

## I. INTRODUCTION

This document is designed to serve as the Academic Plan for the University of Wyoming for the years 1999-2004. Its purpose is to guide decisions concerning the number, scope, and focus of our academic programs, the activities of our academic personnel and staff, and the allocation of our resources and institutional energy.

The University Academic Plan must be considered in concert with the college and department plans that have also been developed through the academic planning process. These plans contain many excellent ideas for improving the quality, effectiveness, and efficiency of our teaching, research, and service. At the discretion of the college deans and the department heads, these ideas should be pursued. Where there appears to be a conflict between the University Academic Plan and the plans of individual colleges or departments, the University Plan takes precedence.

The University Academic Plan does not constitute a complete strategic plan. Rather, focusing as it does upon our academic concerns, it represents the hub around which additional plans will be developed next year to direct the work of our academic, administrative, and student support units. Of special importance in this set of units are the libraries and Information Technology--critical scholarly resources for which planning naturally hinges on decisions made about UW's academic mission. Also slated for next year are plans governing the allocation, renovation, and maintenance of our physical plant and the intelligent use of University lands and facilities. Finally, the University Academic Plan serves as a key self-study element in preparation for our North Central Association Colleges and Schools (NCA) reaccreditation visit in March 2000.

### THE PLANNING PROCESS

The academic planning process identifies a broad set of institutional goals and priorities to guide the development and support of our academic programs and the allocation of institutional resources. It represents an attempt to balance the aspirations, goals, and concerns contained within 59 program and department plans, seven college plans, and seven plans for associated academic administrative units on the one hand, and our collective institutional interests as one university on the other.

Our work began during Academic Year 1997-98, when the academic community collectively defined an academic planning process. Fueled by standard statistical data from the Office of Institutional Analysis, departments and programs drafted and redrafted unit plans during the fall semester of 1998. As department and program plans were nearing completion, academic colleges began to draft college-wide plans. Since then, colleges have redrafted plans to address issues raised by the Office of Academic Affairs during the college plan review period. The plan underwent several revisions in response to campus and public comment. The present document represents the University's Academic Plan as approved by the Board of Trustees at their meeting in July, 1999.

We have actively solicited comments and reactions from students, staff, academic professionals, faculty, administrators, alumni, and external constituents. More than 500 bound copies of the Draft Academic Plan were distributed. Additionally, a web site was established for department and program plans, college plans, administrative and associated academic unit plans, the President's comments, and Academic Affairs' responses to individual college plans. Designed to allow readers the opportunity to view, print, or engage in an electronic discussion group, this website has recorded more than nine thousand "hits" from across the nation. The website can still be accessed via the UW homepage at [www.uwyo.edu/](http://www.uwyo.edu/) or directly at [www.uwyo.edu/acadaffairs/plans](http://www.uwyo.edu/acadaffairs/plans). The existence and location of web-based materials was advertised through newspaper articles and paid newspaper advertisements in both campus and community papers. We also welcomed comments on any of the plans via the electronic discussion forums on the website, e-mail, or hard copy.

Based upon the Action Items contained within the plan, we are developing an implementation schedule. The implementation schedule will identify the priority and time frame for completion of each Action Item, as well as the responsible individual or office. Additionally, the implementation schedule will identify which items are associated with new costs, which stand to generate revenues, and which will produce savings. As details become clearer, more accurate costs and savings will be identified.

### **THE PLANNING CONTEXT**

No planning process can be successful without an understanding of the environment within which the plan will operate and at least an educated guess concerning future conditions that will affect the institution during the life of the plan. Ten topics describing significant internal and external factors that would influence the plan were included in the initial planning materials distributed to all academic units. These topics include the following:

1. UW's Unique Role
2. Understanding Scholarship
3. Funding Constraints
4. Changing Needs of Students
5. Enrollment and Access
6. Partnerships
7. Accountability, Rewards, and Academic Priorities
8. Attention to Broader Contexts
9. Economic Development
10. Commitment to Change

Each of the ten topics was described in a brief paragraph. While broad in scope, the combination of issues raised within the planning context served to define the "playing field" for academic programs, departments, and colleges as they developed their plans.

The Academic Plan addresses those challenges and issues in six broad areas. The first area, labeled “Planning Principles and Assumptions,” describes a core set of constraining principles that we used in developing the plan. The next four areas parallel four broad categories that have guided much campus discussion and debate. They include: “Ensuring Access and Opportunity,” “Rethinking and Revising the Curriculum,” “Focusing for Distinction,” and “Providing Leadership for Wyoming’s Future.” In each of these four areas, key issues and challenges are defined, and **Action Items** that should be undertaken to address these challenges are delineated. The sixth and final category, “Making It Happen,” describes budgetary, workforce, and resource management issues associated with plan implementation.

With this document, UW is embarking on a new course in which academic planning will enable us to adjust to changes in our constituents and their needs. This new course allows for more input from faculty, students, staff, and citizens than any other recent decision-making efforts at UW. Still, we recognize that there is even greater potential for effective involvement by people who hold stakes in the University’s future. UniReg 702 states that principle succinctly:

The overall development of the University, the determination of academic goals and the establishment of academic priorities are fundamental responsibilities necessarily shared by trustees, administrative officials, faculty, and students.

We invite all concerned groups, including but not limited to Faculty Senate, the Academic Planning Committee, ASUW, and Staff Senate to propose additional mechanisms for enhancing shared governance, in what we hope will be a continuing culture of academic planning. These mechanisms should guarantee openness and facilitate responsive communication among all concerned parties. At the same time, our institutional health requires effective and timely decision-making by the President and the Trustees.

## II. PLANNING PRINCIPLES AND ASSUMPTIONS

1. Effective University planning and decision making requires collaboration among all of the University's stakeholders, including administrative officials, faculty, academic professionals, staff, students, and external constituents. Planning should be an open, iterative, and responsive process, grounded in mutual recognition of and shared respect for the statutory duties of the Trustees and the delegated responsibilities of the President, Vice President for Academic Affairs, and the Faculty Senate, in academic matters.

2. The University's first mission is to provide excellent baccalaureate instruction. We are committed to high-quality undergraduate teaching, not only in the classroom but also in the design and scope of our curricula and in the guidance that we provide to our students.

3. There is value in the University's research stature. The University's status as a Carnegie Research II institution is important to its ability to continue attracting high-caliber faculty, to the retention and professional development of its existing faculty, and to the long-term health of its academic programs. It is fundamental to successful graduate education. A strong research university is a necessary ingredient of any plan to ensure a sound state economy.

4. High-quality educational opportunities are of paramount importance. Among the aims of the academic plan are preservation of the University's commitment to excellent education, maintenance of a broad set of degree programs, increased opportunity for access to degree programs, and enhancement of the quality of these programs.

5. The work of the faculty needs judicious support. The main foci of faculty work should be teaching and research, with conscientious advising and service carefully crafted in supporting roles. The evaluation of faculty performance should emphasize these core responsibilities, respect the diversity of contributions from different individuals, and avoid reliance on superficial indices that lack appropriate depth and nuance. Faculty rewards and incentives should be clearly linked to the University's mission.

6. Our strength is in diversity. Across the institution there can be a highly varied range of job responsibilities with flexibility for people to shape their own careers. It is not in the University's best interest to impose uniform job descriptions on our faculty, academic professionals, or staff or to fail to recognize that an individual's interests and strengths can change over the course of a career.

7. All academic programs have benefits and costs. Some program costs do not appear in standard budget indices, but no programs are cost-free. Every program or activity to which faculty and staff dedicate their time represents a resource allocation

decision. There are two key questions in assessing existing and envisioned programs. First, do the attainable benefits warrant the costs, including opportunity costs? Second, are there surmountable obstacles that prevent programs from delivering benefits to their full potential?

8. A successful university is more than a collection of discrete programs. Interactions, intellectual ties, and curricular links among programs are as important as the programs themselves. Cultivating this environment requires allocation strategies that go beyond thinking of academic units as “profit centers” or gainsharing entities.

9. The University will make every effort to minimize dislocations of faculty, academic professionals, staff, and students. Wherever possible, reductions or program modifications should occur over a long enough period of time to allow accommodation through routine faculty and staff attrition, together perhaps with some professionally appropriate reassignments. Faculty, academic professionals and staff whose duties change as a result of the plan must receive adequate opportunity and institutional support for re-training. If degree programs are eliminated, new admissions to such programs will be halted, but all currently enrolled students will have the opportunity to complete their programs.

### III. ENSURING ACCESS AND OPPORTUNITY

As Wyoming's only four-year public university, UW has a broad responsibility to serve the people of the State of Wyoming. Our responsibility is grounded in the 1862 Morrill Act, which established the nation's land-grant universities. But ensuring access and opportunity should not be confused with providing unlimited programmatic breadth and depth. Our land-grant status commits UW to "promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." Those who wrote Wyoming's Constitution probably had similar inclinations when they stated that access to the University should be "as nearly free as possible." It is important that we reaffirm our institutional heritage and obligate ourselves to provide access to anyone ready for and interested in pursuing a university-level education. Beyond this commitment of access and opportunity, we must also provide a genuine opportunity for those enrolled to achieve their academic goals.

#### RECRUITMENT AND COST OF ATTENDANCE

Ensuring access to the University carries with it the responsibility to make prospective students aware of their opportunities. The University must significantly strengthen its recruitment efforts. We must recognize that failure to adequately invest in recruitment at both the undergraduate and graduate level has taken its toll upon UW's financial health. The State Legislature must also be made aware that many of the budget items affecting the University's ability to recruit effectively have been negatively influenced by failure to recognize the effects of inflation, including the costs of printing, postage, and media advertising.

With demographers predicting that Wyoming will lose 15-18 percent of its high school graduates over the next decade, the University needs to bolster its efforts to enroll site-bound adult students throughout the state (see the section on Outreach) and to strengthen its recruitment of students from other states. Crucial to our in-state recruitment efforts are the commendable efforts of many departments—both at UW and in the state's seven community colleges—to maintain active statewide articulation in higher education. Wyoming is fortunate to enjoy close cooperation among University and community-college faculty in many disciplines, and this cooperation has led both to a common course-numbering system and to a highly effective set of transfer arrangements. Continued improvements to these arrangements, the expansion of our articulation efforts, and closer work with counselors around the state are critical, not only to the maintenance of high-quality educational opportunities statewide, but also to our ability to keep attracting community-college graduates to the University.

Also of interest are states like Colorado, which is expected to have an overabundance of college-bound youth. Significant increases in UW's non-resident tuition rates have diminished our market advantage in recruiting such out-of-state students. In 1988-89, it was nearly as economical for a Colorado undergraduate to

attend the University of Wyoming and pay full non-resident tuition (\$2,605) as it was to attend the University of Colorado at the resident rate (\$1,924). By 1998-99, UW's non-resident tuition rate had grown to \$7,418, compared to resident rates of \$3,037 at CU and \$2,986 at CSU. A host of recruitment-related actions are in order:

1. Action Item: Summer academic programs such as the High School Institute have documented success in recruiting quality undergraduate students. Similar initiatives should be replicated at college and department levels where possible. Efforts to attract pre-college students to the UW campus should be encouraged as part of a comprehensive recruiting program.
2. Action Item: All application and course enrollment procedures should be available via the Internet, including the ability to easily handle credit-card and on-line payments.
3. Action Item: We must re-examine our tuition structure for non-resident students, including possible expansion of the Western Undergraduate Exchange Program (WUE), which permits certain students from adjacent states to attend UW at 150 percent of the resident tuition rate. Further discussion of this issue is included in Section VII, "Making It Happen."
4. Action Item: UW must enhance its already active role in statewide articulation with Wyoming's community colleges. The Vice President for Academic Affairs will support these activities in disciplines where they are already in place and will encourage other disciplines—especially those responsible for entry-level coursework—to assume a greater presence in statewide articulation.
5. Action Item: Non-resident recruitment should continue to focus on northern Colorado. Benchmarking should be done to document current recruiting effectiveness. Expenditures should be assessed against enrollment data and strategies modified or adapted accordingly.
6. Action Item: The campus community, via a number of faculty and student groups, should continue its efforts to develop and assess alternative recruitment strategies, to eliminate duplication of effort, and to strengthen the consistency and comprehensibility of our institutional messages. We must involve alumni, high-school and community college counselors, currently-enrolled UW students, and others who can bolster identification and recruitment of prospective students. UW's international alumni should help with the recruitment of international students.

7. Action Item: Because of its critical importance to the University's mission and financial health, recruitment must become an institutional priority for all faculty and staff. The President will study whether increased institutional revenues resulting from successful recruiting efforts can be managed as part of an incentive system to reward faculty and staff with one-time or continuing salary increases. Incentive models that would encourage destructive internal competition among academic units must be avoided. Our goal should be to realize net gains in overall enrollment.

Like other areas of the University, the undergraduate Admission Office has suffered from inadequate funding. This has led to frustration with the effectiveness of our undergraduate recruiting and in some cases has led recruiting initiatives to be inappropriately transferred to faculty. Both faculty and staff have a responsibility for student recruiting, but this is not to suggest that those responsibilities are interchangeable. There is no good substitute for a well-staffed, well-run undergraduate Admission Office.

8. Action Item: We must significantly increase the staffing and operational budget of the undergraduate Admission Office to effectively compete and attract qualified students.

9. Action Item: We must allocate funds on an annual basis to the Office of University Relations for television, radio, and print media advertising in high-visibility outlets, including the major media markets outside of Wyoming that most attract the attention of Wyoming students and their parents in the corners of the state.

10. Action Item: Resources must be allocated to significantly increase the image and usefulness of the University web site, with high priority placed upon those web pages most likely to be visited by prospective students.

## ENROLLMENT MANAGEMENT

Currently, UW organizes its enrollment management services into three administrative units: Admission, Registration and Records, and Student Financial Aid. While this structure served us well for many years, there are compelling reasons for change. Dividing our enrollment management services into three distinct units inhibits the integrated approach to recruitment and retention needed to elevate student enrollments to the institution's capacity. In short, we have considerable opportunity to enhance enrollments and improve institutional revenues. The opening of a high-level administrative position in a key area of enrollment management provides an opportunity for institutional restructuring.



11. Action Item: Academic and Student Affairs will re-define the vacant Director of Admission position into an Associate Vice President for Admission and Enrollment Management, with broad oversight for integrating and coordinating the offices of Admission, Financial Aid, and Registration and Records.

### **RECONSIDERING FINANCIAL AID**

Institutional student aid, or “tuition discounting,” is the difference between a university’s “sticker price” and the student’s purchase price. Most institutions offer subsidies to students to cultivate a student body of a desirable size and quality. By awarding tuition discounts on the bases of academic performance, financial need, or for targeted populations, the institution can reduce its price to encourage the students it wants to enroll.

Managing the discount structure is also an under-appreciated tool for managing an institution’s cash flow. Understanding the details of our net revenue picture can help shape long-term pricing policies in constructive ways. It is self-defeating when tuition and fee hikes are followed by increases in discount rates (i.e. student financial aid awards) that in turn produce negligible increases in net revenues. If we recognize that the goals of Admission and Student Financial Aid are not only to enroll and assist students financially but also to help optimize net revenues, then managing the discount structure can be an effective and powerful budgetary tool.

Our current institutional aid policy is one of feast or famine. The impact of institutional aid policy goes beyond consequences for students. To date, our institutional aid policies have paid little or no attention to the implications for net revenue management or to the elasticity of demand for a UW education. For each student who receives a full-tuition scholarship, the University assumes an obligation to deliver a university education with no corresponding tuition revenue. While we clearly have many students whose academic performance warrants substantial institutional aid, a wiser approach might be to distribute the same amount of financial aid over a greater number of students in amounts of greater variability. When viewed across the thousands of students who attend UW, even modest changes in the structure of our institutional aid can produce substantial benefits for recruitment, retention, and net revenue management.

12. Action Item: Immediately implement procedures that ensure the full distribution of all sources of student aid. Increase the total percentage of students who receive aid, while cautiously reducing the total number of students who receive financial aid equal to or greater than full tuition.

13. Action Item: Continue to work with the Noel-Levitz consulting group to implement their enrollment-management and revenue system, and continue to explore management concepts that can reallocate financial aid to increase enrollment and to enhance net institutional revenue.

### SCHOLARSHIP SUPPORT

Currently, UW dedicates nearly one-third of all tuition dollars for institutionally funded financial aid. This fact reflects the genuine financial needs of our students, the importance of financial aid to effective student recruitment, changes in federal financial-aid-policy producing greater student-held debt, and the lack of cost adjustments in the University's scholarship budget for more than a decade. Although supporting student attendance at the University is a worthy use of these funds, the redirection of tuition dollars to underwrite student financial aid also comes at the expense of academic and student support programs.

Scholarship programs resulting from the generosity of alumni and other benefactors differ from the institutional aid programs that UW funds from its own tuition revenues. Although the source of financial aid has no financial consequence for the students who receive the awards, it has tremendous consequences for institutional revenues. A full-tuition scholarship from a privately funded account is a net gain to institutional revenues. The same scholarship awarded via an institutional aid program produces no net gain to institutional revenues. An institutional award, offset with a 50-percent contribution from a privately funded scholarship account, represents net institutional revenue equal to half of tuition. Source-mixing strategies like this, when managed advantageously across thousands of students, hold the possibility of significant financial gains. To date, we have failed to benefit from a fiscally enlightened approach to scholarship management.

14. Action Item: A high priority for the University's future private fundraising, including any major capital campaign, should be the generation of additional reliable sources of scholarship and grant support for students.

15. Action Item: Immediately survey the existing scholarships (both institutionally and donor-funded) and the range of regulations that affect their distribution. Employ strategies for co-mingling scholarships to maintain student aid levels while maximizing net institutional revenues.

Effecting these strategies requires better coordination between the Office of Financial Aid and college scholarship programs. Colleges, and often departments, manage a substantial number of discipline-specific scholarships. Based largely on historical tradition, colleges or departments establish yearly application and award schedules, which may not coincide with institutional recruiting schedules. The result of uncoordinated scholarship awards is that prospective students don't know how much

financial aid they will receive before having to make their acceptance decisions. This issue is compounded by myriad rules and procedures governing departmentally held scholarships, which add unnecessary complexity to UW's scholarship management.

16. Action Item: Consistent scholarship criteria are needed for students as well as for the staff who must monitor scholarship renewal. A University-wide committee should be created to review application scheduling and current criteria and to recommend a new and consistent renewal policy. The policy should support retention efforts and encourage graduation. The elements of such a policy should include frequency of review, minimum GPA for retention, minimum number of credits to complete for retention, number of semesters the award will be paid, leave-of-absence policy, implications of dropping to less than full-time status, and reinstatement policies.

### **SUPPORTING PART-TIME AND NON-TRADITIONAL STUDENTS**

Our current scholarship programs furnish few opportunities for part-time students. Virtually all of our scholarships require full-time attendance. In recent years, we have seen an increase in the percentage of non-traditional students and a corresponding increase in part-time enrollments. Students returning to the University later in life are likely to have a variety of family and work obligations, and hence they are less likely to attend UW as full-time students. Given the growing proportion of non-traditional students and the unique needs of part-time students, we must develop balanced and well-documented aid programs to assist this segment of our student body.

17. Action Item: Review the rules governing the distribution of scholarships, and implement procedures to convert an appropriate percentage of student aid to programs that serve part-time and non-traditional students. One of the areas of the University with the largest percentage of part-time students is the Outreach School. While the rules governing part-timers are being reviewed, the rules for distance students should also be reviewed.

18. Action Item: Work with ASUW and local businesses to promote adequate day care facilities for the families of UW students.

19. Action Item: Within the constraints imposed by federal financial aid regulations, explore ways of tailoring student aid specifically to meet the needs of non-traditional and distance-learning students.

Current research indicates that non-traditional, place-bound students may not want or need full undergraduate or graduate degree programs. Rather, these students often seek job-related training or skill certifications. We must be prepared to create such programs. Other universities have created strategic advantages for themselves by offering early entry into graduate programs to exceptional undergraduate students while they complete requirements for the baccalaureate.

20. Action Item: The Vice President for Academic Affairs and the Deans of the Graduate School and the Outreach School, in close consultation with the Faculty Senate and the Graduate Council, should consider guidelines for creating and implementing certificate programs.

21. Action Item: The Dean of the Graduate School, in consultation with the Graduate Council, should consider early-entry graduate programs.

