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.

- Action Item 20 Enhancing UW's learning environment. Several university- and collegelevel initiatives have the potential to enhance students' learning experiences in UW's baccalaureate programs:
 - 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.

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,⁴ 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 <u>http://www.uwyo.edu/studentaffsupport/docs/SSP_2005-10_10-28.pdf</u>.

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:

- 1. Maximize the potential for UW researchers, from time to time, to combine separately administered computing platforms to form **temporary higher-performance clusters**.
- 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:

- 1. **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.

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:

- 1. **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:
 - 1. **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 creditbearing 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:
 - 1. 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.
 - 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 UWcentered 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

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

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:

- 1. 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.
- 2. **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 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, Wyoming
BSL3 CES	Biosafety level 3, a standard of biocontainment required for clinical analysis and research on organisms that can cause serious or lethal disease in humans.
	Cooperative Extension Service, a program sponsored by the U.S. Department of Agriculture to deliver non-credit bearing outreach throughout the state
COACHE DNP	Coalition on Academic Careers in Higher Education, a research project centered at Harvard University to examine pressures facing early-career faculty members 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
GA	Historically black colleges and universities Graduate assistant, a position that allows some graduate students in certain programs
GIS	to earn a stipend while they work and study Geographic information science
IGERT INBRE IPO	Integrative Graduate Education and Research Traineeship, a National Science 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 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



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