



CHAPTER 6

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

—Tom Buchanan, President of the University of Wyoming

Engaging Undergraduate Students at the University

CREATING LEARNING ENVIRONMENTS

(Core Component 3c)

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

UNDERSTANDING THE DIVERSITY OF LEARNERS

(Core Component 1b)

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

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

Table 6.1. Undergraduate Student Characteristics

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

Source: Office of Institutional Analysis. Revised 03/10

Freshman enrollment and retention rates

(Core Component 5a)

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

Table 6.2. First-time Freshman Characteristics

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

Source: Office of Institutional Analysis

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

Transfer students

(Core Components 1b, 2a)

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

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

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

STUDENT SUCCESS PROGRAMS

(Core Component 3c)

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

The Learning Resource Network (LeaRN)

(Core Components 3c, 3d)

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

Table 6.3. Transfer Student Characteristics

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

Source: Office of Institutional Analysis

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

Learning communities

(Core Components 2c, 3d)

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

Engineering Power Groups

(Core Component 2c)

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

Freshman Interest Groups

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

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

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

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

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

Entering Fall	Fall 1998 to Fall 2007				Retention Rate Difference
	FIGs		Non-FIGs		
	N	% Retained	N	% Retained	
1998	125	77%	1,133	75%	2%
1999	116	80%	1,109	76%	4%
2000	160	81%	1,192	74%	7%
2001	153	80%	1,293	76%	4%
2002	183	75%	1,288	73%	2%
2003	128	84%	1,288	75%	8%
2004	141	77%	1,377	73%	4%
2005	155	78%	1,266	74%	4%
2006	200	80%	1,374	73%	7%
2007	213	83%	1,428	71%	12%

Source: Office of Institutional Analysis

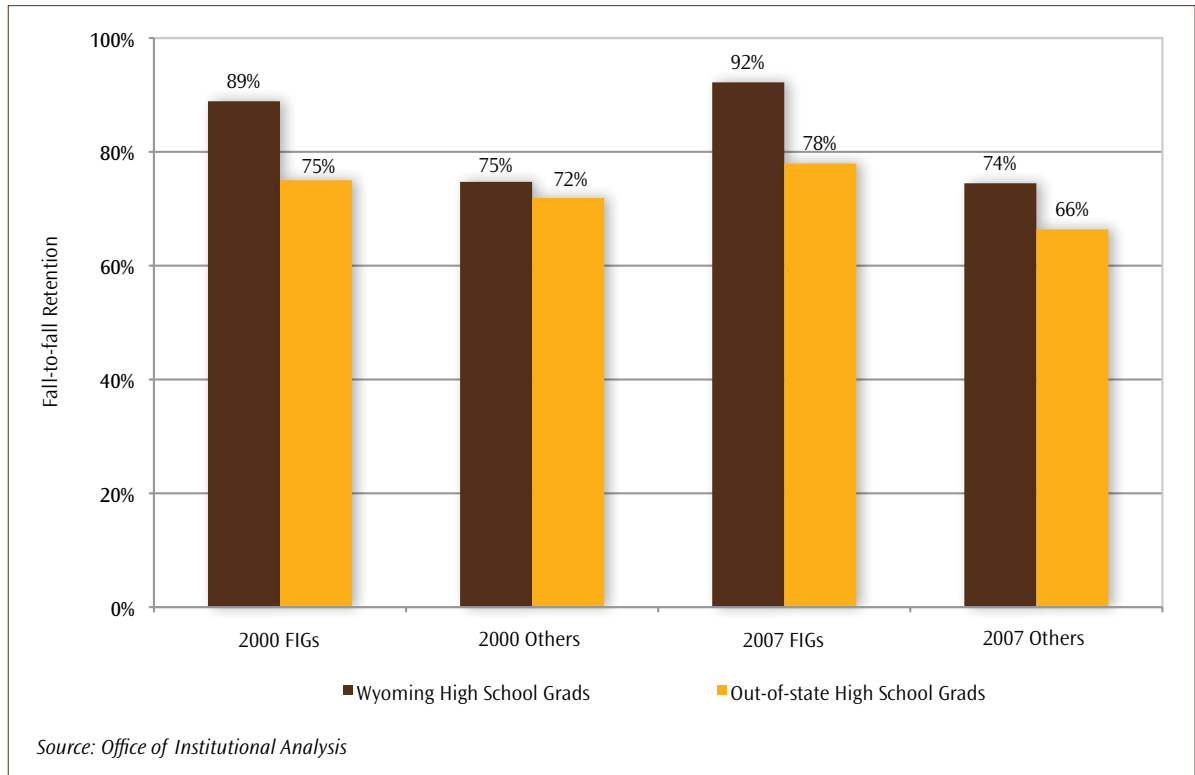


Figure 6.1. Retention Rates Comparison of FIG and Non-FIG Participants by Wyoming versus Out-of-state High School Graduates, Fall 2000 versus Fall 2007 Cohorts

Synergy

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

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

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

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

Expanding learning communities

(Core Component 5a)

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

Honors Program

(Core Components 2b, 4b)

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

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

Supplemental instruction and tutoring

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

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

“In surveys, instructors have been overwhelmingly positive about the effects of supplemental instruction for students and many have discussed secondary benefits of the program on improving curriculum.”

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

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

Learning support centers

(Core Component 3d)

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

Writing Center

(Core Components 3b, 3c)

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

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

Oral Communication Center

(Core Components 3b, 3c)

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

Math Lab

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

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

Student Learning Center

(Core Component 3d)

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

Student perception of support centers

(Core Component 3d)

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

Student Educational Opportunity

(Core Component 3d)

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

Student Success Services

(Core Component 3c)

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

McNair Scholars Program

(Core Component 3d)

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

University Disability Support Services

(Core Component 3c)

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

CREATING EFFECTIVE LEARNING ENVIRONMENTS: INFRASTRUCTURE

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

Capital improvements and learning spaces

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

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

“Investing in the infrastructure insures that the university’s students will be prepared for the work and learning environments that they will enter beyond graduation.”

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

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

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

Technology to enhance learning

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

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

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

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

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

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

Learning at distant locations

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

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

“The university has dedicated a number of resources to its distance programs and capabilities with a substantive infrastructure to ensure that its capacity is in line with growing demands.”

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

Interactive video conferencing is one of the University of Wyoming's most popular distance delivery services. Video conferencing provides the convenience of face-to-face classes and meetings, saving time and money. Prior to 2007, the Outreach School, in partnership with the Wyoming State Division of Telecommunications, operated and maintained the Wyoming Video Conference System (WVCS). A congressional award allowed the Outreach School to launch a pilot video conferencing system using IP-based technology that connected several video endpoints in Casper directly to the main campus in Laramie. Based on the success of this pilot and the desire of the state to reduce its involvement in video conferencing, the Outreach School, in conjunction with IT, launched the Outreach Video Network (OVN) in 2007. Currently, the OVN has 40 video conferencing endpoints in 17 Wyoming communities and operates eight video conferencing rooms on the main campus in Laramie. The network can also connect to Wyoming Equality Network endpoints located in every high school and community college in the state, assuring statewide coverage. (5a)

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

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

CONCLUSION AND KEY FINDINGS

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

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

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

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

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