### **SUMMER SCHOOL**

During the 1997-1998 academic year, a Summer School Advisory Committee was appointed to examine the delivery and administration of summer programs and to recommend how summer school should be managed in the future. The outcomes of that effort were recommendations that include the following:

1. Consider changing the academic calendar to permit expanded summer programming.
2. Create an events planning office.
3. Maintain the current summer tuition policy.
4. Restrict courses to no more than two credits per week.
5. Re-examine the 22.2% cap on state-funded summer salaries.
6. Appoint a Summer Coordinator and institute a surcharge.
7. Bolster non-matriculated summer admissions.
8. Offer one-week housing options.
9. Make better use of August.
10. Enhance summer childcare and youth recreation programs to support adult enrollments.

22. Action Item: Proceed with the implementation of this committee's recommendations for summer session, as approved by the President.

### **ENHANCING STUDENT DIVERSITY**

The University must take positive steps to increase its student-body diversity. Our efforts to attract students of color, Native Americans, students with disabilities, and other under-represented groups have yet to yield impressive results. We propose that some restructuring of our approach to financial aid might help bolster these efforts.

Academic achievement is currently the most commonly used criterion in determining who receives institutional aid at UW. We do not suggest that this change. However, our current scholarship structure does not provide for need-based awards or for awards intended to diversify the student body. Current yield rates indicate that we are quite successful at attracting scholastically gifted students.

Our yield rates are not nearly as high for slightly less accomplished, financially needy students for whom we might justifiably provide some level of financial support. Nor are our yield rates for minorities and under-represented groups acceptable. Less-than-full tuition scholarships to students in these groups would increase both enrollments and institutional net revenues.

Recruitment and retention of minority students has been especially problematic. Wyoming's largest minority population is Chicano/Hispanic, and within the Rocky Mountain region there are significant numbers of African-American students, Native American students, and others. We have not done an adequate job of recruiting and retaining these students. UW must invest time and resources in diversifying our student body. The American Indian Studies (AIST) program has made important progress in recruiting and retaining Native American students in the past six years, as has the African-American Studies (AAST) program with respect to Black students. The Chicano Studies (CHST) program appears to be making remarkable progress for a relatively new program, and we encourage support of all of these efforts by colleges and the central administration.

For minority students, faculty, and staff, retention is as significant an issue as recruitment. Laramie lacks minority groups in sufficient number to provide a strong sense of community that can aid the building of a multi-cultural environment. Building upon existing strengths in AIST, AAST and CHST may be a viable way to overcome this deficiency.

23. Action Item: Use institutionally funded student aid and, where appropriate, private donor aid to support scholarship programs targeted at financially needy students, minorities, and under-represented groups.

Student financial aid also affects the future diversity of the academic workforce discussed below. To help enrich the "pipeline" to academic professions, we must consider targeting some of our financial aid toward diversity-oriented doctoral and postdoctoral fellowships.

We are profoundly aware of the importance of diversity within our academic personnel, staff, and students. Universities often use financial-aid packages to help build diverse student bodies, but UW has had little success in this arena. To a great extent, this issue is germane to next year's planning efforts.

24. Action Item: The Office of Student Affairs will form a study group involving academic personnel, professional staff, and students to formulate strategies for targeting some financial aid to attract a more diverse student body.

## ENHANCING WORKFORCE DIVERSITY

Diversity is not just an international issue; it encompasses aspects of the American experience as well. Despite the admirable dedication of many groups on campus, UW enjoys too few of the benefits of our nation's diversity, especially in comparison with most of our sister institutions. Much of this problem is associated with our geographic and cultural setting, and overcoming it will require deliberate effort.

25. Action Item: To promote the hiring of under-represented minorities and women, and to enhance workforce diversity at UW, the Office of Academic Affairs should restore the availability of dedicated funds for diversity issues, and reconstitute the oversight group charged with fund distribution.

Academic Affairs and the Employment Practices Office should continue to disseminate relevant hiring statistics on under-represented groups to search committees and to the campus at large.

It is critical to students' educational experience that they have the opportunity to learn within a multicultural and diverse university community. Creating a welcoming, hospitable, and supportive environment for these individuals and groups will remain a challenge.

26. Action Item: Continue efforts to help academic personnel, staff, and students understand issues related to diversity, including but not limited to faculty and staff development programs (Safe Zone, prejudice-reduction workshops, special educational symposia, visiting speakers, etc.).

## IMPROVING STUDENT RETENTION

The principle of "ensuring access and opportunity" carries with it an obligation to support students in completing their degrees. Historically, UW's retention record has not been an admirable one. The current six-year graduation rate for students who entered as full-time freshmen (a benchmark that recognizes the length of some degree programs at UW and the need for some students to interrupt their education for work or personal reasons) is just 47 percent--an historic high-water mark. Studies of institutions like ours with students who have comparable academic and social characteristics suggests that UW should seek to graduate more than 60 percent of its students in six years. This is a realistic and achievable goal.

To be sure, awareness of the retention problem and concentrated attention to it through the University Studies First-Year Seminar and the Division of Student Affairs have resulted in marked improvement. Retention of Wyoming resident students from the freshman year to the sophomore year is now up to 80 percent, a considerable improvement from the 69 percent seen a decade ago. But we continue to lose more than one-quarter of our non-resident undergraduates before the beginning of their

sophomore year, and we have yet to achieve equity between the persistence rates of white and minority students.

Retention also bears upon the financial health of the University. A mere one percent improvement in retention yields nearly \$260,000 in annual tuition revenues at current tuition rates. For both educational and financial reasons, therefore, retention is a critically important issue for the University of Wyoming.

27. Action Item: The Recruitment and Retention Committee should continue to design intervention programs and approaches so that we can be proactive in dealing with the students who are most at risk. This work should include consideration not only of the academic predictors of student success but also the social predictors, including alcohol and drug abuse.

28. Action Item: There is considerable evidence that supportive living-learning communities enhance retention by helping students stay connected—intellectually and socially—to the life of the institution. By attending to the condition of the living-learning communities, including the quality of the first-year residence program and the experience of students in fraternities and sororities, we can improve student persistence to graduation. We should look for additional opportunities to expand the living-learning communities, including the University Honors Program.

29. Action Item: It is of particular importance for undeclared students, advised by the Center for Academic Advising (CAA), to establish positive connections with the institution. Academic unit heads and chairs should meet with CAA staff once each semester to maintain CAA awareness of undergraduate options and curricula.

30. Action Item: Because of its central importance to the University's mission and financial health, retention must become an institutional priority for every UW employee, particularly academic administrators and academic personnel. Academic personnel must not be encouraged, expected, or pressured to compromise academic standards. But a more sweeping institutional commitment to help students succeed is required. Accordingly, in administering centralized academic position management (see Section VII, "Making It Happen") the Vice President for Academic Affairs will consider retention as one of a number of performance characteristics. In addition, the President will examine whether increased tuition revenues resulting from successful retention efforts could be managed as an incentive to reward faculty and staff with one-time or continuing salary increases or support for their units.

The Office of Student Affairs has developed a thoughtful proposal that targets student retention efforts on at-risk students, and includes an aggressive approach to some retention issues. The proposal also suggests the creation of an "Academic Success Center" that would house such academic support services as walk-in assistance for students in writing, quantitative skills, oral communication, and computer literacy.

Currently, we have several disconnected units that might be affected by such discussion. These include the Writing Center under the Center for Teaching Excellence, the Math Lab currently run by the Mathematics Department, and oral communications programs currently provided through the first-year freshman program. These programs affect nearly every student on our campus. Given the demand for additional space for library collections and study, it would be highly desirable to find a location for such a center close to the campus core but outside the library.

31. Action Item: With the involvement of affected units, academic departments, and students, the administration will assess the desirability of and physical location for an Academic Success Center.



## **IV. RETHINKING AND REVISING THE CURRICULUM**

Curricular issues are the heart of a university's academic quality. They also have significant implications for how we commit resources. Although it is natural for faculty to tend to curricular quality on a nearly continuous basis, the question of curricular resources deserves close scrutiny.

An analysis of credits required by different degree programs since 1965 shows tremendous variability within degrees over time and between degrees at any one point in time. The average number of credits now required for baccalaureate degrees at UW is 126. This figure is deceptive, however, as variability is substantial, ranging from a low of 120 credits in 45 departments to a high of 163 credits.

Minimum numbers of credits required for degree completion generally represent best-case scenarios. Students who enroll in a major as entering freshman, do not change their majors, carefully select courses, and take advantage of double counting within or between their requirements can finish within eight consecutive semesters. However, at UW, only 17 percent do so. The remainder--those who arrive at UW less certain about their interests--take less efficient paths. On average, each changes majors 1.2 times, takes 5.7 years to complete the baccalaureate, and completes 145 credit hours in the process. We cannot gainsay the considerable intellectual and personal growth that accompanies additional coursework. But the delivery of such coursework represents real costs to UW and the State, only about 20 percent of which are covered by student tuition. As an institution, we must critically assess our students' course-taking patterns, the percentage who actually complete degrees, and the length of time they take to finish.

### **UNIVERSITY-LEVEL REQUIREMENTS**

UW implemented its University Studies Program (USP) nearly a decade ago in response to the 1990 reaccreditation study conducted by the North Central Association of Colleges and Schools (NCA). The premise behind the program is that UW has a responsibility to provide all undergraduates a basic set of educational experiences as a cornerstone to a sound baccalaureate education. Program goals include skills in written and oral communication, quantitative reasoning, scientific methods and principles, methods and content in behavioral and social sciences, appreciation for the arts and humanities, physical activity and health, and awareness of other cultures and cultural traditions. Consistent with legislative requirements, the USP also requires an understanding of the U.S. and Wyoming constitutions. The program's designers reasoned that achieving these goals would require typical undergraduates to spend one to one-and-a-half years pursuing a general education.

Ten years later, we are preparing for our next NCA reaccreditation review. It is both appropriate and timely to reexamine USP. The current USP curriculum allows instructional commitments from an ever-growing collection of courses. Departments and programs have been encouraged to develop new coursework for inclusion in this program. Thus, encouraged in part by management tactics such as gainsharing, the USP has evolved into a complex smorgasbord of loosely connected coursework. This system constrains instructional flexibility and often aggravates the advising and enrollment quandaries confronting many of our undergraduates. Arguably, it has created student demand for coursework where it might otherwise not exist and where there is slender pedagogical justification.

We have also gone to considerable length to maintain and upgrade our USP course offerings. Most notable is the Hewlett Foundation program for designing and re-designing sophomore-level, general education courses to incorporate new pedagogy and increase connected learning. There is no question that UW is doing innovative work on curricular reform.

The fundamental concept of a core curriculum is sound. Our current system is neither superfluous nor irreparably broken, but it does need a tune-up. While it is difficult to argue against the notion of writing across the curriculum, UW has yet to assess the efficacy of the USP writing requirements. Nor have we sufficiently considered the appropriate balance between oral and written communication skills. Similarly, our mathematics requirements bear closer scrutiny. People have expressed serious reservations about the value of the M3 requirement for all majors. Requirements in the social sciences, the humanities and the fine arts are also areas of concern to both faculty and students. The effectiveness of the global studies requirement is another topic that warrants our focused attention.

Beyond these issues, we ought to evaluate the overall structure of the USP. Should we expand skill requirements to include library, Internet, and information literacy? Should all undergraduate programs have some involvement in research, creative activity, or content-based internships?

Let us be clear about our intentions. We are not arguing against a core of liberal arts courses essential to any university education. We are arguing that our USP curricular obligations have become more burdensome than the original purpose warrants, at times complicating what is required to complete a major or to change one. Rethinking and reconfiguring the USP is beyond the scope of this document. Parallel to the academic planning process, however, is a working group charged with critically examining undergraduate education and the University Studies experience in preparation for the upcoming NCA site visit. The efforts of this group have established the groundwork for a complete appraisal of the USP.

32. Action Item: The Vice President for Academic Affairs will appoint a broadly representative committee drawing on experiences of the existing USP Committee, the

NCA USP/Undergraduate Education and Outcomes Assessment self-study groups, and appropriate student representation. The committee should include representation from the Minority and Women's Affairs Committee. This committee will develop a plan for streamlining and clarifying the USP curriculum and for reducing the number of hours required to complete the USP.

### COLLEGE REQUIREMENTS

Individual colleges also have established requirements for their majors. Described by such terms as the "common body of knowledge" or "extended core," these college requirements add a second tier of constraints on baccalaureate study. Taken individually, the requirements are well intentioned and consistent with a quality undergraduate experience. Coupled with university and departmental requirements, they add complexity to UW's baccalaureate programs. Often necessary, and sometimes required by professional accrediting bodies, college-level requirements vary significantly across the University. In the aggregate, they act against cross-college transfers, delay time to graduation for some transfer students, and hinder those who are uncertain of career and educational aspirations. These requirements, coupled with those of USP and the major, make advising complex and difficult. In some cases, college-imposed requirements have arguably perverse effects: they increase pressure on part-time teaching budgets; they dilute undergraduates' opportunities for upper-division coursework and contact with faculty; and they isolate students from an overall University education and experience.

33. Action Item: In conjunction with revision of the USP, colleges will evaluate core requirements for elimination or minimization. College requirements that are retained will be justified with a statement of purpose and a specific evaluation plan to assess student outcomes.

34. Action Item: After revision of the USP, a committee will be established to develop recommendations for credit ceilings to govern college core requirements.

### DEPARTMENT REQUIREMENTS

It is also important to re-examine course requirements attached to specific majors. University regulations place the responsibility for establishing credit-hour standards right where they belong: under the purview of colleges and departments. This responsibility is a double-edged sword. Certainly, faculty members are the appropriate guardians of curricula within their disciplines. However, in an era of information explosion and rapid change, rethinking the curriculum must occur at frequent intervals. Major requirements should be based on learning goals and objectives defined by faculty expertise and using input from a variety of sources, including changes in the workplace. We must be mindful that UW's overall institutional goal is degree completion within four years.

Many departments have constructed curricula that thoughtfully balance disciplinary content with college and university-wide requirements. But this is not universally the case. In more than a few programs, department-level curricular requirements are embedded into college requirements or the USP. While intentioned to facilitate their students' meeting USP and enhanced core requirements, these decisions also restrict choices available even to highly focused students, and they increase the likelihood that their less focused peers will be unable to complete the baccalaureate degree in a reasonable amount of time.

A substantial number of undergraduate majors require more than 75 credits of coursework within the major. Several require more than 100 credits in addition to college and university level requirements. These program requirements can be found in the *UW General Bulletin*.

35. Action Item: In consultation with the Faculty Senate, the Vice President for Academic Affairs will initiate a review to assure that all undergraduate curricula (except those constrained by demonstrable accreditation requirements) can be completed with no more than 128 credits.

36. Action Item: In consultation with the Faculty Senate, the Vice President for Academic Affairs will establish reasonable credit ceilings for undergraduate degrees. The intents of this effort will be (1) to minimize curricular constraints that unnecessarily reduce students' flexibility and (2) to eliminate the embedding of specific college and USP requirements in the major wherever possible.

37. Action Item: In an information-rich society characterized by dramatic change, technology that necessitates lifelong learning, and the evolution of new fields of endeavor, innovation in post-baccalaureate education goes hand-in-hand with revision of undergraduate curricula. Concepts such as professional masters' and interdisciplinary masters' degrees deserve attention.

## **OUTCOMES ASSESSMENT**

In 1995, UW submitted its first comprehensive student outcomes assessment plan to the NCA. NCA approved the plan, and we have implemented it over the last five years. Our institutional assessment plan is consistent with the three-tier description of university, college, and major requirements. The university-wide assessment plan involves a critical examination of writing and quantitative reasoning and an overall assessment of the USP via standardized tests.

In concert, Academic Affairs has provided colleges and departments with yearly statistical information about academic and demographic characteristics of the student body. Now, five years since the program's inception, each college can review its incoming freshman class, the educational performance of its students, and how they change over time. The Office of Institutional Analysis provides customized or college-specific data to help address cross-college comparisons and college-specific data needs.

At the college level, we have conducted student satisfaction surveys every two years. Alumni surveys have been conducted as part of a ten-year program review cycle, and some (but not all) colleges have employed discipline-specific testing at or near the time of graduation. Engineering, for example, requires the Fundamentals of Engineering Exam of all graduating seniors. Overall scores are posted to student transcripts, and sub-scores are disaggregated and forwarded to individual departments to assist in curricular evaluation and review. The College of Business requires the ETS Major Field Achievement Test of all graduating seniors and monitors GMAT performance and pass rates on such standard tests as the CPA exam. The College of Health Sciences has linked its assessments closely to accrediting agencies.

Most colleges (Arts and Sciences in particular) have established a cafeteria approach to department-level outcomes assessment: individual departments and programs select assessment tools from an array of techniques. We have generally succeeded in implementing our initial five-year NCA assessment plan. Students and alumni routinely report satisfaction with their education. However, we must better document the actual educational benefits that our students receive, and we must translate assessment efforts into processes by which we validate or adjust our curriculum.

38. Action Item: The Vice President for Academic Affairs will appoint a faculty and student Assessment Committee to review and revise the University Outcomes Assessment Plan. The main issues in this exercise are as follow:

- \* The USP has mandated more writing and more mathematics, but we have not adequately assessed the effectiveness of this program. Without proof that our current structure is working, it makes little sense to argue for retaining it.
- \* Colleges must validate their extended-core or similar supplemental degree requirements.
- \* Specific goals, objectives, and assessment methods must be part of every college plan.
- \* Concurrently, departments must continue to evaluate curricular requirements against their educational goals. They must document not only what they learn from their assessment efforts but also the programmatic and curricular modifications that

result. These tasks must be clearly outlined in department plans, along with methods that will be used to measure instructional success.

- \* Improved student assessment at all levels will require multiple performance indicators, refined sampling strategies, better research instruments, and carefully constructed evaluation processes. Senior staff members from the OIA have already been redirected to this task. The Center for Teaching Excellence can play an important role in enhancing awareness of the importance of this topic.

39. Action Item: The Vice-President of Academic Affairs, in consultation with academic deans, will initiate a pilot program to develop a limited number of competency-based degree programs.

## INTERNATIONALIZATION

Students enter a society and a global workplace characterized by increasing ethnic and cultural diversity with increased demand for transnational competence. Yet, relatively speaking, we are an isolated campus in a small rural town in a land-locked state. Developing true international strength and diversity in this setting will require a sustained commitment. It will require that we develop a more diverse workforce and student body. It will require investment in a multicultural campus, a more internationalized curriculum, and broader options for study, work, internships, and research abroad.

By every means possible, the University should encourage students to study abroad, and we should examine financial opportunities to support students who want an international experience. Every appropriate department should make study abroad part of the curriculum available to students. Further, UW must reduce structural impediments to studying abroad. Among the important issues that need attention are financial aid, course transfer credit, student-friendly advising on study-abroad opportunities, and skilled backstopping for students who are abroad. There should be a companion competition for students that parallels the International Travel Grants competition for faculty.

Our efforts with Russia's Saratov State University, China's Heilongjiang Province, and the China National Petroleum Corporation are good examples of successful, focused investments in internationalization. With our existing ability to recruit faculty internationally, we should be able to broaden our international ties. Departments should encourage opportunities within their curriculum for students to acquire a "concentration" or "focus" on international dimensions of their discipline. This effort might reasonably include development of a cross-college minor in international studies.

To some extent, our efforts in this arena still lack consistency and focus. For example, UW now operates three distinct units that have some international thrust: International Programs, under Academic Affairs; International Studies, within Arts and Sciences; and International Student Services, under Student Affairs. Although each has

different responsibilities and functions, their current structure fragments our focus and presents students with an unnecessarily complex array of offices and services.

40. Action Item: Consistent with the recommendations of the recent International Program review and the Strategic Plan for International Programs, develop a unified administrative approach to internationalization. This approach should unite international functions at UW in a common location, with a reduced number of reporting lines, and develop a common web site for internationally-related program and service units.

41. Action Item: As proposed in the Strategic Plan for International Programs, focused bilateral relations should be advanced in specific regions of the world where UW has strength of expertise, prior experience and commitment, and ongoing relations.

42. Action Item: The offices should continue to:

- \* Internationalize the campus by promoting greater international involvement of academic personnel and staff.
- \* Increase the number of UW students studying abroad during their undergraduate years.
- \* Consult with colleges and departments about infusing international perspectives into existing courses.

