



CENTRAL WASHINGTON UNIVERSITY

October 25, 2007

Ann Daley, Executive Director
Higher Education Coordinating Board
917 Lakeridge Way
Olympia, WA

Dear Ann,

Thank you for the opportunity to participate in the planning of the 2008 Master Plan for Higher Education. Following please find brief answers to some of the questions you posed to institutions. We look forward to the opportunity to expand upon any of the responses for which you seek greater detail.

Goal 1: We will create a higher education system that truly serves everyone – a system that anyone can enter and afford, and a system that personalizes education so that everyone can succeed.

1. How can our state build a college-bound culture in our high schools?

Strengthen partnerships, communication, and coordination between secondary and postsecondary schools: counselors, faculty, parents, and students. Support programs proven to increase the likelihood that high school students will graduate and pursue postsecondary education, including the following:

- **Navigation 101.** Now in use by more than 100 school districts, *Navigation 101* is a life skills and planning program for students in grades 6 through 12. The program helps students plan for life beyond high school. It engages parents and students, and enhances student achievement.
- **The Bridges Program** was founded in 1997 at CWU to help low-income and under-represented youth gain the skills necessary to succeed in their future education and careers. Bridges sends out teams of college students to aid educators by mentoring middle- and high-school students in the classroom, implementing after-school book and video clubs, organizing college campus visits, and empowering teens with the knowledge and skills for web site development. The program encourages students to see college as a real possibility for themselves and it provides training opportunities for college students who wish to make careers working in multicultural, rural communities.
- **The Cornerstone program** lays the foundation for a successful transition to higher education by offering highly capable students the opportunity to take rigorous college courses while in high school. The courses are taught by qualified high school instructors whom Central has approved for lecturer status. All Cornerstone classes are the same challenging courses offered at the university. Students may apply the credits they earn toward a degree at CWU or transfer them to another institution. Cornerstone enhances

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students' progress toward a degree, reduces the cost of college, and strengthens their chances of being accepted to their college of choice.

2. How can we improve teacher preparation to teach math and science?

- **Expand support for Master of Arts in Teaching Mathematics.** Teachers who complete MAT programs are better prepared to address the diverse needs of students in middle- and high-school math programs. More teachers are likely to enroll in MAT programs that are available close to where teachers live and work. University Centers could enhance access to MAT programs, however, expanding MAT programs would require expanded state support. And the fiscal and time demands (recruitment, staffing, etc.) for starting a new program require at least a year lead time.
- **Provide fiscal incentives and professional development for outstanding teachers and leaders in the field of K-12 mathematics.** Reward excellent teaching and encourage teachers to create excellence in mathematics education for all students in Washington by providing financial incentives and MAT scholarships. Many students with the potential to become outstanding teachers cannot resist the more lucrative pull of the private sector. We need to actively work to minimize attrition of pre-service and in-service mathematics teachers to well-paying technological fields.

In addition, the demands of preparing for the math portion of the WASL have made what is already a challenging career even more difficult. Through professional development we must find ways to improve mathematics pedagogy in Washington State in a manner that focuses on both WASL components: computational skills and solving problems by making connections.

Following are other strategies the state may wish to consider to enable math teachers to become better at their profession and find their careers more rewarding.

- **Provide more scholarships for math teachers,** including four-year scholarships to recruit student right out of high school. The cost of earning a master's degree is an impediment to some teachers. MAT scholarships would help to recruit and support teachers who seek a master's degree.
- **Support mathematics teacher education programs,** which require time and money to improve both the quality and quantity of teachers in Washington.
- **Support innovative models developed through grants** that can be used for teacher professional development;

- **Support K-16 mathematics education research data** and methods for making informed decisions; and
- **Provide funding for partnerships** among higher education, school districts, and teacher education programs, and encourage pre-service teachers working with classroom teachers.

3. & 4. How do we provide more education to more people at an affordable cost? Are we making the most efficient and effective use of new communication technologies to do this? Are there other ways to reduce costs that don't compromise quality?

How can we provide education and job training to people who are place bound? Can we find ways to take the education to the learners, wherever they are?

- **Employ the University Center model that CWU has used for 30 years.** A University Center is more than simply a storefront or a portion of a program, provided to students at an off-campus location. University Centers are located in buildings constructed for the purpose of providing upper-division, degree-completion programs in coordination with a community college partner. These facilities include interactive television systems that allow programs to be offered, live, at more than one location at a time.

CWU University Centers are a cost-effective way to provide upper-division education in high-demand urban areas and in hard-to-serve rural areas. Rather than constructing an entirely new university, the state builds a University Center on the campus of an existing community college, which provides lower-division courses leading to a baccalaureate degree. Students can complete all four years of a baccalaureate education in their own community. They earn a two-year degree from the community college and then simply transfer into upper-division courses at a University Center on the same campus. Degree-completion rates for students who use the University Center model are among the highest in the nation.