43. Action Item: The international arena can be an important resource for Wyoming's economic development. UW faculty with international expertise should help communities, enterprises, and individuals gain the competence necessary to make effective plans and decisions within the global marketplace.

### MANAGING FOR INSTRUCTIONAL EFFICIENCY

Characteristic of every large organization are policies and procedures designed to administer and manage resources. Each policy or procedure may have its own historical rationale, but taken together they often lead to inefficiencies. At UW, our academic management practices are no exception to this tendency. We see room for constructive changes in several instructional arenas, including course delivery, enrollment policies, enrollment management, and outreach programs.

**Course Delivery.** Some of our instructional inefficiency is related to the policies by which we deliver courses. We impose lax withdrawal policies and a tuition structure that imposes no additional costs for students enrolled for more than the 12 credits that trigger the full-time tuition rate. In response, many UW students sample courses, withdrawing from them throughout the semester. During the fall and spring semesters of 1997-98, for example, students enrolled in 261,977 hours, but completed 246,714 hours. If we assume three-credit classes with an average enrollment of 24 students, we

delivered the numerical equivalent of 212 more courses than students were taking at the end of the semester. We cannot afford this inefficiency.

44. Action Item: In the spring of 1998, the President asked the Academic Deans and Student Affairs Advisory Council (AD/SAAC) to review policies and procedures pertaining to add/drop, course repeats, and course withdrawals. The AD/SAAC recommendations must now be reviewed by the Vice President for Academic Affairs, who will prepare recommendations for review by the Faculty Senate, the President, and the Board of Trustees.

**Course Approval and Removal.** We are implementing a new course approval process that will streamline the development of courses and minimize the time required for approval. However, significant problems still exist in course removal. Courses can linger in the *UW General Bulletin* for years, creating a false image of our curricular scope.

45. Action Item: The Course Approval Committee will comply with UniReg 806, Rev. 2 and develop a streamlined process for course approvals.

46. Action Item: Courses that are not offered at least once every three years will be removed from the *UW General Bulletin*. The Vice President for Academic Affairs will develop appropriate administrative procedures for implementation.

**Course Enrollment Policies.** With varying degrees of commitment and success, UW has imposed minimum class sizes, monitored faculty credit production, and mandated the number of classes that would be offered at different times of the day. Associated performance indicators have passed from vice president to deans to department heads, along with differing levels of pressure to comply with the policies, depending upon the circumstances and players involved. These measures notwithstanding, we still offer more low-enrollment classes than we can afford.

There is little that we can do to trim poorly subscribed classes once they are in session. And, because we have lacked administrative follow-up, some departments routinely ignore their instructional inefficiencies.

Not all of our enrollment inefficiencies are attributable to policy violations. Despite compliance in the strict sense, many units offer a large number of classes that barely meet the required minimums. In this regard, median class-size statistics would give a far different picture of our enrollment practices than does simple compliance with policy. A faculty member who regularly teaches two classes per semester at or slightly above minimum enrollments produces long-term inefficiencies that the institution pays for in other ways. This is not to suggest that all classes must be large, or that no one should teach upper-level or graduate courses with small enrollments. In the aggregate, however, UW offers an astonishing number of low-enrollment courses, despite distinct



limits on our resources. One way that we can avoid more painful ways to balance student demand against workforce size is to strive for more efficient instruction.

These are issues best managed with a tiered administrative approach. Academic Affairs should monitor colleges; deans in turn should monitor departments; and department heads should monitor their course offerings.

47. Action Item: College requests to fill vacant positions will be gauged in part against course enrollment patterns and statistics. Academic Affairs will predicate its allocation decisions, in part, on efficient use of instructional resources.

### OUTREACH PROGRAMS

Using a combination of new technologies and traditional delivery mechanisms, the University serves thousands of students each year through off-campus programs. In total, UW offers five different statewide undergraduate degrees and five statewide graduate programs. We offer three additional baccalaureate programs and three graduate programs at specific sites within Wyoming. In addition to traditional educational programs, the School of Extended Studies and Public Service (SES/PS) also delivers community-service education (non-credit classes), operates Wyoming Public Radio, and maintains the UW-Casper College Center. The University's outreach programs are integral to our institutional commitment to educational access and opportunity for Wyoming citizens.

During the 1997-98 academic year, a University-wide review of outreach programs was prepared under the guidance of the Dean of Outreach, with input from the Outreach Council and five task forces. These task forces examined five specific areas of concern: planning and budgeting, student services, technology, internet-based courses, and non-credit activities. More than 60 recommendations were approved by President Dubois in the early fall of 1998 and were incorporated in the academic plan prepared by the Dean of Outreach. Though too detailed to be reviewed here, the University's intention is to implement the proposed plan, including its recommended name change (from the School of Extended Studies and Public Service to The Outreach School), statement of mission, and statement of vision. The statement of vision is particularly important:

The State of Wyoming is the campus of the University of Wyoming. The University has one faculty and staff, one student body, and one set of academic programs. Teaching, research, and service are the mission of the University regardless of location. The University recognizes that its "one student body" is composed of a wide variety of students whose needs differ. The University is committed to providing all student support services essential for success, regardless of where the student is located. The University will share the expertise of the faculty and staff with the

citizens of the state through instruction, community service, and application of research.

This vision requires comprehensive changes to planning, to the structure of tuition, to the use of available technologies, and to the allocation of faculty time.

**Educational Needs Assessment.** Delivery of an undergraduate degree program off campus requires a carefully constructed, multi-year commitment from the University and usually a concomitant commitment from community colleges. Once committed, we are obligated for at least four years, even in the face of changing or capricious student demand and financial or technological difficulties. In the last decade, we have produced and delivered several well-subscribed and highly successful degree programs. We have also mounted and delivered degree programs for which there was little or no demand, at significant costs to the University. Our failure to respond to the educational needs of place-bound residents has led Wyoming's community colleges to enlist the help of other four-year, out-of-state institutions to offer baccalaureate and graduate programs at "market-based" tuition rates that UW was unwilling to charge.

No new off-campus programs should be developed or approved in the absence of documented student demand. A statewide educational needs assessment, slated for implementation in 1999, should provide information needed to make informed programmatic decisions.

48. Action Item: Complete a comprehensive statewide educational needs assessment to determine the demand for baccalaureate and graduate-level degree and non-degree programs. Use the results from this effort to determine current and future off-campus program commitments, including the possibility of a more significant institutional presence in Cheyenne.

**Core Versus Entrepreneurial Programs.** We also must consider the scope and array of degree programs that we can reasonably deliver off campus. We propose a change in philosophy. Beyond our basic program responsibilities there are degree programs where market demand is strong enough to warrant charging differential tuition. To this end, we envision two types of off-campus degree programs. "Core" programs are those off-campus degrees to which we make a lasting institutional commitment. These will be basic instructional programs that we will commit to delivering as part of our obligation to the citizens of Wyoming, regardless of fluctuating student demand. Identifying these core programs will require careful attention to statewide needs, historic enrollment trends, and market studies. While the "core" is open for discussion, the undergraduate social science major is a likely candidate, as are the Masters in Public Administration and the Masters in Business Administration programs.

The second type of off-campus degree program will be "entrepreneurial." Degree programs in this category will be expected to exhibit sufficient enrollments and tuition revenues to cover their own costs. As student demand waxes or wanes, programs might be initiated or closed out. In all instances, the University would maintain its

commitment to students already enrolled. For entrepreneurial programs, differential tuition will be possible within a range prescribed by the Board of Trustees.

49. Action Item: Determine core and entrepreneurial off-campus degree programs, and develop the procedures for the implementation of each.

**Delivery Technology.** Another set of issues revolves around technology. Compressed video, audio, and web- and internet-based delivery are among the most frequently used electronic methods for course delivery. Costs and constraints vary significantly. The most popular and most expensive delivery mechanism is compressed video, which provides two-way audio and video interaction among students at remote sites and faculty on the Laramie campus. Historically, we have allocated this resource just as western states allocate their water resources: "first in time, first in right." Low-enrollment courses that cannot possibly generate their own operating costs can use the system to the exclusion of high-enrollment, high-revenue programs, simply because they got there first. This policy should be ended.

50. Action Item: The Outreach School will allocate compressed-video time to maximize instructional and financial efficiencies.

**Investing in Future Technologies.** Our compressed video network is approaching the end of its useful life. If we are to continue to use this medium for statewide instruction, we will soon be confronted with replacement costs exceeding \$500,000. Weighing against this investment are those who believe that compressed video unnecessarily restricts our market to sites in Wyoming and that it will soon be replaced by cheaper, better, web-based technologies. We must consider technologies for outreach education that allow partnerships which enhance geographic access to our programs, such as UW-Online with eCollege.com, the Western Governors' University and the land-grant consortium A\*DEC.

51. Action Item: Academic Affairs, the Outreach School, and InfoTech will cooperate in investigating all appropriate alternatives for replacing the existing compressed video system. This will require exploring opportunities associated with the US West network, the State Telecommunications Office, and Wyoming community colleges.

**UW Television.** UWTV serves the outreach mission by producing distance learning and teaching materials, operating the compressed-video classrooms, and serving as a TV production unit. The first two services are fundamental to delivering quality instruction off campus, and we must retain them in some form. The third activity is tangential to UWTV's primary mission to serve the needs of UW Outreach. As long as TV production does not negatively impact the outreach mission, these activities allow broader university service and generate income for operating expenses and equipment replacement.

52. Action Item: The Outreach School should reorganize UWTV from a stand-alone unit and integrate it with the other outreach technology support services. The primary mission of UWTV should be providing instructional support for outreach academic programs.

## V. FOCUSING FOR DISTINCTION

Over a decade ago, the National Center for Higher Education Management Systems (NCHEMS) concluded that, "...with limited resources, the University needs to decide what it can do well and dedicate its resources to achieving that goal. The University can no longer afford to be all things to all people." We cannot afford it any more today than we could then.

UW must carefully plan how it manages its resources if we are to avoid widespread degradation in our mission. This is a difficult challenge: as Wyoming's only four-year public institution of higher learning, we have a responsibility to offer a wide array of programs and services to the state. Yet as a research institution in a state with less than half a million people, we can easily spread ourselves too thin. In the interests of cultivating distinguished academics and scholarship, we must focus our efforts.

Focusing for distinction requires thoughtful decisions and broad vision. A university of our size can hope to be truly distinguished only in a set of disciplines that is circumscribed by comparison with flagship institutions in larger states. On the other hand, no university can afford to concentrate resources to such a degree that academically central disciplines languish. We propose the following framework for balancing these issues:

- \* Identify major intellectual themes and a set of disciplinary areas for emphasis, recognizing that this set may not include all of the areas that are central to any modern university.
- \* Maintain strength in the other academically central fields, encouraging the relevant units to contribute to major intellectual themes where feasible.
- \* Carefully examine our commitments to units that we do not intend to emphasize and that we do not see as central to the academic mission.

A central goal of academic planning is to make decisions within this framework. Deciding where individual programs and disciplines at UW belong in this framework requires a mix of quantitative and qualitative criteria. In developing this plan, we have asked the following questions:

1. Is the program central to the University's mission to deliver an excellent undergraduate education in the liberal arts and sciences?
2. Is there significant existing or potential student demand for the program?
3. Does the program possess or have potential for national or international recognition?
4. Does the program fill a demonstrable need in the state and region?
5. Is the program critical for the state's economic development?
6. Does the program reflect the distinctive character of Wyoming's location, heritage or culture?

UW has many programs that can answer one or more of these questions affirmatively. We also have a few for which the answers are less compelling. Even after answering all of these questions, deciding the fates of individual programs is a delicate matter. Strategies include strengthening or maintaining an existing area of emphasis, committing to a new area of emphasis, maintaining strength in an academically central area, encouraging such an area to adjust its own focus, reducing scope and institutional commitments in some areas, and eliminating some programs. Within these strategies are a variety of tactical options. For example, units can adjust their foci by forming “graduate groups,” in which several departments collaborate to offer joint graduate degrees instead of offering separate degrees. Reducing or eliminating a program may involve eliminating a department, eliminating degree options offered by the department, or reducing the number of courses that the department offers. In developing the recommendations that follow, we have tried to keep in mind the broadest possible array of strategies and tactics.

We propose that the University emphasize the following long-range intellectual themes:

- \* Deliver a well-rounded **education** that will equip UW graduates to assume roles as productive citizens and future community leaders.
- \* Strengthen UW’s efforts related to the **environment and natural resources**, including agricultural, water, land, wildlife, and energy and mineral resources.
- \* Promote an understanding of the distinctive **history and culture** of Wyoming and the Rocky Mountain West.
- \* Develop specialties related to **rural** issues in higher education, research, and service (e.g. health care, K-12 education, and community and economic development).
- \* Take leadership in **artistic and cultural endeavors**.
- \* Educate and prepare students **for professions** that are crucial to the region, including its quality of life.

Certainly these endeavors should not form the only criteria by which the University allocates resources. However, they are broad enough to allow almost any academic discipline to find ways to build on them, **and they are in keeping with UW’s status as a land-grant institution as described in the 1862 Morrill Act**. We discuss how the institution can encourage this process under the heading, “Making It Happen.”

53. Action Item: With appropriate input and involvement by the University community, develop a revised mission statement that recognizes the University’s intention to focus for distinction in the intellectual themes listed above and that is consistent with the spirit and intent of the Academic Plan.

## **COLLEGE AND DEPARTMENT ACADEMIC PLANS**

College and department plans represent hundreds of hours of effort and establish a solid foundation upon which to develop the University Plan. The revised college plans, in general, are thorough and well conceived documents. Faculty, department heads, program directors, and deans who have worked to develop these documents have made great strides in addressing difficult and controversial academic issues. We are grateful for their efforts.

It is not our intent, and it is beyond the scope of this document, to resolve or comment upon all of the issues that have been raised by specific unit plans. This section provides feedback to the colleges with respect to some of the issues and initiatives raised within their planning documents, but we do not attempt to address all issues in all units.

We address, in three ways, some of the issues raised by college plans. First, we endorse college proposals that we believe respond to institutional or programmatic needs. Second, we identify and discuss those components of college plans that seem to lack clarity or focus and that do not have adequate scope. Finally, we comment on those portions of the college plans which fail adequately to address issues raised in previous correspondence. Where we have not commented specifically on college proposals, in large measure we concur with college priorities and endorse their general direction.

On issues where college and department plans lack clarity and focus, or where they have not adequately addressed administrative concerns, there is room for improvement in subsequent planning. In all instances, it will be necessary to establish implementation timelines for the specific actions that colleges have proposed.

## **UNIVERSITY-WIDE ISSUES**

The academic planning process has helped to identify areas of the University where we have particular academic strengths and, in some instances, opportunities for additional cross-disciplinary cooperation. The process has also helped to identify areas of curricular overlap and duplication that deserve detailed and thoughtful review. In other areas, the process has highlighted opportunities to improve our programs if we focus on resources.

Program assessment is a key tool in devising effective strategies for hiring faculty in different disciplines. Many universities have developed national or international reputations in an area despite the fact that the faculty members supporting that area belong to more than one department or college. If the University of Wyoming is to focus for distinction, we need to hire faculty in areas of critical importance, without unnecessary constraints imposed by departmental boundaries. Centralized management of faculty positions, detailed in Section VII ("Making It Happen"), is a key element of such a strategy.

The following areas deserve further review:

**Productivity and Support of Doctoral Programs.** One of our goals is to maintain UW's status as a Carnegie Research II institution. To achieve and maintain this designation, an institution must receive at least \$15.5 million dollars in federal research funding and must award at least 50 doctoral degrees annually. Today, UW is in no jeopardy of losing its Carnegie Research II status. Our current federal research funding is well in excess of \$20 million annually, and our annual doctoral degree production ranges between 60 and 80.

Some Ph.D. programs consistently produce an appropriate number of graduates who enter excellent jobs. These programs typically develop extramural funding in support of their research and graduate programs. Doctoral enrollments are uneven, however, and degree production by program is unpredictable. Some programs have consistently awarded a disturbingly small number of Ph.D. degrees annually (some average fewer than one per year). The same programs often have inconsistent records of faculty commitment to doctoral training and external funding, issues not unrelated to doctoral degree production. There appears to be excessive time-to-degree in some programs. Moreover, as reflected in nearly all college and department plans, financial support for doctoral students is inadequate.

Concomitantly, UW has achieved national recognition for its doctoral programs in only a couple of disciplines. Only a few of our graduate programs rank in the top 100 or even the top 150 according to the National Research Council. At least part of the reason for the relatively low rankings of most doctoral programs is their small size (both in terms of faculty and students) and relatively low productivity.

The problems confronting our doctoral programs are intertwined with the same problems *in* our master's programs and the management of our undergraduate programs. Many graduate assistantships (GAs) are allocated to master's programs in support of required undergraduate teaching. Alterations in our University Studies requirements or other significant curricular changes, for example, could alter our need for GAs in some areas. One possible consequence of such action might be to further diminish already small graduate programs.

We have no immediate solution to these dilemmas. We believe that the University must reduce the scope of its graduate programs and focus its support more narrowly. The central aim must be to improve the quality and productivity of those programs we choose to maintain and to improve the level of support that we provide students. However, until issues related to undergraduate education are resolved, it will be impossible to settle those related to graduate education.

Nevertheless, we can begin assessing our graduate programs, particularly at the doctoral level. We must focus our attention on maintaining the doctoral degree production required for Carnegie Research II status while reducing the number of programs. We also need to give close attention to the proportion of graduate students (particularly doctoral students) in our enrollment mix. Graduate students typically



represent 20 to 30 percent of the student body in Carnegie Research II institutions; at UW the proportion is 14 percent.

54. Action Item: The Dean of the Graduate School, in concert with the Vice President for Academic Affairs, the Vice President for Research, the college deans, and the Graduate Council, will identify priorities for reducing the number of doctoral programs while developing a plan to ensure enrollment, degree production, and more competitive levels of support for doctoral students (see "Developing a Graduate Enrollment Plan" in Section VII).

**Environment and Natural Resources.** There is no question regarding the preeminent importance of natural resources and the environment to Wyoming. They affect our quality of life; the sustainability and profitability of agriculture, the extractive industries, and tourism; and the maintenance of remarkable and diverse ecological systems. Our faculty has well-recognized depth and breadth in related disciplines. This is a clear institutional strength. It makes sense to build upon organizations like the School and Institute of Environment and Natural Resources (SENR, IENR) to help organize and deliver these strengths for teaching, research, and service.

Virtually every college at the University can provide contributions to this effort. We concur with a shared-governance approach to SENR's organization. Several college plans have SENR components, all of which deserve careful consideration.

55. Action Item: The Vice President for Academic Affairs and the Vice President for Research, in consultation with Deans, *the SENR Director, SENR faculty and IENR* advisory committees, will determine the feasibility of an undergraduate major in Environment and Natural Resources.

56. Action Item: The Vice President for Academic Affairs, working with the Director of SENR and IENR will appoint a group to examine organizational arrangements for the formation of interdisciplinary graduate programs in ENR. Areas of focus for such programs could include M.S. and M.A. in Natural Resource Management (with various options, e.g. Public Lands Management), Ph.D. in Natural Resource Science and Policy and M.S. and Ph.D. in Environmental Science and Engineering.

57. Action Item: The Vice President for Academic Affairs, in consultation with the SENR and IENR Director, deans, and the SENR faculty and IENR advisory committees, will design and provide on-campus courses for non-ENR majors and off-campus outreach and extension courses and services to meet the needs of Wyoming citizens for both professional development and general interest learning about ENR issues important to the West.

**Life Sciences.** The life sciences at UW have unrealized potential for greater distinction at UW. Necessary conditions for enhancing these programs include the reduction of institutional barriers and more widespread collaboration among units in the Colleges of Agriculture and Arts and Sciences. Several departmental plans, most notably those of Molecular Biology and Zoology & Physiology, speak to the need for rethinking the organization of life sciences at UW. There have been several noteworthy proposals for an interdisciplinary graduate program in life sciences that would draw on our particular strengths in microbial, molecular, plant, animal and environmental-related research. The content areas for graduate study would be those that offer natural, commonly occurring interdisciplinary interactions, as well as novel types of interdisciplinary interactions that would capitalize on combinations of research strengths that are relatively unique to UW. Reorganized undergraduate and graduate programs would create stronger teaching and learning environments with better-coordinated instruction and the opportunity for new research relationships. Our ability to compete with larger doctoral-granting institutions would be enhanced by interdisciplinary groupings that reflect the contemporary lines of scientific inquiry, whether basic or applied.

58. Action Item: A group of distinguished life scientists from other universities will be consulted to assess UW's life sciences as part of developing life sciences as an area of distinction.

59. Action Item: The Vice President for Academic Affairs will appoint a study group to examine alternative organizational arrangements for interdisciplinary graduate programs and even the administration of the life sciences. Areas of focus could include Molecular, Cellular and Developmental Biology; Ecology, Population and Organismal Biology; and Applied Life Sciences. The study group's work should include visits to other institutions that have successfully implemented such organizational arrangements and should examine incentives that promote such programs.

60. Action Item: The Vice President for Academic Affairs, in consultation with the Deans of Agriculture and Arts and Sciences, will appoint a working group to develop proposals for improving the efficiency and effectiveness of undergraduate life-science instruction. These proposals should include plans to share the instruction in large-enrollment core life-sciences courses, regardless of college of origin. In addition, the Botany and Zoology & Physiology departments should initiate discussion on how to improve their long-standing record of collaboration by coalescing their curricula and exploring the possibility of a departmental merger.

Rethinking and reconfiguring the ENR area and the life sciences warrants further consideration. But the complexity of the discussions, the number of faculty involved, the scope of existing curricula, the ways in which students might be impacted, and the administrative structures and resources we will need require more complete assessment. In any reorganization, care must be taken to ensure the continued fulfillment of our land-grant mission to support agriculture and to apply scientific

knowledge through the Cooperative Extension Service to real-world problems on the ranches and in the production fields of Wyoming.

**Computer Science, Computer Engineering, and Management Information Systems.** There is a national shortage of information technology professionals. The University has considerable but currently disconnected expertise in this area spread across the College of Business, the Department of Computer Science, and the Department of Electrical Engineering. It is difficult to understand the similarities and differences among the various subfields in this large content area, but it is significant that both major accreditation bodies for Computer Science and Electrical and Computer Engineering are integrating their services and organizations into a single accreditation agency. With the College of Engineering contemplating the conversion of Computer Engineering into a separately accredited degree program, it is timely to assess the adequacy of our curriculum in information technology and management information systems. Key issues include the strength and depth of our faculty, areas of potential collaboration, and areas where duplication can be minimized or eliminated.

As indicated in Section VI, the Wyoming Business Council (WBC) has identified computing and information management as a targeted industry for new business development. This emphasis encompasses companies involved in computers, peripherals, data storage, data management, and software development. The WBC also notes interest in electronic commerce and telecommunications-based industries, including customer- and product-processing and distribution centers.

61. Action Item: In consultation with the Deans of Arts and Sciences, Business, and Engineering, the Vice President for Academic Affairs will assess alternative organizational arrangements that will strengthen the University's presence in computing, information technology, and information management at the undergraduate and graduate level. This effort could include cross-college cooperation for a computer engineering program, the merger of Computer Science and Electrical Engineering, the creation of an inter-college School of Computer and Information Sciences, or other alternatives.

**Economics and Agricultural and Applied Economics.** Like many land-grant universities, the University of Wyoming maintains two separate departments in two separate colleges that are both concerned with economics. In our case, each brings distinctive strengths and different emphases. The Department of Economics and Finance in the College of Business is home to a small but nationally recognized doctoral program in environmental and natural-resource economics. The Department of Agricultural and Applied Economics in the College of Agriculture is the home of a well subscribed undergraduate major in Agricultural Business and a small but consistent master's program in Agricultural Economics. The research strengths of the department include natural-resource economics, community and economic development, and agricultural policy and ranch management. Both departments have respectable, albeit modest, levels of extramurally funded research.

The University of Wyoming can accommodate economists with different emphases and two autonomous departments with different missions. The support that the Department of Agricultural and Applied Economics provides for the agricultural community must not be lost or de-emphasized. At the same time, there is considerable overlap in the two curricula. In particular, it is reasonable to seek consistency and interchangeability in "principles of economics" courses. In the last several years, "principles" courses have enrolled approximately 500 students per semester. The Department of Economics and Finance carries 80-90 percent of the instructional load.

62. Action Item: The Deans of Agriculture and Business will establish a faculty committee to oversee cross-listing of "principles of economics" courses and to ensure ongoing articulation between the two departments. Consideration should be given to permanent cross-college articulation, *and to instructional assignments which will maximize efficiencies in the teaching of "principles" courses.*

The Department of Agricultural and Applied Economics and the Department of Economics share most in common at the graduate level. Strong collegial relations exist among some faculty, and cross-college research is growing more common. With the exception of the new M.S. in Agri-Business, which should be given opportunity to mature, there is good reason to seek closer connections between graduate programs in the two departments. The two departments should consider the idea of a more formally established faculty graduate group. These two departments must coordinate and collaborate if they are to achieve program distinction.

63. Action Item: At the direction of the Vice President for Academic Affairs, the Deans of Business and Agriculture will establish a faculty group to develop articulation and cross-listing agreements, and explore the programmatic implications of a graduate group in agricultural, environmental and natural resource economics.

64. Action Item: Future faculty allocations to either Agricultural and Applied Economics or Economics will be dependent upon evidence of the establishment of cooperative relations, effective articulation, and reduced course duplication.

We turn now to issues affecting individual colleges.

## COLLEGE OF AGRICULTURE

To support Wyoming's rural communities and the management of public and private lands, water, and wildlife, the college should refocus as a college of Agriculture and Natural Resources. The emphasis of this unit should be sustainable plant and animal food systems as well as natural resource management. The college's willingness to redirect Agricultural Experiment Station (AES) competitive grant funds to this end is commendable.

Three broader initiatives deserve specific recognition. The first is the proposal to integrate the International Agriculture program with the existing International Studies program. Second, the college proposes to examine, reconfigure and strengthen Agroecology, Agronomy, Soil Science, Reproductive Biology, and Food Science and Human Nutrition. Third, the college plan identifies four curricular areas (Hospitality and Food Service Management, Life Sciences, Interdisciplinary Microbiology, Environment and Natural Resources) that will be considered for interdisciplinary cooperation and focused development. All of these proposals are worth pursuing.

The college plan also affirms a commitment to community and economic development, through its academic programs and through services provided via the Cooperative Extension Service and the AES.

65. Action Item: We strongly endorse college proposals to eliminate underutilized undergraduate degrees. Specifically, we concur with recommendations to eliminate International Agriculture, Farm and Ranch Management, General Agriculture, and Insect Biology.

The college plan addresses a variety of mechanisms for better integrating the disciplinary content of these independent degrees into a smaller array of existing college degree programs.

**Agricultural and Applied Economics.** We approve of the department's initiatives to revitalize SENR, provide leadership in agricultural community development and explore its role in tourism and hospitality management. See "University-Wide Issues" for more detailed comments about future relations with the College of Business.

**Animal Science.** The livestock teaching and research facilities and the Hansen Livestock Teaching Arena are valuable institutional resources that should be more fully utilized and publicized. Department personnel should provide strong leadership to the State's agricultural industry in the areas of food product safety and value-added development. Also, Animal Science should actively participate in the broader Life Sciences discussions.

**Family and Consumer Sciences.** To focus for distinction, the department must rethink its scope. We have asked the department to consider how it might better focus its energy and resources in a smaller number of programs.

We believe such an effort will make selected programs even stronger by bringing together faculty from across the University with similar disciplinary interests. In addition to teaching responsibility, all ten faculty in the department also have research or extension responsibilities. In total, the department's instructional responsibility amounts to only 5.5 full-time faculty and approximately 1.5 academic professionals. The department currently offers four undergraduate degree programs: Child and Family Studies, Human Nutrition and Food/Dietetics, Textiles and Merchandising, and Family and Consumer Sciences (which incorporates the Education degree). The department also offers the M.S. degree in Family and Consumer Sciences and participates in the interdisciplinary M.S. degree in Food Science and Human Nutrition. Despite the hard work and dedication of its faculty, we think this large an array of degree programs is overly ambitious for a department of this size.

The University possesses great strength in the area of Child and Family Studies, with faculty in the Departments of Family and Consumer Sciences, Psychology and in the College of Education. Similarly, in the area of Human Nutrition and Foods, Department of Family and Consumer Sciences faculty represent the institutional core with additional nutrition and food expertise in the Health Sciences and Animal Sciences. The draft academic plan has proposed these areas as institutional foci.

The issue of consolidation and degree program elimination cannot be set aside. The Department of Family and Consumer Sciences argues for their "integrative" role, yet their undergraduate degree programs have in common only two courses as well as six credits selected from a limited number of courses across the departmental specializations. The college plan calls for elimination of all but the B.S. degree in Family and Consumer Science. We endorse the college plan in this regard, and suggest that the faculty of Family and Consumer Sciences focus on one integrative degree program.

Finally, the College of Education has proposed elimination of the Family and Consumer Sciences Education degree program as one for which demand does not justify continuation. We support this decision.

The first draft of the Academic Plan questioned whether we might realize greater strength by relocating the faculty of the Department of Family and Consumer Sciences in other departments with related disciplinary interests. This suggestion was secondary to concerns about the scope of the department's programs and redundancies that might exist in other colleges or departments. Moreover, we must acknowledge the value of the Cooperative Extension programs and related commitments within the department. There is nothing in our proposal that calls for a diminution of services provided to the people of Wyoming. Our overriding intent is to deliver the highest quality education possible, both on campus and through the Cooperative Extension Service. We endorse

the department's decision to focus its teaching, research, and extension activities upon one of the three areas of emphasis identified in the College of Agriculture's Strategic Plan, "Family and Community Resources."

66. Action Item: One degree in "Family and Consumer Sciences" should be retained at both the undergraduate and graduate levels, excepting the interdisciplinary M.S. program in Food Science and Human Nutrition. These degrees should emphasize integrative coursework and abide by the credit ceilings to be established as a result of other actions called for by this plan.

67. Action Item: Cross-college taskforces in Child and Family Studies and in Human Nutrition and Foods should develop collaborative efforts to strengthen their respective instruction, research and outreach efforts. Interdisciplinary programs in Child Development and Human Nutrition should be explored. The Child and Family Studies effort should include an assessment and analysis of their diverse university services and child-care facilities.

**Molecular Biology.** This is unquestionably one of UW's strongest academic departments. The faculty should assume a leadership role in university-wide discussions to reorganize the life sciences (see "University-Wide Issues").

**Plant Sciences.** The department's academic plan describes its leadership in the Agroecology undergraduate program and in sustainable cropping systems research and outreach. In particular, the department has the opportunity to stimulate growth of niche agriculture production systems (for example, a specialized seed industry). The Department of Plant Sciences should be an active participant in the discussions relative to life sciences at both graduate and undergraduate levels.

**Renewable Resources.** The department is well positioned to provide significant leadership for an interdisciplinary degree in the School of Environment and Natural Resources. More specifically, the department has valuable contributions to make in the areas of natural resources management, land reclamation, insect biology, rangeland management, water, wildlife and soils. Greater collaboration with Plant Science and departments in Arts and Sciences would strengthen the Agroecology and Rangeland Ecology and Watershed Management degrees. Faculty with interests in soil science should explore collaborative links with Civil Engineering, Geology and Mathematics. Also, Renewable Resources should actively participate in the broader Life Sciences discussions.

68. Action Item: In collaboration with college administration, identify the department's curricular *contributions* to an SENR undergraduate degree.

69. Action Item: With the assistance of the Vice President for Research, the department should pursue discussion with the Office of Surface Mining to support development of a Reclamation Center.

**Veterinary Science.** The departmental academic plan has addressed thoughtful approaches for new funding to support its outreach-service activities in animal disease diagnostics, including its fee structures, funding alignments, and the level of service desired by its constituents. The department should pursue its focus for distinction in wildlife-livestock disease research and outreach. This unit should also participate in the broader life-sciences discussions.

### COLLEGE OF ARTS AND SCIENCES

The varied roles and responsibilities of the College of Arts and Sciences are unlike any other college. In addition to providing a multitude of undergraduate and graduate majors, the college also provides the core areas of study upon which other colleges rely. Mathematics, Physics, and Chemistry, for example, provide core instruction needed by the College of Engineering. Similarly, Botany and Zoology provide much of the scientific basis upon which the College of Agriculture depends. About half of all undergraduate credits earned at the University are in the College of Arts and Sciences.

Consistent with the Boyer Commission on Educating Undergraduates in Research Universities, the college has developed convincing rationale for emphasizing inquiry-based experiences for undergraduates. We encourage individual units within the college to develop concrete plans for advancing this idea.

Earlier comments about college interdisciplinary proposals criticized the lack of specificity in dedicating 25 percent of new hires to interdisciplinary appointments. While the revised draft is considerably more focused, we are still troubled by the desire to leave unspecified future interdisciplinary allocations. While there is no doubt a need to retain flexibility in program decision-making, we think the future success of the college in securing interdisciplinary positions will be enhanced to the extent that its requests are grounded in intellectual themes documented in the college and University plans.

Cross-college interdisciplinary proposals, particularly those related to the College of Education, are worthy of specific comment. A substantial number of A&S departments and programs have made commitments to link Arts and Sciences disciplinary content with the pedagogical focus of the College of Education. This commitment is firmly established in four goals for cross-college cooperation. We endorse these goals and will look for implementation of more specific cooperative proposals.

**Administration of Justice.** In recent years, the Administration of Justice Program has distinguished itself by serving an important state need both on and off campus. Its



enrollments are substantial, due in part to quality teaching and excellent student internships. Designation as a department rather than a program appears to have minimal substantive impact on the degree program. We leave this proposal to the determination of the dean and program director.

**African-American Studies.** The African American Studies Program (AAST), despite its relatively small size, has an important and significant role to play on the UW campus. Under the leadership of a new program director, we believe the program is appropriately targeting its near-term sights on the development and delivery of a high-quality undergraduate minor. The proposal to coordinate delivery of several core undergraduate courses between AAST, American Indian Studies (AIST) and Chicano Studies (CHST) seems appropriate and judicious, given resource constraints and modest enrollments in these programs. Similarly, the proposal to use the self-designed major for students wishing for more in-depth exposure to African and African American Studies seems quite appropriate.

**American Studies.** Not unlike some of the other programs within Arts and Sciences, American Studies is a hybrid, drawing its instructional resources in part from faculty in other departments and in part from one of its three permanent faculty. Unlike any other program at UW, it derives core funding from the Coe and Kuehn endowments. As noted in the program plan, American Studies has served as a popular location for incoming international exchange students, many of whom spend one or more semesters at UW in completing degree requirements for home institutions. This international connection has resulted in a number of exchange agreements with other institutions.

70. Action Item: Coordinated and focused efforts among the International Programs Office, the International Studies Program, and the American Studies Program should be encouraged as one means of enhancing international experiences and programs.

In concert with other interdisciplinary A&S programs, the American Studies Program has endorsed development of an Alliance on Interdisciplinary and Multicultural Studies (AIMS). We encourage these alliances, but we question program implementation that seems to rely more on serendipity than on planned growth and development in focused areas of identifiable need. On the other hand, linkages between the American Heritage Center (AHC), and the Department of History in the development of a museum studies curriculum seems to hold promise and has the potential to make better use of institutional resources like the AHC.

**American Indian Studies.** Despite its lack of dedicated faculty positions (beyond that of the Director), AIST has done a commendable job of soliciting participation and support by UW and adjunct appointments. Since its inception, the program has established strong connections with the American Indian community and has operated effectively in coordinating the Wind River Initiative. Recruiting and retaining American Indian students remains a core concern of the institution. The Wind River Initiative

Committee and the High Plains American Indian Research Institute (HPAIRI) Steering Committee jointly propose that the HPAIRI become a recognized component of the Wind River Initiative. In cooperation with the Wind River Initiative, the HPAIRI will initiate research and service activities on and for the Wind River Indian Reservation. While the Wind River Initiative will continue to represent the University of Wyoming in formal discussions and relationships with the Reservation, the HPAIRI will become the "action arm" of the Initiative. Some issues associated with Native Americans may also be appropriate for discussion within a proposed Public Affairs Research Center, as discussed in Section VI.

**Anthropology.** The Anthropology Department is one upon which the college will focus for distinction. Overall, the department has attracted a substantial number of undergraduate and graduate majors, and it continues to produce substantial credit hours through service instruction. The recent creation of the Frison Institute, coupled with the department's established reputation in paleoindian archaeology, have created a niche for this program in both Wyoming and the region.

71. Action Item: We support the development of a Ph.D. program with emphasis in paleoindian archaeology.

**Art.** Like the Department of Theatre and Dance, the Art Department made a strategic decision several years ago to phase out its graduate programs in favor of a stronger emphasis on the undergraduate experience. This strategy has paid significant dividends. Willingness to explore the potential of a museum studies program seems to position the department well with respect to other academic units, and we encourage this initiative. Even more important, however, is the department's commitment to a stronger relationship with the Art Museum. The Department of Art seriously needs better exhibition space. It should aggressively explore opportunities for enhancing curricular and programmatic opportunities with the Art Museum.

72. Action Item: The Vice President for Academic Affairs will appoint an ad hoc committee to review and advise the university on short- and long-term opportunities to better integrate the Art Museum with on-campus art education.

**Botany.** The Botany Department is one of the best small departments at the University, recognized for its leadership in the biological sciences and its strong research faculty. Clearly, if either the SENR or the Life Sciences interdisciplinary proposals are to succeed, they will require active participation by the Botany faculty.

**Chemistry.** More than a decade ago, UW made a strong institutional commitment to invest in Chemistry as a flagship Ph.D.-granting department. Today, Chemistry stands as proof that we can focus for distinction and that making judicious investments in academic disciplines can produce nationally prominent academic departments.

**Chicano Studies.** Implemented in the Fall of 1998, Chicano Studies is the newest of the A&S interdisciplinary programs. The program is currently considering the development of a minor. We encourage Chicano Studies in this effort and recommend cooperation and integration with other programs whenever appropriate. Particularly noteworthy are the prospects for closer instructional connections between Chicano Studies, Women's Studies, and American Studies.

**Communication and Mass Media.**

73. Action Item: We endorse the college decision to eliminate the Broadcasting option within the Department of Communication and Mass Media. The college has never had the resources to adequately support this program, and it is unlikely that it will in the future. Courses are taught largely by non-academic staff, and the curriculum is hampered by inadequate equipment. The department should, however, continue to explore curricular opportunities with the Department of Theatre and Dance. The fine arts addition should provide opportunity for cooperation with some Communication and Mass Media faculty.

**Computer Science.** The Computer Science department plan proposes implementation of a professional M.S. degree in Computer Science. Regardless of the possibility of administrative reorganization with the College of Engineering, this is a proposal that warrants further consideration.

The professional M.S. in Computer Science Program would be an intensive course of study that will lead to an advanced degree in computer science in a single calendar year. The program will initially be offered on campus, with a limited enrollment. We ultimately envision taking courses off campus to industry in Wyoming and the Front Range, both through on-site delivery and electronic distance learning.

This program is consistent with the University's goal of helping to develop infrastructure for economic development in the state. It will provide a fast track to technology employment for Wyoming residents and UW students, who will be able to earn an advanced degree in a calendar year. It should help attract new students in technology areas from the region to UW. Finally, it should help to attract high-technology industry to Wyoming by increasing our visibility in computer science.

**English.** Supported by both the department and college plans, the English faculty have already begun a process of curricular reform. Coupled with potential changes to the USP requirements, the impact of this curricular reform remains uncertain but promising. We encourage the department in this effort and remain hopeful that curricular change will produce greater instructional flexibility within this core discipline.

**Geography and Recreation.** The department provides core instruction in geographic information sciences (GIS) and has been the historic provider of campus GIS education. The department and the college identify GIS as an important instructional focus for the future. We concur and urge the department to invest increased effort and faculty

resources in this important and growing area. The department should explore the strengthening of connections with the Spatial Data and Visualization Center (SDVC).

74. Action Item: The college plan also calls for the elimination of one of the department's three Master's programs. Elimination of the M.S. in Recreation and Park Administration makes sense as this program lacks critical mass within the faculty and produces very few graduates. We do, however, encourage the involvement of interested faculty in discussions regarding interdisciplinary efforts in community-based tourism. Like the M.S. in Recreation and Park Administration, the Master of Planning (M.P.) program has inadequate faculty support and marginal degree production. While it is academically sound to eliminate this degree based on past performance and curricular depth, reconceived as an interdisciplinary program with connections to agricultural economics and the Master of Public Administration (M.P.A.) degree in Political Science, this degree could provide an important service role to community and regional economic development efforts. We endorse the A&S College Plan which calls for an integration of the M.P. and M.P.A. degrees with coursework and expertise available through the ENR program.

**Geology and Geophysics.** Clearly one of the finest academic programs at the university, the department is uniquely positioned to provide leadership in energy and earth science initiatives. College proposals to strengthen the geophysics component of the department are well conceived and worthy of sustained institutional support. In light of programmatic reductions in physics, it seems both timely and appropriate to emphasize geophysics and to look for future faculty connections between the geophysics curriculum and changes within the Department of Physics & Astronomy. In particular, we encourage exploration of interdisciplinary connections between the Institute for Energy Research, the Institute for Scientific Computation (in Mathematics) and the Spatial Data and Visualization Center (in the Research Office).

More than a year ago, after considerable effort and deliberation, the department proposed a new undergraduate degree strongly focused on the earth sciences. This proposal is advanced with prior approval by the department, the dean, and the Academic Planning Committee.

75. Action Item: We endorse the proposal to initiate a new degree program: B.A. in Geology and Earth Sciences. The department should coordinate this degree development, over the long-term, with faculty interested in Earth System Science.

76. Action Item: The Vice President for Research, the Dean of Arts and Sciences, and the Department Head of Geology and Geophysics will proceed with transferring the Institute for Energy Research to the Department of Geology and Geophysics.

**History.** The History Department establishes as its top priority the hiring of new faculty in areas which will contribute to internationalizing their curriculum. We endorse this priority as well as their commitment to enhanced library services, outreach, and

curricular modernization. Current cooperation between the History Department and the American Heritage Center is commendable, particularly discussions regarding the development of museum-related coursework and a master's program in Public History.

**International Studies.** The program plan for International Studies identifies the need to consider the contribution of new faculty hires to international education on the UW campus. We strongly endorse this recommendation and believe that the college plan similarly identifies international and interdisciplinary faculty hiring as a college priority. Enhanced study-abroad programs and student internship proposals are also consistent with college and University emphasis on better internationalizing the undergraduate experience. Further, the proposal regarding regional concentrations is consistent with the recent review of the International Programs Office. Elsewhere in this document, we encourage stronger connections between the International Studies Program and other international units.

**Mathematics.** The Mathematics Department has had historical strengths in applied mathematics, algebra and combinatorics, and analysis. The department also has several faculty members with professional interests in mathematics education. We support this distribution of focus areas and the department's commitment to maintaining critical research mass in them. But consistent with the University's broad priorities, we also urge the department to maintain genuine strength in applications. Of special importance are areas with potential for enhanced collaboration with Geology and Geophysics, Engineering, and Renewable Resources. We see continued commitment to this direction as crucial to the department's research stature.

The department should approach expansion of its focus areas cautiously. For example, although it may be tempting to develop programs in actuarial science, the department should carefully assess its faculty resources to avoid diluting existing strengths. Emphasis on a small, well-defined collection of foci is more likely to promote successful hiring, research, and graduate degree production.

The department should strongly consider closer cooperation with Statistics, especially in its graduate program. We do not have in mind a "forced merger." However, both departments have small doctoral programs that produce highly marketable Ph.D.s but receive scant national recognition. By combining efforts judiciously, the doctoral programs might earn more appropriate recognition.

77. Action Item: The Math Department should begin discussions with the Department of Statistics on structuring a graduate group in Mathematics and Statistics, in which the two departments can offer degrees based on some common core courses and requirements but allow adequate room for specialization.

Closer cooperation with Statistics is also a possible vehicle for enhancing both the Statistics Department's access to large-scale computation and the interdisciplinary funding stream needed to support the Institute for Scientific Computation. To the extent

possible, we also encourage cooperation of the Institute with SDVC to avoid unnecessary duplication of effort.

**Modern and Classical Languages.** Questions posed by Academic Affairs about the organizational structure of the Department of Modern and Classical Languages generated substantial campus-wide discussion. The current college plan calls for the consolidation of the individual language degrees into one degree, allowing emphases in particular languages. Prompted by concerns about instructional efficiencies and imbalances in student demand between different languages, the current proposal should be implemented only if it will lead to efficiencies in upper-level coursework. If degree consolidation will accomplish nothing more than altering institutional statistical summaries, we see no compelling reason for it. The University invests substantially in Modern and Classical Languages. Last year, the University budget authorized \$700,752 for the Department of Modern and Classical Languages, not including graduate assistant funding or part-time instructional dollars funded annually by the A&S Dean's Office. There were approximately 14 full-time faculty. During this period, the department graduated 12 undergraduates and five graduate students. German and Russian graduated one baccalaureate student each. There were no graduate degrees in either Russian or French. Attempts by the department to offer instruction in Chinese and Japanese have generally resulted in low enrollments, especially as students progress beyond the elementary level.

The suggestion that the University consider offering fewer languages elicited considerable commentary. For many, second languages provide a fundamental component of the undergraduate experience and enhance the value of a student's degree. For others, a diverse offering of foreign languages is essential to the internationalization of the undergraduate curriculum. Still others point out the important role that UW plays in the preparation of secondary school teachers in the foreign languages and the possible expansion of that responsibility for the preparation of elementary school teachers.

We are convinced that the University must maintain a core inventory of instruction in several foreign languages. However, we are also convinced that current approaches need rethinking and that new efforts must be undertaken to build the enrollments that will support healthy and vibrant programs of language instruction.

78. Action Item: The University administration will open discussions with the Superintendent of Public Instruction and other officials concerning the future of elementary and secondary foreign language instruction in the state. Such discussions should consider a University admission standard relating to foreign language competency.

79. Action Item: The Department of Modern and Classical Languages will develop a recruitment plan to enhance enrollments. Such a plan should consider enhanced relationships with Wyoming's high schools and community colleges, the development of pre-college summer language institutes, and other activities. The plan should also examine the potential consequences of modifying the A&S extended core, as described below. The University is prepared to allocate a reasonable level of resources to support thoughtful initiatives.

80. Action Item: The College of Arts and Sciences will reconsider the structure of foreign language requirements in its extended core, so that fewer resources will be expended providing introductory-level instruction to a broad base of students. Rather, effort should be directed toward ensuring that more students (but not necessarily all) have incentives to take intermediate and even advanced courses in foreign languages. This is particularly relevant for students enrolled in majors where foreign-language competency and an understanding of international cultures are central to the subject matter or provide expanded career options. Examples of majors that currently require at least one course in foreign languages beyond the introductory level include Anthropology (12 hours), English (12 hours), History (12 hours), and International Studies (18 hours). It is reasonable to ask whether these requirements should be expanded and extended to other disciplines, including American Studies, Communication, Journalism, Philosophy, Political Science, Psychology, and Sociology. In such cases, programs should be structured to facilitate study abroad.

81. Action Item: Faculty in cognate "feeder" departments serve as an important source of students interested in advanced language study. The Dean of Arts and Sciences will consider such issues as faculty position requests are prepared.

82. Action Item: As noted in the Strategic Plan for International Programs, the University should increase global linkages with a limited number of foreign institutions. These institutions should have expertise complementary to that of specific UW colleges, the goals of the University, and the needs of the state. Such linkages should enhance our ability to provide meaningful study-abroad opportunities for students. A comprehensive plan for the development of such linkages should be prepared by the Director of International Programs in close consultation with the faculty of International Studies and the Department of Modern and Classical Languages. The establishment of stronger linkages with China and Japan must give due attention to the resources required to sustain introductory, intermediate, and advanced instruction in those languages.

**Music.** Located in the Fine Arts Division of the College of Arts and Sciences, the Music Department is the only fine arts program that still maintains graduate degree programs. The department also operates an impressive array of on- and off-campus performances and concerts, and is actively involved in service activities with high schools throughout Wyoming.

**Philosophy.** Historically the smallest department in Arts and Sciences, Philosophy has been reduced even further in size via recent faculty departures. The significance of the subject matter notwithstanding, there still remains the question of how small a department can become before its faculty and students would benefit from integration with other units. The college plan promotes the merger of the Philosophy Department with the Religious Studies Program. After USP and the A&S extended core requirements are re-examined, we believe it would be appropriate to re-visit issues about the department's sustainability.

**Physics & Astronomy.** Numerous external reviews, including the most recent review of the Wyoming Infrared Observatory (WIRO) at Jelm Mountain, have questioned the sustainability of the full array of programs in Physics & Astronomy. The College of Arts and Sciences has systematically reduced resources to this department in response to various exigencies over the past decade. As a consequence of these actions and other factors, conservative estimates suggest that it will take hundreds of thousands of dollars to maintain—current programs and restore them to positions of academic distinction, even considering foreseeable levels of external funding. Once done, it would require hundreds of thousands of dollars per year in addition to maintain these programs and the required facilities. In the absence of any effective plan, these costs drain resources from other core programs at the University, largely for the benefit of a small and recently dwindling set of students.

We propose a plan that will strengthen the department's most important contributions to UW. Central among these is its role in undergraduate education. High-quality physics instruction is essential to students in engineering, science, and many other majors. Notable among this last group are prospective secondary teachers, who are required to take physics for high-school science certification.

In focusing the department's energies, we must recognize some constraints. The University simply cannot siphon teaching or research resources away from other units to support a costly observatory on Jelm Mountain. WIRO must become a self-sustaining facility with a clear scientific future, or else it must be terminated. Similarly, we must consider our commitments to graduate training in Physics & Astronomy as secondary to the department's central contributions, especially in light of the long-range commitments that we make when a Ph.D. student begins his or her training.

83. Action Item: Under the leadership of the department head and the Dean of Arts and Sciences, the Department of Physics & Astronomy will develop and implement plans to provide a viable, well-subscribed undergraduate degree in Physics and appropriate service courses. The department's proposal to develop undergraduate options with an interdisciplinary, professional focus appears to be a reasonable starting point. Allocation of future resources to the department will depend on its performance in this central task.



84. Action Item: The department will begin discussions with appropriate astronomical research communities to develop strategies for the future management of WIRO. These strategies should include the possible establishment of a research consortium, a focused plan for acquiring near-term external funding, and a plan to ensure the scientific viability of the facility beyond the fundable life span of the existing medium-aperture telescope. The department will submit a management plan for WIRO to the Dean of Arts and Sciences, the Vice President for Academic Affairs, and the Vice President for Research by March 1, 2000.

85. Action Item: A moratorium will be placed on new admissions to M.S. and Ph.D. programs in Physics & Astronomy. During this moratorium, the department can dedicate the resources, including external funding as appropriate, that are necessary to allow current graduate students to complete their programs. Final decisions about the elimination of graduate programs in the department will hinge on a review of the department's progress in the two previous action items. This review will occur no later than Spring 2001.

**Political Science.** The MPA program has long been a mainstay for graduate off-campus degree production and, despite recent declines in enrollment, it seems likely that recommended changes in off-campus degree administration can elevate this program to its previous prominence.

The college academic plan calls for combining the two graduate degree programs in Political Science. We concur with a thorough department assessment of the costs and benefits associated with such change.

**Psychology.** As at other universities, the Psychology program at UW enjoys substantial enrollments. Most notable, however, is the department's Ph.D. program in Clinical Psychology. A recent program review by the American Psychological Association (APA) endorsed the current academic program and suggested the need for enhanced instructional resources. We concur. The clinical psychology Ph.D. has an established national reputation and a long and distinguished history. Consistent with the college plan, we support careful investment and nurturing of this small but high-quality academic program.

**Religious Studies.** The college plan calls for the merger of the Religious Studies Program with the Department of Philosophy. This is worth implementing if it will attract more students to the department.

**Sociology.** This department currently comprises fourteen tenured or tenure-track faculty and two temporary academic professionals. Several Sociology faculty share appointments and responsibilities with interdisciplinary programs. Connections to American Indian Studies, International Studies, Women's Studies, Religious Studies, and African American Studies speak to the departments' strong interdisciplinary commitment. These interdisciplinary commitments and connections represent a significant source of strength and should be continued. Also commendable are recent

curricular innovations, including capstone courses and limited-enrollment courses focused on improving freshman success. The department's commitment to outreach, the College of Education, and in a very significant way to internationalizing the undergraduate experience, warrants recognition and support.

**Statistics.** The Statistics Department has a strong historical emphasis on applications and, concomitantly, an unusual number of faculty who hold joint appointments. The department's recent program review endorsed this focus and urged the continued operation of the Statistics Consulting Center.

Although the college plan argues against merging Statistics with Mathematics, the formation of a graduate group in Mathematics and Statistics is consistent with the practices of several of UW's regional competitors, including University of Colorado at Boulder, Montana State University, University of New Mexico, and University of Nebraska at Lincoln. Closer links between the two departments, especially at the graduate level, could help broaden graduate assistants' teaching experiences, enhance graduate recruiting for both units, and strengthen overall doctoral productivity in the mathematical sciences.

**Theatre and Dance.** The Theatre and Dance Department has distinguished itself as a quality undergraduate program with a first-rate, student-oriented curriculum. Its theatre productions are widely acclaimed and have resulted in substantial regional and national recognition. The department's success can be attributed to its focused curriculum and its decision to concentrate its limited faculty resources on an undergraduate curriculum. The department's proposal to explore a musical theatre option seems well conceived but at this juncture does not seem to have developed comparable support from the Department of Music. Similarly, the potential connection between this proposal and the Wyoming Centennial Singers cannot be ignored, but it has not been explored.

**Women's Studies.** First established as an interdisciplinary degree program in 1981, this program has seen enrollment growth from 22 students to more than 350 students each semester. Currently comprising 1.75 tenured or tenure-track positions, Women's Studies, like other A&S interdisciplinary programs, draws its instructional core from other academic units. Like other academic units, reliance on the budgetary and instructional needs of other disciplines presents complex and often difficult staffing issues. In this regard, we encourage the program to focus its attention on building enrollments in the undergraduate major. While commendable in purpose and intent, redirecting attention to graduate efforts and research in gender equity is not appropriate until the undergraduate program is more broadly established.

**Zoology & Physiology.** This is the largest life science department on campus in terms of number of graduate and undergraduate students. We concur with the college plan calling for enhancement of the Wildlife and Fisheries Biology and Management major through targeting the next departmental faculty hires toward this program. This program is essential for Wyoming and the state's environmental and economic health. Members

of the Zoology & Physiology Department should actively participate in the campus-wide discussions about reorganizing the life sciences.

### COLLEGE OF BUSINESS

The College of Business (COB) offers a well-enrolled set of standard undergraduate business majors, the M.B.A., the M.S. in both Finance and Economics, and the Ph.D. in Economics. In preparation for the upcoming self-study to renew the college's AACSB (the international association for management education accreditation), the college has undertaken substantial planning activities that provide guidance for future college directions.

The college plan retains as the most important aspect of its mission the delivery of broad, high-quality business and economics education to Wyoming residents and others. Central to the emphasis on its teaching and learning mission is the college's movement toward broad diversity in faculty work assignments and flexibility of those assignments over time.

86. Action Item: The innovative faculty profile approach developed by the Department of Management and Marketing faculty should be implemented college-wide, as suggested in the college plan, including a teaching norm of nine credits per semester. The dean should work with the Vice President for Academic Affairs to determine the factors (e.g., extramural funding, research productivity, exceptional service assignments, tenure status, and graduate research supervision) for which this norm may be adjusted.

87. Action Item: The college should retain its professional student advising center, and the dean should develop an accepted set of faculty responsibilities, in addition to career advising, that the faculty assume in the absence of academic advising.

88. Action Item: The future of the college's Business Assistance Center should be determined in close consultation with the Vice President for Research. Should the center be retained in some configuration, it should do so with extramural funding.

Business College faculty should exploit opportunities to engage more actively in some of the recruitment and retention activities recommended university-wide. Faculty involvement in Freshman Interest Groups, direct student recruitment, undergraduate research opportunities, and teaching of University Studies courses (should those be retained) are just examples of these activities.

The college implemented a 2.5 GPA requirement for admission to upper-division business courses some 10 years ago as part of an effort to control the number of majors in the college. Since that time, the number of majors has dropped by more than a third, and the University has itself adopted admissions standards.

89. Action Item: As suggested in the college plan, the College should drop the 2.5 GPA requirement in favor of more meaningful performance standards for individual lower-division courses. Performance standards should be documented in the college plan.

The college plan suggests that a number of new programmatic “niches” may make sense and could build on current faculty strengths. The college must, however, narrow the scope of those new areas. The college’s task force report on this topic strongly emphasizes the hazards of selecting too many new areas to target for competitive advantage. The college plan suggests a student survey to determine current student interest in the niche areas. While this survey could inform the niche decisions, the college should recognize that current students were likely attracted by current programs and niches; the establishment or strengthening of areas of competitive advantage will attract students with different goals. Hiring of new faculty with interdisciplinary strengths in selected niche areas should be a high priority for the college in building these areas.

The College of Business leads the University in its outcomes assessment plans and efforts. COB should continue this leadership role, particularly in reviewing the outcomes of its curricular innovations.

### **Accounting.**

90. Action Item: The Accounting Department should proceed with the implementation of its new curriculum and should reinstate the idle M.S. in Accounting degree in response to the new Wyoming CPA exam requirements. Since 150 hours will be required for students who sit for the exam, and since neighboring universities are not offering the M.S., the reinstatement of the M.S. makes sense from a student recruitment standpoint.

91. Action Item: There appear to be interdisciplinary opportunities in reinstating the Management Information Systems program in the form of a COB minor with existing faculty resources. In the near term, the department should work with the dean and colleagues in Management and Marketing and Computer Science in developing this initiative. Resource commitments for department MIS efforts will rely on participation in broader campus-wide discussions (See Section V).

**Economics and Finance.** Focusing and strengthening the ENR emphasis of the Economics Ph.D. is essential to the maintenance of this doctoral program. While some closely allied areas are certainly acceptable and necessary for scholarly breadth, the department should build aggressively in the ENR area. Faculty recruitment efforts should seek candidates with ENR credentials and an appropriate second area of expertise. This is not a suggestion to weaken core economics instruction but rather a caution against dilution of emphasis. Extramural funding will be essential in building this program, as will the recruitment of and successful completion of an increased number of

Ph.D.s. Actual target numbers of students will be guided by the proposed graduate enrollment plan, discussed in Section VII.

The A&S Economics degree has seen some resurgence of student interest, in no small part due to increased department focus on undergraduate instruction. There are two different baccalaureate programs (College of Business Economics and College of Arts and Sciences Economics). The economics requirements are the same for the two degrees, but college requirements change from “common body of knowledge” in Business to the “extended core” of the College of Arts and Sciences. One degree focuses on economics and the business environment, and one focuses on economics within a liberal arts environment. We should maintain both opportunities.

92. Action Item: The Department of Economics and Finance should assume leadership responsibility for both degree options (including student supervision), with appropriate close coordination with the College of Arts and Sciences. The two colleges and the department should consider degree titling to consolidate undergraduate economics.

The Finance faculty should build an emphasis on Banking and Financial Services. Because of the area’s strong external ties to Wyoming bankers and the need to develop extramural funding, this is the one area in the college where the development of an institute might be sensible. The college plan indicates that this initiative can be undertaken with present resources, and the faculty should work closely with the dean and the Vice Presidents for Academic Affairs and Research as they proceed.

Recent attention and successful faculty hires have greatly strengthened both Finance and Accounting. The academic connection between these areas is increasingly evident, and the synergies developing between these degree programs warrant recognition and support.

93. Action Item: A recent increase in the number and quality of students completing the M.S. in Finance, combined with the very recent successes in building the Finance faculty, justify the continuation of the M.S. Finance in the short run. The department should develop performance measures and targets against which performance can be assessed. Continued program support should be assessed against performance (e.g. number of majors, credit production, and number of degrees granted).

## Management and Marketing.

**94. Action Item: The Management and Marketing Department should proceed with the suggested elimination of the Small Business Management major and should replace it with either a major or a minor in entrepreneurship. Response to this change should guide any request to reallocate faculty resources to this area. See the more complete discussion of entrepreneurship in Section VI, "Providing Leadership for Wyoming's Future: Economic Development."**

The suggestion in the college plan that a major and an institute in Human Resource Management be considered should be delayed until the niche areas more central to the University's mission and the planning themes are thoroughly explored and either implemented or dismissed. This recommendation should be edited from the college plan.

The department should continue its leadership in curriculum development and innovation, and should participate in the MIS initiative with other College of Business departments and the College of Arts and Sciences. It should also continue its leadership role in the Saratov State initiatives, as long as that relationship is beneficial to UW faculty and students as well as to Saratov State.

Should the state-wide needs assessment demonstrate that there is adequate demand for the Business Administration major in the UW outreach program, the department should examine the feasibility of offering that program state-wide.

## COLLEGE OF EDUCATION

The college plan devotes considerable attention to faculty workloads and instructional resources, showing how thinly stretched resources are within the college and suggesting that there is no opportunity for curricular expansion. We emphatically concur. This is the fundamental challenge facing the college. Given the unlikelihood of dramatic increases in college resources, the situation in the college will only worsen if the scope of college offerings is not carefully circumscribed.

As commendable as it is to aspire to deliver a comprehensive array of educational programs, this desire is seriously jeopardizing the quality of all programs within the college. In addressing how the college will focus for distinction, the School-University Partnership is identified as an area of educational distinction. While this program certainly warrants distinction, it does not address the narrowing of scope that is needed.

We endorse many of the proposals contained in the college plan, with the proviso that they should become more concrete action items. The following is a summary of our recommendations.

95. Action Item: Eliminate the undergraduate programs in Industrial Technology, Business Education, and Family and Consumer Science Education. Where appropriate, pursue discussions and articulation with Casper College and other community colleges that may be interested in absorbing some of the curricula related to these areas.

96. Action Item: Eliminate graduate specialties in Educational Psychology, Library Media, and Applied Science and Technology.

97. Action Item: Combine the off-campus programs that now offer the Master's in Teaching and Learning and the Teacher as Leader program.

98. Action Item: Consistent with a focus on Wyoming's schools, focus the college's doctoral offerings on three programs: Educational Leadership, Counselor Education, and Curriculum and Instruction. At this time, we are uncertain in our recommendations about the doctoral program in Adult Learning and Technology. Our primary purpose in raising issues about doctoral programs is to continue the overall goal of reducing breadth and emphasizing distinction. The college and department argue convincingly that the adult learner and instructional technology are areas of core college responsibility. Currently, the program graduates between three and five doctoral students per year. During the past six years, it has produced 22 doctoral students. We defer judgment on the elimination of this doctoral program pending the review of doctoral programs identified elsewhere in this document. In addition, we will ask the College of Education to coordinate graduate requirements and course offerings to increase, where possible, the number of courses common to all programs, and to report on progress. The college should accept no additional cohort groups into the Utah adult education doctoral program. The Utah program should be closed with completion of the current cohort.

99. Action Item: Begin articulation with departments in other colleges to make the "fast-track" concept a reality for more UW graduates outside of the college. Initiate discussions with the Professional Teaching Standards Board to identify areas where "fast-track" certification of post-baccalaureate students is most feasible.

In addition to these specific action items, we urge the college to explore avenues for deeper articulation with in-service teachers. For example, are there possibilities for bringing Wyoming high-school teachers to UW as "faculty interns," to participate in curricular design and instruction in such entry-level courses as English 1010 (English Composition), Math 1400 (College Algebra), Math 1405 (Trigonometry), and various modern language courses? Initiatives of this type clearly require cooperation among the University, the Wyoming Department of Education, and individual school districts. But we suggest that the College of Education play a leadership role in expanding UW's connections to the public schools.

UW began its academic planning process at the same time that the College of Education reorganized from two divisions into six academic departments. For this

reason, the college developed one comprehensive college plan and department-level plans for units that had only begun to organize. When academic position control is centralized, position requests must be accompanied by supporting documentation from individual department and college plans.

100. Action Item: All departments in the College of Education will produce department plans by December 31, 1999.

### COLLEGE OF ENGINEERING

The College of Engineering is home to departments of Atmospheric Science, Chemical and Petroleum Engineering, Civil and Architectural Engineering, Electrical Engineering, and Mechanical Engineering. All except Atmospheric Science offer at least one baccalaureate degree, and all offer M.S. and Ph.D. programs as well as active research agendas. The college plan identifies specific scholarly foci for each department:

- \* Atmospheric Science proposes refocusing its emphasis from weather forecasting to earth-atmosphere interactions.
- \* Chemical and Petroleum Engineering proposes continuing its emphases in areas related to Wyoming's extractive industries, namely coal-related research, petroleum recovery, and trona production.
- \* Civil and Architectural Engineering proposes narrowing its foci to structures, transportation, geotechnical engineering, and environmental and water resources.
- \* Electrical Engineering proposes narrowing its foci to control and optimization and computer systems.
- \* Mechanical Engineering proposes continuing its emphases on the mechanics of composite materials and fluid mechanics.

Overall, we endorse these decisions.

There are five college-wide issues that warrant specific action. The first is the productivity of Ph.D. programs, which the college addresses in its plan.

101. Action Item: Pursuant to the graduate enrollment plan in Section VII, Engineering should implement its plan to increase Ph.D. production. We believe that it is possible to attain the goal of at least 15 Ph.D. graduates per year within four years.

Achieving this goal may require the strategic use of state-funded graduate assistantships, in concert with more aggressive use of external funding to support research assistants. College faculty might consider whether revenues from outreach activities, discussed below, could be used to help fund doctoral students. Cooperative



research-funding arrangements with the Western Research Institute can provide additional avenues along these lines, and we urge exploration of these possibilities.

A second issue is that of faculty teaching responsibilities.

102. Action Item: The college should develop a mechanism for assigning faculty job descriptions differentially, using its Faculty Professional Development Database. The scheme should accommodate meritorious performance evaluations both for faculty who are research-active and for those who elect to replace some of their research responsibilities with teaching.

A third issue concerns the college's recruitment and retention efforts.

103. Action Item: The college should continue its articulation with Wyoming community colleges, possibly coordinating with the mathematical sciences in this effort. In addition, such initiatives as engineering floors in dormitories and "power groups" are worth continuing and enhancing.

The fourth college-wide issue involves outreach and economic development.

104. Action Item: The college should increase its regional and national visibility in offering continuing professional development courses, in an appropriate suite of formats. In addition, the college should study the feasibility of offering a Master's in Engineering degree at least regionally, via distance-learning technologies. A needs assessment to determine interest within Wyoming of an interdisciplinary Master's program in Engineering Management should also be conducted.

Finally, the college plan identifies logistical difficulties in establishing an "Engineering Business" course.

105. Action Item: Following recommendations by its National Advisory Board, the College should pursue discussions with the College of Business to establish an "Engineering Business" course for its undergraduate majors.

There are also several department-specific issues that we recommend addressing.

**Atmospheric Science.** We cautiously endorse the plan to explore various undergraduate options in this department, including an undergraduate major in earth system science. Earth system science refers to the earth, the oceans, the biosphere and the atmosphere. The disciplines of geology, geophysics, geochemistry, geography, hydrology, atmospheric science, environmental chemistry, soil science, ecology, segments of zoology and botany, and many others could be considered its parts.

Bringing these disciplines together would enable new undergraduate degrees to be offered and could open new horizons in research and graduate education. The critical issues are student demand, the job market for majors, and considerations of the interface between this proposal and the SENR.

106. Action Item: The department should coordinate exploration of an Earth System Science program with the Vice President for Academic Affairs, the Vice President for Research, and all interested parties, particularly including the Department of Geology and Geophysics, as they begin implementation of a new B.A. degree in Geology and Earth Sciences.

**Chemical and Petroleum Engineering.** The plan to combine the Petroleum and Chemical Engineering graduate degrees into a single, broader program in Chemical Engineering appears to make sense, both in light of hiring patterns in the petroleum industry and in view of the size of this department. The department also should take part in discussions about an energy science research center.

**Civil and Architectural Engineering.** This department's plan to narrow its foci, as indicated above, appears to be consistent both with student demand and with available and foreseeable faculty resources. The data clearly indicate a productive and expanding program in Architectural Engineering that needs some attention and resources.

107. Action Item: The department should develop specific hiring strategies to bolster its strength in water resources, especially to promote synergies with faculty in Chemical and Petroleum Engineering, Renewable Resources, and Mathematics.

**Electrical Engineering.** This department's commitment to three foci is commendable, as is their commitment to increased external funding. These three areas of focus will include:

- \* control of electromechanical systems and electrical energy
- \* electronics (to include radio frequency applications, power electronics, VLSI design)
- \* communications, signal processing, and networks.

We urge the department and the college to explore the organizational and curricular issues related to Computer Science, as discussed under "University-Wide Issues."

**Mechanical Engineering.** It is our sense that, with the recent hiring of promising faculty in fluid mechanics, the most critical remaining issue for Mechanical Engineering will be maintaining its strength in composite material mechanics. We encourage the department to develop a focused hiring plan that will help smooth the inevitable transitions that will occur as senior faculty in this focus area retire.

## COLLEGE OF HEALTH SCIENCES

The College of Health Sciences offers thirteen degree programs plus the Washington, Wyoming, Alaska, Montana & Idaho Medical Education Program (WWAMI), and supports two family practice centers. The recent college program review provides ample direction for the future, including the need for most of the departments to significantly increase research productivity and external funding for research.

108. Action Item: The College of Health Sciences should develop targeted strategies for increasing extramural funding in the college. Support for their efforts should be indexed against performance objectives.

Because of the cost of health-related programs, considerable caution should be observed in undertaking new initiatives. The college plan suggests a large number of new degree programs to be considered in the coming decade, including physical and occupational therapy, therapeutic recreation, health administration, pharmaceutical sciences, psychiatric nursing, and an unspecified interdisciplinary Ph.D. program. We urge a more measured approach.

Professional workforce projections prepared by the Western Interstate Commission for Higher Education (WICHE) confirm strong national, regional, and state projections for physical and occupational therapists, at least through the year 2005. In Wyoming, the need for occupational therapists is expected to increase by 39 percent by the end of the decade, while the corresponding increase for physical therapists will be 48 percent. The number of expected annual openings for physical therapists within the state is especially impressive (20), double those expected for occupational therapists (10).

For reasons cited above, and because some of the investments already made to support the WWAMI medical training program may serve the training of physical or occupational therapists, we propose a feasibility and cost study in these two areas. We do not endorse additional degree-program initiatives at this time.

**Dental Hygiene.** Dental Hygiene is a program that is not central to the mission of the College of Health Sciences, but its administration imposes few fiscal obligations upon the college. The Outreach School administers the program in cooperation with Sheridan College and pays all faculty salaries and other expenses; the college approves all academic appointments and all courses.

From a purely financial standpoint, the Dental Hygiene program produces a profit for the Outreach School. From an educational standpoint, its record of producing bachelor-prepared dental hygienists has been unimpressive, with only 24 graduates in 24 years. It appears that degree production could be enhanced significantly if the senior year of coursework can be delivered through UW outreach rather than principally on the Laramie campus.

**109. Action Item: The Vice President for Academic Affairs will meet with the Dean of Outreach and the Dean of the College to see what steps can be taken to increase the production of bachelor's degrees in Dental Hygiene.**

**Human Medicine.** Both of the Family Practice Residency Centers (Cheyenne and Casper) provide important services to Wyoming by helping to recruit family practitioners to the state and through the direct provision of high-quality medical care. Approximately 43 percent of the residents graduating from the three-year residency program in Cheyenne have remained in Wyoming as practitioners; the comparable figure for Casper is 40 percent. More than 30,000 patient-visits were recorded at the two centers last year.

Despite their value, the two family practice centers are operating at a considerable deficit, currently exceeding \$635,000 annually for both. All available reserves have been exhausted.

For reasons related to the history of the centers and federal Medicare regulations, Wyoming is one of just two states that does not qualify for the federal payments that support graduate medical education. Patient loads have declined over the past several years in both clinics. The declines are attributable in part to increases in the number of family practice physicians in Cheyenne and Casper and in part to the emergence of managed care alternatives. Together, the lack of federal funding, the decline in patient loads, and the continuing burden of serving uninsured patients make the financial situation dire.

The President and other members of the administration met with the CEOs of the United Medical Center in Cheyenne and the Wyoming Medical Center in Casper to see whether a restructuring of the financial arrangements governing the direct and indirect costs of the medical residency programs might qualify Wyoming for federal graduate medical education monies. Results from that discussion did not produce any promising options. Currently, an attempt is being made to qualify the Casper program as a Federally Qualified Health Center (FQHC) that should be eligible for funding aimed at the treatment of Medicare and Medicaid patients.

Without additional funds to support the two programs, one or both of the Family Practice Centers may be subject to closure.

### **Medical Technology.**

Although its academic plan calls for expanding the annual enrollment of new students, Medical Technology has constrained enrollment and limited instructional resources; only one of its three academic professionals holds faculty rank. The program has experienced logistical constraints associated with student placement during the fourth (clinical) year. It ranks low in nearly all Office of Institutional Analysis (OIA) ratios, particularly those that compare cost to instructional output (e.g. FTE students and credits produced). We are certainly willing to cooperate in any efforts by

other institutions to establish such programs in the region. However, the existing program at UW simply cannot be considered a high priority given other critical needs within the college and given the limited market for medical technologists in Wyoming.

110. Action Item: The Medical Technology program should be closed for new admissions and phased out. The Administration is directed to explore fourth-year exchange programs for UW students at existing regional programs where baccalaureate degrees in Medical Technology are offered.

**Nursing.** The School of Nursing provides baccalaureate and graduate education that has well served the state, and has been nationally accredited since 1952. As the only master's degree program in rural health nursing recognized by WICHE, the rural emphasis of this program should continue to be a focus. Additionally, the School of Nursing stands as a model other units should emulate in its use of assessment practices to enhance the quality of teaching and learning. The school's academic plan identifies continued attention to student recruitment and retention as an appropriate priority. Further attention to strengthening its cross-college links in both interdisciplinary research and teaching, and for refining scholarship to incorporate the scholarship of teaching, practice and research are encouraged.

Opportunities for student practice with Student Affairs units (e.g. Student Health or apartments in Housing) are worthy of continued exploration, but the Student Health Service should continue under its current Student Affairs administrative arrangement.

**Pharmacy.** UW's School of Pharmacy has experienced a considerable level of success. According to the School's academic plan, it enjoys an application-to-enrollment ratio of 6.5 exceeded by only three other schools in the country. It attracts students from 21 states and is the first choice of Wyoming residents who wish to study in this field; in 1997, only three residents chose to enroll in pharmacy programs elsewhere. Despite a hefty tuition differential, the School is obviously able to attract students. And, as a result of the differential, the School currently earns a large fraction of its annual operating budget from tuition revenues.

111. Action Item: The Vice President for Academic Affairs will be charged by the President to meet with the Dean of Health Sciences and the Dean of Pharmacy to devise a plan to increase funding for the School of Pharmacy. This may include consideration of a strategy that will produce financial self-sufficiency for the school.

**Physical and Health Education.** This department offers a limited but well-balanced set of majors, all but one of which (Health Education) are well-enrolled. A master's program in Physical and Health Education maintains reasonable enrollment and a steady stream of graduates. We have questions about the large number of credits required in the major programs, but these are not unique to this department or college (see Section IV, "Rethinking and Revising the Curriculum") and will be addressed in campus-wide curriculum reviews. The Health Education major has had only two

graduates over the past five years, but its incremental costs are uncertain given the apparent overlap in course requirements with the two other well-subscribed majors sponsored by the department (Physical Education Teaching and Exercise & Sport Science). Low enrollments in this degree program have been noted previously, and the department is engaged in an active recruiting plan to increase the number of Health Education majors by 40 over a four-year period. At the two-year mark, the department is close to meeting its interim goals and appears on track to reach its goal by the 2000-2001 academic year. Additionally, legislatively directed health education standards are likely to increase course enrollments by elementary education majors.

112. Action Item: After appropriate time to achieve its stated enrollment goals, the Vice President for Academic Affairs, in concert with the dean, department head, and faculty of the department, should assess the continuing viability of the Health Education major. Under no circumstances should any application for, or consideration of, program certification proceed until this review is completed.

As noted above, it also appears that the Department of Physical and Health Education could become an important part of a reorganized program relating to human nutrition.

**Social Work.** The Master's in Social Work (M.S.W.) program has failed to achieve targeted enrollment figures, but there is every reason to believe that its high tuition is a substantial reason for the under-enrollment problem.

113. Action Item: In the context of a planned campus-wide reassessment of tuition levels and tuition differentials, the President will recommend to the Trustees that a lower tuition differential *for the M.S.W.* be applied for a two-year period to assess the impacts of tuition on enrollment. The dean of the college and the chair of Social Work will develop a revised budget to ensure the continuing quality of the program.

Speech Pathology and Audiology. Arguably one of the best clinical programs at the University, the department offers a preprofessional Bachelor of Science in Speech-Language-Hearing Sciences and a nationally accredited M.S. degree in audiology and speech-language pathology. With six FTE tenure-track positions and 3.5 FTE academic professional positions, the department has nearly doubled its enrollments in the last decade. Similar in demand to Pharmacy, the graduate program has five applicants for every student accepted. The Department's outreach and community service responsibilities are extensive, including one of the more successful distance-learning programs, cleft palate and deaf-blind teams, speech-language hearing clinics, and services to various Wyoming communities via practicum students. This is a small but strong department that should receive encouragement and support.

**Wyoming Institute for Disabilities (WIND).** In its brief four-year history, WIND has established itself as a major recipient of external funding, allowing it to pursue its university- and state-wide interdisciplinary mission of teaching, research and service in

the area of disabilities and disabilities studies. Because of its interdisciplinary focus, WIND works closely with faculty in every college and in many disciplines across campus. WIND provides coursework on disabilities, creates opportunities for funded faculty research, funds graduate assistantships and undergraduate traineeships, and delivers community services to every county in Wyoming. WIND projects assist communities to become more supportive of the disabled while providing employment assistance to persons with disabilities.

114. Action Item: Subject to appropriate college and University support and approval, we endorse the notion of a dedicated WIND course prefix. Cross listing with academic units would enhance WIND's connection with the academic fabric of the University and would facilitate the WIND trainee programs.

### **COLLEGE OF LAW**

One of the nation's smallest law schools, the UW College of Law supports Wyoming's legal community through its legal clinics, continuing education programs, and in-state placement of approximately 70 percent of its graduates. The college's academic plan provides an overview of its current status and identifies a number of reasonable goals that mesh well with institutional priorities, particularly that of reducing first-year class sizes.

Repeatedly, the college has identified its faculty size as a significant constraint on any attempt to focus for distinction. Simply put, one or two strategic hires in a focused area of the law would not develop sufficient "critical mass" for the college to emphasize a distinct legal focus. Additionally, the relatively small student body argues against a significant number of highly specialized courses in favor of more help in broadly applicable areas of the law. The college's position on focusing for distinction is that the addition of generalist legal faculty would better serve the college by allowing coverage of legal topics that faculty resources currently preclude. While this position seems reasonable, we encourage the college to consider areas of growth that will advance the University's intellectual themes.

## ACADEMIC PROGRAMS

**Center for the Advancement of Ethics.** The Center for the Advancement of Ethics was established in 1995, in response to a challenge grant. Despite the hard work of the center's director, it was not possible for the University to raise the matching commitment needed to sustain the center. For the last year, an Interim Director has managed the center. Since the center's establishment, a number of ethics courses and modules within courses have been developed. The center's existence during the past few years helped to enhance dialog about ethical issues on campus. We encourage interested faculty to continue pursuing these worthwhile efforts. However, this is not a priority for the allocation of institutional resources.

115. Action Item: Eliminate the Center for the Advancement of Ethics.

**Center for Teaching Excellence.** The Center for Teaching Excellence (CTE) was established in response to recommendations made during the 1990 NCA reaccreditation visit. Since its inception, CTE has developed an impressive record of involving faculty in workshops, seminars, and informal programs to elevate the status of teaching at UW. The CTE plays an important role in instructional design and building partnerships between faculty and the services and people available to assist with teaching improvement and enhancement. Recently, it has begun to reach out to community college faculty. Despite CTE's accomplishments, some criticize it for not effectively reaching more faculty members and for siphoning resources that could more directly help educational programs. There is some truth to the claims of both critics and supporters. We propose three changes.

116. Action Item: The instructional designer positions, located in the Outreach School, should be consolidated into the CTE to establish a central resource for electronic course development. This move is consistent with the recommendations made in the 1997-1998 Outreach Plan. Implementation of this action item should take place when the future role and mission of the CTE are more firmly established and a permanent director of the CTE is in place.

117. Action Item: Student support services, such as the Writing Center, should be expanded to include walk-in labs for oral communication and basic quantitative reasoning, in cooperation with the Math Department's graduate assistant-staffed Math Lab. Academic and Student Affairs should begin to study whether it is possible to co-locate all such services in a single Student Academic Success Center. If these services are co-located, expanded, and require more space, location outside of Coe Library should be considered.

118. Action Item: In cooperation with Academic Affairs, the CTE should take a leadership role in providing faculty development opportunities in all aspects of student outcomes assessment.



Honors Program. The University Honors Program is extremely successful and well managed; it plays a significant role in recruiting and retaining some of our very best students. Student participation in the Honors Program has more than doubled over the past decade, and the responsibilities assumed by the program have grown markedly with little or no corresponding increase in support. The establishment of an Honors living-learning center in the Bunkhouse (a former athletic dormitory) is in progress. This Honors House will serve as a visible “home” for the program in addition to the Honors floors currently in White Hall and Honors Freshman Interest Group. The program is important in student recruitment and retention and has earned increased institutional support.

**Support for Data Analysis.** Like most research institutions, the University of Wyoming has a variety of units that support research requiring the application of statistical techniques or the analysis and presentation of data. These units typically call upon faculty expertise with assistance from undergraduate and graduate students. At UW, the units include the Spatial Data and Visualization Center (Office of Research), the Statistics Consulting Center (Department of Statistics), the Survey Research Center (College of Arts and Sciences), and our membership in the Inter-University Consortium for Political and Social Research (ICPSR). There may be administrative or programmatic advantages to bringing these units and activities together, either under a shared administrative structure or in a shared location or both. A key question is whether such reorganization might help stimulate awareness and utilization of these services by external or internal clients.

119. Action Item: In consultation with the affected units, the Vice President for Research will appoint a task force to examine the potential advantages and disadvantages of bringing the aforementioned units under a shared administrative organization or moved to a common location.

## **VI. PROVIDING LEADERSHIP FOR WYOMING'S FUTURE**

The University has a unique role in improving the quality of life in Wyoming. We contribute in three distinct areas:

1. As a leading catalyst and essential component of the state's infrastructure for economic development;
2. As the state's primary resource for objective policy-making advice at all levels of government;
3. As one of the state's most significant centers for cultural resources.

We propose initiatives in each of these areas.

### **ECONOMIC DEVELOPMENT**

States with healthy economies have strong and productive research universities. As Wyoming's only four-year university, UW has a singular responsibility to conduct research and provide technical support to advance the state's economic development. The University's research mission creates jobs in Wyoming that would not otherwise exist. The jobs arise both through the acquisition of extramural funding for research (approaching \$40 million per year) and through spin-offs in key technological fields.

Business and industrial productivity depend directly upon access to the research and development of the University. The land-grant mission of the University recognizes this special role in helping the agricultural community to become more efficient, productive, and profitable through the Cooperative Extension Service and the Agricultural Experiment Stations. The lessons of extension are applicable in almost any field of economic endeavor. In addition, commercialization of University-based research, either through licensing of products or the development of spin-off companies, strengthens Wyoming's economy by stimulating job creation and purchasing power.

Through its recently released Strategic Plan, the Wyoming Business Council (WBC) has identified manufacturing and technology as "core competencies" to be developed for future economic growth in this state. Development of these new areas should complement existing strength in the "foundation industries" of tourism, agriculture, minerals, and energy. Among WBC's targeted industries are nearly 20 industry groups, including advanced composites and precision metals, communications and information management, transportation equipment and services, arts and entertainment production, and agricultural biotechnology. The Council also proposes a high priority for the support of entrepreneurial efforts within the state. Supporting these efforts are a host of University-affiliated agencies, including the Small Business Development Centers (SBDCs), the Small Business Innovation Research (SBIR) program, and the Mid-America Manufacturing Technology Center (MAMTC), or through the commercialization of products from University-based research.

The College of Engineering plan called for an Associate Dean for Research and Economic Development. We believe all colleges have responsibility in these areas of critical importance to the State of Wyoming. We are concerned that Engineering's proposal could lead to a proliferation of uncoordinated college-level economic development initiatives and result in unnecessary administrative growth. We are not, however, opposed to the notion that increased focus on Wyoming research and development will require careful coordination and oversight.

120. Action Item: The Vice President for Research will discuss with the Dean of the College of Business the possible transfer of the Business Assistance Center to the University of Wyoming Research Products Center, a unit responsible for exporting University-based technology into the private sector.

121. Action Item: The President will charge the Vice President for Research, in consultation with the academic deans, to develop a strategy to support the University's initiatives in economic development and the commercialization of science and technology.

The University must play the strongest possible role in economic development. It is critical that we maintain a first-rate research infrastructure capable of supporting Wyoming's "core competencies" and "foundation industries." At the critical intersection of the University's emerging strengths and the state's growth potential are three areas of opportunity.

122. Action Item: We must develop a faculty hiring strategy to strengthen the University's capacity in three broadly defined areas: 1) natural resource development and enhancement (including cost-effective and environmentally sound energy generation and distribution); 2) materials and composites; 3) computational science and information technology.

**Energy Development.** Wyoming is rich in natural resources, especially coal, natural gas and petroleum. Currently, the Institute for Energy Research (IER) and the Enhanced Oil Recovery Institute support petroleum and natural gas research. Research centered in the Department of Chemical and Petroleum Engineering includes a productive Coal Utilization Group, with expertise in fluidized bed combustion, coal utilization, and coalbed methane production.

123. Action Item: The Vice President for Research, in consultation with affected parties, will examine mechanisms for further strengthening UW's presence in energy-related research.

**UW's GIS Capacity.** Geographic Information Sciences (GIS), including computer-assisted mapping, processing remotely sensed data, geographic positioning systems, geographic information systems, and automated mapping, are cross-cutting technologies affecting many disciplines. Such technologies are useful in resource exploration and mapping, social system analysis, marketing and business development, agribusiness, and public administration. UW is positioned to take advantage of these technologies through its Spatial Data and Visualization Center (SDVC).

124. Action Item: Using SDVC as a focal point, the University should expand GIS capacities and competencies throughout campus. The aims of this effort should be to provide critically needed coursework for undergraduate and graduate students and to serve as a resource for businesses and government agencies.

**The Mission of Cooperative Extension.** The Cooperative Extension Service is the only UW program with a physical presence in each of Wyoming's 23 counties. As such, it is uniquely positioned to link the resources available at the University with the needs of local communities. The Strategic Plan of the College of Agriculture, approved in 1998, and this year's college plan reaffirm the traditional role of Cooperative Extension to support agriculture and natural resources; individual, family, and community resources; and 4-H and youth development.

125. Action Item: The scope of the Cooperative Extension Service needs to be broadened to encompass agricultural research and practice; community and economic development; business recruitment and marketing; and natural resource development and environmental assessment. As indicated in the College of Agriculture's Strategic Plan, this expansion of mission and visibility in local communities will require greater involvement of local clientele in planning, implementing, evaluating, and supporting Extension programs.

**UW's Involvement in Internet II.** The University of Wyoming has been selected as one of 125 Internet II schools nationwide. Through a grant from the National Science Foundation (NSF), we have gained a connection to the vBNS, a low latency (fast), high-bandwidth (large-capacity) network. This connection allows scientists to communicate with colleagues world-wide via data, audio and video transmissions. It also provides access to the NSF supercomputing centers in San Diego, CA and Champaign-Urbana, IL. Researchers with expertise in bioinformatics, computational geology, computer science (including high-speed networking and complex visualization), electrical engineering, and atmospheric sciences now enjoy a degree of access to information

unimaginable a decade ago. Industries with research and development needs that are dependent upon this type of access can now consider Wyoming as a prospective home.

The University can take other steps to support state economic development:

126. Action Item: We endorse the establishment of the Wyoming Research Products Center, a technology-transfer initiative funded as a pilot project of the Wyoming Business Council.

127. Action Item: We must re-establish a close working relationship between the University and the Western Research Institute. Among the possibilities are a common infrastructure for technology transfer and business incubation and shared staffing (including joint faculty appointments) in critical fields, such as environmental remediation, fossil fuels, and asphalt research.

128. Action Item: In partnership with the Laramie Economic Development Corporation and the City of Laramie, UW should develop a prospectus for a Wyoming Research Park near the campus.

129. Action Item: The Vice President for Research will establish and chair the UW Economic Development Roundtable. The core function of the group will be to coordinate economic development at UW.

Finally, two specific academic program initiatives can help to support state economic development:

**Wyoming's Tourism and Hospitality Industry.** Representatives of Wyoming's hospitality industry have indicated their interest in an undergraduate program to support hotels, motels, restaurants, and other tourism-related businesses. In its plan, the Department of Family and Consumer Sciences recommends development of an interdisciplinary program in Hospitality and Food Service Management, but neither the demand nor the appropriate coursework for such a program are yet known. There are also important questions concerning relationships to feeder programs in the community colleges (most notably, the Hospitality Management program at Sheridan College) and vocational programs in the secondary schools.

130. Action Item: The University will assess the demand and potential costs associated with an undergraduate program in tourism and hospitality.

A second initiative relates to small businesses. The College of Business offers a major in Small Business Management, but it has attracted few students.

131. Action Item: With the goal of keeping more UW graduates employed within the state, the College of Business should eliminate the under-subscribed undergraduate major in Small Business Management and replace it with a new program (major or minor) in entrepreneurship.

### UW AS A STATE POLICY RESOURCE

UW may be alone in its capacity to serve as the state's neutral forum, where difficult policy issues can be debated and consensus can be developed. As the state's greatest single resource for scientific information, the University is also uniquely positioned to support state decision-makers in areas where scientific judgments are relevant. The same is true in the social sciences, where the University can help address issues as diverse as child and family development, community planning, criminal justice, business and tax policy, education, employment practices, public administration, rural health-care delivery, welfare reform, and tourism.

To be sure, there are political risks associated with assuming a more central role in difficult and often intractable public-policy issues. The University invites criticism from all points along the political spectrum when faculty members issue professional judgments that offend one political interest or another. However, the needs of the state override the political liabilities. Moreover, careful attention to objectivity and credibility can minimize these concerns.

Two possible avenues exist for strengthening our capacity in this arena.

**Institute for Environment and Natural Resources (IENR).** Founded in 1993, IENR's mission is "to advance effective decision-making on environmental and natural-resource issues by promoting and assisting collaborative, informed approaches that sustain both the economy and the environment." The Institute strives to empower citizens and communities with scientific, technical, and socioeconomic information that can help solve thorny environmental and natural resource issues. The University has an international board composed of leaders from business, industry, environmental organizations, education, and government, under the chairmanship of William D. Ruckelshaus. Its work has attracted attention from the White House Council of Environmental Quality and the Western Governor's Association. With more than 200 faculty members possessing relevant expertise, few other programs possess such broad potential.

132. Action Item: Strengthen the Institute for Environment and Natural Resources by building closer ties with the School for Environment and Natural Resources, and engage more faculty and students in the work of the Institute. Particular attention will be given to enhancing UW's reputation as a center for excellence in the study of environment and natural resource issues.

**Statewide Public Affairs Research Center.** The state and the University have much to gain from a multidisciplinary public affairs research center directed at bringing the University's resources and expertise to bear on public affairs. To be successful, such a center would have to be responsive to the needs of state and local decision-makers and serve a range of policy-related functions. For example, it could serve as an information clearinghouse, synthesize existing research, and perhaps offer educational seminars and training. Close consultation with the governor and the executive branch of state government and the Legislative Service Office will be required to avoid duplicating existing activities and to determine where economies might be realized by combining independent agency research activities under the umbrella of a University center.

133. Action Item: The Vice President for Research will initiate planning for the establishment of a Statewide Public Affairs Research Center.

**Leadership Development.** Political perspectives in Wyoming tend to be highly polarized, with opposing perspectives often engaged in media battles or, even worse, locked in litigation. Useful, problem-solving dialogue seems to be the exception rather than the rule. Part of this contentious culture is explained by the difficulty of the issues. But a contributing factor is the absence of any organization that can help create personal contacts that help lower the traditional barriers to resolution. Through the work of IENR, the proposed Statewide Public Affairs Research Center, or the creation of a Statewide Leadership Development Program, the University can play a leading role in preparing the state's future leaders.

134. Action Item: The University will participate actively in efforts to prepare emerging leaders at the state and local levels to resolve Wyoming's most difficult public policy challenges.

## **ENHANCE AND PROTECT WYOMING'S CULTURAL RESOURCES**

UW serves as a cornerstone to Wyoming's cultural and historic resources. Notwithstanding world-class facilities in Cody (the Buffalo Bill Historical Center) and Jackson (the National Museum of Wildlife Art), and superb collections in Casper (the Nicholaysen Art Museum) and Cheyenne (the new Wyoming State Museum), the University maintains the largest and most significant array of cultural resources in the state. They include Wyoming's most comprehensive library collection, high-quality academic programs in the fine and performing arts, a nationally recognized concert

series, a first-rate Art Museum, and historically-significant collections in Anthropology, Geology, and the American Heritage Center (AHC). In cooperation with the Wyoming Department of Parks and Cultural Resources and in partnership with federal and state agencies, the University houses the Office of the Wyoming State Archeologist and the Wyoming Cultural Records Office, which serves as the repository of all cultural artifacts 50 years or older unearthed in the State.

Supplementing these core programs and services are cultural outreach programs (including the widely acclaimed Centennial Singers), summer music and ballet camps, and arts partnerships with schools and community colleges.

The scope and quality of our programs easily exceed what one would expect for a university of our size, with clear positive implications for helping us to recruit students, hire and retain excellent academic personnel and staff, and generate public support for the University.

It is important that we preserve these state resources and, if possible, strengthen the University's role as one of the state's core cultural repositories. This role is particularly important in Wyoming because relatively few communities in the state possess the population or the resources to support locally based cultural programs of their own. In addition, because of travel and weather concerns, it is difficult for many Wyoming citizens to visit the University. Where possible, we should take our music, dance, and theatre productions "on the road" and share our cultural collections similarly (as we do, for instance, with the Ann Simpson Art Mobile).

The University's potential in this area seems constrained only by four major factors: 1) the inadequacy of budget support for core activities and outreach efforts; 2) inefficiencies brought about by a fragmented organization; 3) long-term space issues; and 4) the transitional challenges of adapting to digital and telecommunications technology.

**Technology Issues.** Technology is an increasingly important consideration for our collections, including acquisitions, cataloging, bibliographic and metadata access, and electronic dissemination of information to the Laramie campus and to remote sites. Technology allows us to exploit the full potential of the intellectual contents of our collections. The University must stay abreast of appropriate hardware and software advancements. The aging on-line library system (CARL) has been in use since 1989 and is not a fully integrated system. Only the Libraries and the AHC use CARL. The Law Library and other library and cultural resources are either stand-alone systems or are not taking full advantage of available technologies.



135. Action Item: The Vice President for Academic Affairs will work with the Libraries, the American Heritage Center, the Law Library and other collections to install a campus-wide, electronic, integrated information access system for our library, archives and museums.

136. Action Item: The Vice President for Academic Affairs will fund a one-year trial program to determine the viability and costs of a change from paper to electronic journals.

**Budget Issues.** Budget reductions have curtailed our ability to support activities on campus and to sustain broad cultural initiatives throughout the state. For instance, both the University Art Museum and the American Heritage Center were moved to the Centennial Complex without adequate state budgets to support them. In the case of the Art Museum, the result has been excessive pressure upon the National Advisory Board to raise private funding to support day-to-day activities. In the case of the American Heritage Center, the shift in emphasis over the past eight years from building the collections to enhancing public and student accessibility has had similar effects. Campus-wide budget cuts that threatened the very existence of Cultural Programs were offset by budget reallocation by the College of Arts and Sciences. Similarly, touring programs by the Departments of Music and Theatre and Dance, through the Office of Cultural Outreach, have been significantly reduced. There are undoubtedly other budgetary issues related to cultural resources, but the ones listed strike us as the most significant.

137. Action Item: The Vice President for Academic Affairs will determine the appropriate level of budgetary support required for the Art Museum and the American Heritage Center. The Vice President's report should include management issues related to privately funded endowments.

138. Action Item: The Vice President for Academic Affairs will, through reallocation, dedicate an appropriate level of funding for touring performances in music, dance, and theatre, through the Office of Cultural Outreach.

139. Action Item: A minor but worthy budgetary and organizational issue that deserves examination is the administrative location of the student touring group, the Centennial Singers. This group appears to operate out of the UW Alumni Association and is not closely linked to any of our performance programs in either Music or Theatre and Dance. If the College of Arts and Sciences decides that the proposed interdisciplinary program in Musical Theatre is worth pursuing, re-examination of the role and home of Centennial Singers would be appropriate.

**Organizational Issues.** The way in which we manage our libraries, collections, and information services has significant implications, both educationally and financially. The on-going costs associated with facilities and services are significant, representing a

commitment of resources that is independent of student or public demand. We must seek efficiencies wherever possible.

140. Action Item: Establish one administrative organization to encompass the Libraries and AHC.

141. Action Item: The Vice President for Academic Affairs will assess the costs and benefits associated with realigning other collection programs (e.g. University Art Museum, departmental public collections) and various other information-related services under the new organization that will encompass the Libraries and the AHC. Such an assessment should include close consultation with the unit directors, the Faculty Senate, and the Staff Senate. This action should yield no net increase in administrators.

In recent months there has been much focused discussion about the financial challenges facing our library collections. As the Library begins to develop its planning document, we must focus on improving our standing as a Carnegie Research II institution. Specifically, we suggest setting an institutional goal of membership in the Association of Research Libraries (ARL). Membership in this association, open by invitation from ARL, was considered 10 years ago, but we have since slipped in our progress towards this goal. If the University wishes to strengthen its research status, it has to invest in its research collections in the libraries.

142. Action Item: The Director of Libraries will consider the feasibility of membership in the Association of Research Libraries.

**Space Issues.** Although space issues lie outside the scope of this plan, the University recognizes the need for long-term space planning with respect to its libraries, the Centennial Complex, and its various collections. Apart from the amount of space available to house collections, the multiple locations currently used for our various public (non-research) collections (including Anthropology and Geology) discourage public awareness, utilization, and enjoyment.

143. Action Item: Following completion of the Academic Plan, the President and the Vice President for Academic Affairs will analyze the long-term space needs of the University's libraries and cultural collections. The analysis of library space should consider an expansion of Coe Library and the construction of a remote storage facility for lower-use materials. Such an analysis should also consider expansion of the Centennial Complex to incorporate as many of the University's natural history (non-research) collections as possible to enhance public access and enjoyment.

144. Action Item: The Vice President for Academic Affairs will charge the American Heritage Center to determine appropriate space-saving strategies, including reconsideration of the scope of the University's archival and record-retention schedules. Such discussions should consider the deaccession of collections that are outside the AHC collection policy. The principal collection and preservation endeavors of the Center should focus on the history of Wyoming and the West.

## VII. MAKING IT HAPPEN

We devote this final section to an array of mechanisms that will help UW manage the changes that lie ahead.

Among the plans that arouse the most vigorous debate are those that involve elimination, reconfiguration, or reduction of programs. The University's rules governing such decisions arguably suffer from two flaws: they can be cumbersome and they mandate broadly representative faculty involvement only under narrow conditions. For example, UniReg 43, which codifies procedures for program elimination, requires only consultation between the Vice President for Academic Affairs and the responsible dean, except in circumstances that involve termination of faculty positions.

We invite the Faculty Senate to recommend a redrafting of UniReg 43 to allow for broader faculty involvement in future modifications to academic programs. Any such redrafting should accommodate the following principles:

- \* Procedures for modifying programs should be appropriately streamlined, so that decisions can be implemented in a timely fashion.
- \* The breadth of faculty involvement should be commensurate with the impact that the modifications will have on faculty positions, on curricula in other units, and on the University's mission.
- \* The process should recognize the statutory mandate that the President and Trustees have for effective management and guidance of the University.

### CENTRALIZED POSITION CONTROL

Since 76 percent of our legislatively-appropriated budget is dedicated to salaries and employer-paid benefits, no sensible strategy of budget management can ignore the allocation, funding, and use of full-time, part-time, temporary, and permanent personnel positions. We must have a position-control process that directs resources to the areas of highest priority and greatest need. We must also find a predictable way to fund salary increases, academic promotions, and staff reclassifications. It is also important that we develop mechanisms, such as phased retirement options, to reduce institutional personnel costs.

The University has long operated under a decentralized management philosophy. Academic departments and deans enjoyed freedom to manage constraints imposed by shrinking resources and inflation. To be sure, some degree of decentralization is necessary in an institution as large and complex as UW. But decisions that locally maximize (or protect) benefits to individual colleges or departments do not always yield globally optimal results for the University.

Centralizing the control of instructional positions offers a way to optimize institution-wide benefits. Done properly, centralized position control can allow UW to

direct resources toward areas of institutional and academic priority while preserving mechanisms for meeting local needs. Centralized position control will also help to dedicate resources to hiring a more diverse faculty and staff. Part of the framework for this approach is already in place via the existing position authorization process, which requires colleges to gain central authorization before faculty searches can begin.

145. Action Item: Academic Affairs will expand the existing position authorization process to accommodate the central allocation of faculty, academic professional, and graduate assistant positions. A specific proposal for a position-management system will be developed in full consultation with UW administrators, faculty, representative faculty committees, academic professionals, and students. We envision that the academic deans will contribute significantly to all discussions regarding position allocation and that their input will be thoughtfully and thoroughly considered in all allocation decisions. In addition to soliciting advice from the academic deans, the President and Vice President for Academic Affairs will also seek counsel from the Vice President for Research, the Dean of the Outreach School, and the Dean of the Graduate School.

### WORKLOAD POLICY

Since its development in 1992, UW's Teaching, Research, and Service (TRS) policy has required countless hours to administer but has yielded no improvement in the quality of the University. TRS cannot replace sound evaluative judgments of good department heads and deans. At its worst, TRS has been used to validate the status quo under the premise that we could monitor and measure faculty contributions to four significant digits. At its best, it has been a benign annoyance. As a management tool, it sets the institution's sight on formulaic minima rather than on distinction and accomplishment in teaching, research, and service.

146. Action Item: Academic Affairs, working with the Faculty Senate, will eliminate the TRS from UW's working regulations (UniReg 807). Academic Affairs will also discourage the use of similar formula-driven schemes in performance appraisals and will develop post-tenure review policies that prohibit the use of such devices in initiating comprehensive performance reviews.

147. Action Item: Develop, for all faculty and academic professionals, effective job descriptions that recognize differential work responsibilities, especially in departments where the current uniform responsibilities have weak justification.

### GAINSHARING

Originally designed to guide the movement of financial resources, gainsharing was a formula that allocated dollars in direct response to changes in credit production and numbers of majors. Although never fully implemented, gainsharing has affected UW's management approach for several years despite serious and fundamental flaws.

The formula never worked, and from its inception we were forced to import rational judgment into the process. While it is important to redistribute institutional resources across colleges in concert with changing instructional pressures and performance, the most distinctive products of gainsharing have been anxiety about the adverse consequences of cooperating and proliferation of courses for both USP and the majors. Instead of focusing faculty attention on building interdisciplinary bridges, the “profit-center” philosophy focused attention on numerical indices of individual unit performance.

148. Action Item: Immediately end gainsharing.

### **RETIREMENT-RECALL**

The UW Board of Trustees at their March, 1999 meeting endorsed consideration of a faculty retirement-recall proposal.

149. Action Item: Provide the Faculty Senate with the draft retirement-recall proposal and return to the Board of Trustees with a formal proposal as soon as practicable.

### **FACULTY AND STAFF SALARY POLICIES**

UW’s supplemental pay policies are established by the Trustees and can be found in two regulations. Trustees’ Regulation VII C indicates that faculty members on academic-year appointments may earn up to a third of their academic-year salaries in supplemental pay during the summer. Unireg 40 establishes rules for supplemental pay for teaching through the Outreach School, which can occur during the academic year or during the summer. Faculty and academic professionals can receive, per credit, 2.5 percent of the average salary within their rank for off-campus instruction, for up to one three-credit course per semester. There is no provision for faculty members to earn supplemental pay for research during the academic year.

Existing policy arguably acts as disincentive for research-active faculty members who have the capacity to generate research funds and associated salaries in excess of the 33.3- percent summer cap. It fails to place research on equal footing with teaching, and it encourages the most research-active faculty to earn additional pay as consultants, even when the University might benefit financially from other arrangements. We need a straightforward, unified policy on supplemental pay. The policy should recognize research and instruction on an equal footing, and it should provide more incentive than current rules allow.

Given below-market faculty salaries, we should re-examine a wide range of compensation-related policies, including those involving summer school and off-campus teaching. In some cases, such as summer school, we not only have widely divergent pay structures across colleges and departments, but we also rely heavily upon

instructionally generated revenues to address core operational (non-salary) needs. In the case of compensation rates for off-campus instruction, we need increased flexibility to adjust salaries downward for minimally enrolled classes and upward for heavily enrolled classes and entrepreneurial programs. If we are going to maintain a high-quality faculty, attract the best new faculty, and encourage faculty to engage in non-traditional and entrepreneurial activities (including, off-campus teaching, community service, and economic development), we must look beyond our traditional salary administration policies.

Compounding the problem is the limited connection that now exists between the allocation of salary dollars and the achievement of key institutional objectives. Faculty members are evaluated almost entirely on the basis of their individual accomplishments, with little recognition for their collective contributions to institutional objectives. It is important that we establish reasonable connections between our institutional performance expectations for faculty and academic professionals and our salary enhancement and distribution policies. For instance, can we establish a more direct connection between salaries and revenue gains realized from recruitment and retention?

The same can be said of our staff salary system. Although we do not want to create additional unfunded mandates such as longevity pay, the staff should also benefit from its contributions to institutional objectives. In addition, opportunities to reward staff and faculty with one-time bonuses based upon performance should be considered.

150. Action Item: Academic Affairs, in close consultation with the Academic Deans and the Faculty Senate Budget Committee, should develop and submit for faculty discussion a unified supplemental pay policy. This policy should enhance the incentives for faculty members to expand their teaching and research activities under the aegis of the University.

151. Action Item: Similarly, the President and the Vice President for Academic Affairs, in close consultation with the academic deans, Staff Senate, and the Faculty Senate Budget Committee, should develop proposals for one-time salary bonuses or ongoing salary enhancements derived from increased revenues associated with success in university-wide initiatives such as recruitment and retention.

152. Action Item: Consistent with recommendations made by the Budget Re-examination Committee, the President, in close consultation with the Staff Senate, will examine the funding of position reclassifications.

## **RESEARCH-RELATED INCOME**

Indirect cost payments and released-time payments from external contracts and grants return more than \$5 million annually to UW. The allocation of indirect costs has

been fixed by formula since 1978. It is appropriate to review this allocation formula to assure that central administrative costs generated by the University's research mission are appropriately reimbursed, to ensure a healthy rate of return to individual principal investigators and their academic units, and to stimulate yet additional sponsored research. Campus practices with respect to the use of released-time funds are highly variable and subject to historical policies of departments and programs. Some released-time funds are expended to replace instruction lost as a result of research-related reductions in faculty teaching. There is, however, no consistency in the practices of departments and programs within colleges or between colleges. Indeed, there is a need for standards or guidelines that promote more uniform understanding across campus of when state-supported reductions in teaching are appropriate, when teaching reductions related to extramurally-funded research are acceptable, and how substitute instruction should be provided from research-related funding.

153. Action Item: The Vice President for Research, in consultation with appropriate administrators and faculty groups, will complete a review and assessment of current indirect-cost and released-time practices, and will suggest formula or policy changes to address both administrative costs and adequate faculty incentives.

154. Action Item: The Vice Presidents for Academic Affairs and Research will develop more flexible guidelines for salary adjustments for employees paid from external, research-related funding. These guidelines should provide mechanisms for ensuring equity among employees as well as flexibility for principal investigators.

### **FINANCING OFF-CAMPUS DEGREE PROGRAMS**

Despite widely different issues and constraints, UW has historically operated under the policy that the costs and mechanisms for funding off-campus programs should be as similar as possible to their on-campus counterparts. Administrative unwillingness to consider flexible or differential tuition policies often resulted in an inability to deliver programs off-campus. In some instances, community colleges have established cooperative arrangements with four-year institutions other than UW. To finance a reasonably wide array of off-campus offerings requires a comparable array of financial options. If the Outreach School is to remain responsive to changing instructional needs, flexibility, not uniformity, is the key to success.



155. Action Item: Units involved in core off-campus programs should include off-campus teaching in the job descriptions of all newly hired academic personnel. These units should also consider schemes for distributing these responsibilities among all of their instructional staff. Academic position allocations should also recognize the needs of certain units charged with delivering core off-campus programs.

156. Action Item: To tailor tuition revenues to delivery costs and fluctuating demand, the Outreach School should establish a flexible tuition policy for entrepreneurial courses.

157. Action Item: For entrepreneurial programs, the Outreach School should establish an incentive-based salary scale that will allow revenues in excess of program costs to be shared between the instructor or department and the Outreach School.

158. Action Item: The Outreach School will recommend a single tuition rate and an additional technology delivery fee for outreach courses offered via Online UW and WGU to offset the associated overhead costs. The tuition and delivery fee should anticipate future modes of delivery of “core” outreach programs.

159. Action Item: In accordance with the recommendations of the 1998 Outreach Report, the Vice President for Academic Affairs, in concert with the Dean of the Outreach School, should develop a mechanism to incorporate the infrastructure costs of distance education as an institutional responsibility.

It is also appropriate to consider underlying budget and financial structures for off-campus programs. The Outreach School states in its academic plan that it “... is not an academic unit. Rather, it is an administrative unit which delivers degree programs and credit courses which are offered by the UW academic colleges.” Despite this proclamation, over the years, faculty resources and budget issues have grown complicated and confused. In principle, neither the UW-Casper Center nor the Outreach School should maintain or control permanent (tenure-track, tenured, extended track, extended-term) teaching positions. Locating permanent teaching personnel in non-academic units complicates faculty performance appraisal, minimizes college and department prerogatives in delivering degrees, and inappropriately constrains the ability of the Outreach School to redistribute its instructional resources in the face of changing instructional demand.

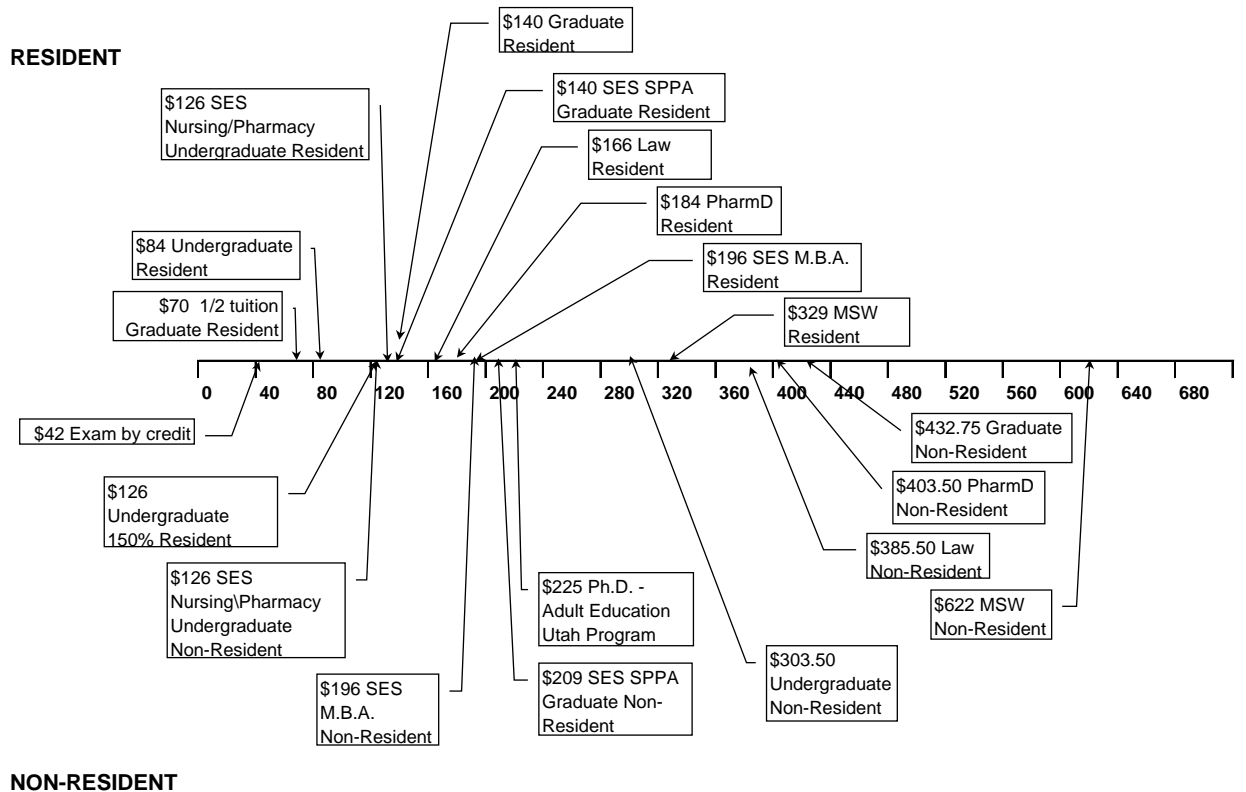
160. Action Item: Permanent teaching positions currently budgeted with off-campus programs should be transferred to Academic Affairs in the next budget cycle. At a schedule to be determined by the Vice President for Academic Affairs, control of teaching positions will be transferred to their academic homes. During the transition period and after transfer of personnel control to academic units, the instruction associated with those personnel will remain as permanent obligations of the colleges to the Outreach School. In the case of underutilized instructional personnel, the academic colleges, in consultation with the Outreach School, should have flexibility in determining where the instructional assignment will occur. Finally, to ensure appropriate long-term attention by the colleges to core off-campus programs, the Dean of Outreach should have a voice in the allocation of faculty positions.

### **TUITION POLICY AND STRUCTURE**

University tuition policy is established by the Board of Trustees upon recommendation by the President. Overall tuition rates are grounded in the resident undergraduate cost per credit. Resident graduate students are levied a surcharge above resident rates, while non-resident rates are calculated at 3.6 times the resident rate, plus a surcharge for graduate students. We have categorized students by undergraduate or graduate status, resident- or non-resident status, geographic location, program-funding source, and differential delivery costs. In some cases part or all of the differential rates are returned to the generating unit, as in Pharmacy and Law. In other instances all tuition funds revert to the central administration. In still other circumstances all of the tuition revenues are held locally by an administrative unit such as the Outreach School.

In response to these widely varying rules, our tuition structure has developed in a piecemeal and ad hoc fashion. In attempting to address individual programmatic and budgetary issues as they arose, we have produced a highly heterogeneous and arguably inconsistent tuition structure. While individually these decisions appear reasonable, in total we have developed a complicated array of conflicting tuition rules and rates. At its worst, it is possible for two students to be sitting in the same class, with one of them paying \$84 per credit, while the other pays \$622 per credit. The following is a graphic depiction of the tuition rates already approved for AY 2000.

University of Wyoming Tuition - 2000 AY



Note: Tuition for WWAMI is a flat rate of \$5575 per year.

TUITION RATES

Tuition rates affect both enrollment trends and credit production. Growth in the Western Undergraduate Exchange scholarship program clearly indicates the effect that changing non-resident rates can have on enrollment patterns. While this plan poses no new tuition rates, a thorough examination of the base undergraduate tuition rates is in order. We have targeted the resident undergraduate rate at the twentieth percentile of our public doctorate-granting comparator institutions. Then we established a factor of 3.6 as the appropriate ratio between non-resident and resident tuition. While using a ratio to relate resident and non-resident tuition may be appropriate, we should examine the size of the ratio. A review of enrollment trends indicates declining non-resident enrollments that closely parallel increasing non-resident tuition. While it is common to expect non-residents to bear a heavier tuition burden, at some point the additional costs to students become too large and we lose non-resident students and their tuition revenue. It is time to review tuition rates and associated revenues for all categories of students.

161. Action Item: The President, in consultation with all affected parties, will develop for the Board of Trustees a plan for restructuring UW's tuition policies.

### **TUITION BY CREDIT**

At least three arguments favor charging tuition on a per-credit basis. First, the ability to enroll in more than 12 credits with no increase in tuition contributes to capricious course enrollments. Coupled with a liberal drop policy, this policy encourages students to enroll in more courses than they intend to finish and to drop one or more as the semester progresses. In the aggregate, this approach has significant instructional costs (cited earlier).

Second, our current policy also works against summer enrollments. Why take summer school classes when you can add them for free during the fall or spring semester? Per-credit billing would eliminate these disincentives.

Third, a per-credit billing structure is arguably more equitable. Full-time, financially comfortable students may be in the best position to take more than 12 credits and pay lower per-credit tuition rates. Other students, who because of family or life commitments cannot go to school full-time, are billed at higher rates. For example, a resident student taking 12 credits currently spends \$81 per credit. Another student enrolled in 18 credits purchases his or her education at \$54 per credit. In fact, part-time students and those who are unable to enroll in more than 12 credits are subsidizing those who can. The increasing proportion of part-time and non-traditional students suggests that it would be more equitable to charge all students the same rate per credit.

A per-credit billing structure, implemented at our current rate of \$81, would generate significant new institutional revenue. Arguably, it would be a de facto tuition hike for many students. The shift to a per-credit charge, however, does not preclude a revenue-neutral structure or a reduction in the per-credit charge. For example, if 15 credits were considered full-time and our tuition were held constant, resident students would pay \$65 per credit—significantly less than the current rate.

162. Action Item: The President, after consultation with all affected parties, will explore conversion to a per-credit billing policy that will include revenue-neutral and revenue-enhancing scenarios and that will address equity between part-time and full-time students.

### **DEVELOPING A GRADUATE ENROLLMENT PLAN**

We have stressed the importance of retaining UW's Carnegie Research II status. A review of graduate enrollment percentages at other research universities indicates that graduate students normally comprise between 20 and 30 percent of the student body. At UW, graduate students comprise 14 percent of the student body. Given the

relatively low percentage of graduate students within the overall student body, our decreasing graduate enrollments, and the possible elimination of some graduate programs, the need for a well conceived plan to manage graduate enrollments and associated degree production is evident.

163. Action Item: The Graduate School, in cooperation with the academic colleges, will develop an institution-wide strategy for managing graduate enrollments. This plan should include establishing target enrollment levels, degree production rates, and resource allocation for Ph.D. departments to assure continued Carnegie Research II designation.

164. Action Item: The Graduate School, in concert with Academic Affairs, will consider graduate stipend enhancements for market-impacted disciplines.

165. Action Item: The Graduate School will consider strategies for the allocation of graduate assistantships that will encourage **admissions from broader applicant pools, including international applicants.**

166. Action Item: The Graduate School, in conjunction with the academic colleges, will cap the number of years that any individual can enjoy financial support via state-funded graduate assistantships. There should be separate caps for masters' and doctoral degrees.

### ENCOURAGING ECONOMIC DEVELOPMENT ACTIVITIES

Our existing reward structure does not adequately recognize faculty involvement in Wyoming's economic development efforts. To enhance faculty involvement, a review of the criteria governing the assessment of faculty performance for reappointment, promotion, and tenure is needed. Similarly, we should re-examine procedures governing faculty involvement in external activities where the potential exists for conflicts of commitment or conflicts of interest. Policies governing the sharing of revenues from intellectual property rights deserve similar reconsideration.

167. Action Item: In collaboration with the leadership of the Faculty Senate, the Vice President for Academic Affairs and the Vice President for Research will assess institutional policies and procedures that may impede faculty involvement in economic development activities.

States interested in recruiting new businesses typically offer incentive packages to the owners, managers, and employees of such businesses. These packages often include the opportunity for enrollment for new residents at a state public university for resident tuition rates without having to wait the customary 12 months to establish formal residency.

168. Action Item: The President will recommend to the Trustees that University residency guidelines be altered so that any individual, their spouse, or children entering Wyoming in connection with a job-related relocation be accorded residency status for tuition purposes immediately upon arrival.

By enhancing access to high-quality education, cultivating a strong internal culture of scholarship and creativity, and strengthening links to its external constituencies, the University can help the state, the region, and the nation build a just and prosperous future.