Close ties with community colleges, businesses, and the community allow University Centers to respond quickly to the ever-changing demands of the economy and the job market. University Centers respond to the needs of students by creating a welcoming environment where nontraditional students can succeed.

University Centers provide access to upper-division education that allows people whose commitments to their family and jobs might otherwise prevent them from going to college.

Responsive to students and business, strategically located and economical, CWU University Centers are one of the best options for meeting the demand for higher education.

Goal 2: We will create a higher education system that drives greater economic prosperity, innovation and opportunity.

1. How do higher education institutions need to be better partners with employers and regional economic development agencies?

- **Clarify the roles and relationships of those involved in the partnership**, which includes the State of Washington. The question posed under goal 2 might better be stated, “What strategies will strengthen partnerships between higher education and employers and economic development agencies?” Employer-university partnerships are mutually beneficial. Partners share responsibility for the effectiveness and efficiency of the partnership. Business and higher education learn and benefit from each other when they engage in strategic partnerships.

Businesses often provide expertise in the classroom that gives students insight into the way the business world is changing, and into new industry technologies or business strategies. Businesses often play important roles on university boards that provide scholarships, endow faculty, and provide other fiscal support.

Higher education institutions provide the well educated graduates whose collaboration, innovation, and hard work makes businesses successful. The research and expertise of university faculty creates new business opportunities, and helps businesses get work done in more efficient and productive ways.

Depending on the size of the institutions, universities enjoy hundreds or thousands of partnerships with business and industry and, equally important, with education and social service agencies who hire university graduates. Representatives of partner groups serve on advisory councils, participate in a shared research agenda, or participate in internship programs.

The state benefits from university – business partnerships because employment rates rise, the tax base expands, and because well educated, employed citizens participate fully in their communities. The state supports such partnerships by funding faculty and enrollment, research, facilities and other resources and activities at public universities.

Therefore, the Master Plan may wish to consider outlining actions *each of the three* partners could take to enhance the mutually beneficial academic and business relationships that promote economic activity, create jobs, and enhance the quality of life for Washington residents in many, many other ways.

Higher education institutions:

- **Seek opportunities to invite business to provide expertise** that can enrich curriculum, mentor students, and inform academic planning and outreach that benefits students, employers, and the economy.

For example, CWU's "Business-to-Business Breakfast" brings together university faculty and Puget Sound-area business leaders. Discussions about emerging business trends and employer needs invigorate CWU business programs and strengthens the connection between the CWU College of Business and the Puget Sound business community.

Central's mutually beneficial partnership with Horizon Air allows graduates of our Flight Officer and Aircraft Systems Management specializations to interview for First Officer flight-crew positions with fewer hours of flight time than required for grads of other programs. Horizon provides the opportunity because of the company's outstanding experience with pilots who graduated from CWU, and because of the thorough nature of those graduates' education and training.

- **Anticipate employer and student educational needs as the requirements of the economy change.** For example, after significant Boeing layoffs five years ago, CWU responded to workforce needs by developing the "Career Switcher" program. It recruited laid-off aerospace engineers and others with strong math backgrounds to become high school math teachers.

Business, industry, & economic development councils:

- **Learn about higher education accountability processes** — those universities engage because of their own desire to work more efficiently, and those universities are compelled to engage in by a host of outside entities, from the Legislature and state agencies, to accreditation organizations and bond-rating agencies.
- **Learn about higher education governance and funding.** What is the difference between a university president and a CEO? What is the difference between the role and mission of a public university and that of a corporation?
- **Learn about the unique opportunities available at nearby public universities** — opportunities that will benefit business as well as opportunities for industry leaders to share their expertise with and to volunteer at higher education institutions.

State of Washington:

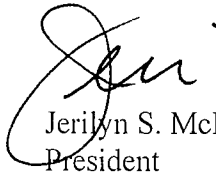
- **Learn about higher education accountability processes.** Universities engage in some because of their own desire to work more efficiently. Universities are compelled to engage in other accountability processes host of organizations, from the Legislature and state agencies, to accreditation organizations and bond-rating agencies.
- **Recognize the differences among the regional economies and educational needs of the state** when determining “high-demand” employment areas and academic programs. Understand that engineering may be in high demand in one part of the state while in other regions access to *any* baccalaureate program is highly sought after by students and employers.
- **Recognize that all public universities engage in productive and important research**, not just “research universities.” Look for opportunities to use the expertise at regional universities, which may be able to provide services more efficiently and effectively than larger institutions.

2. What strategic investments in research should we make? How can they be sustained? How should we support translating research into commercial applications that create new jobs?

- **Provide ongoing support for graduate students and faculty who mentor them.** One of the driving forces of research and the development of new and innovative ideas at a university is high quality graduate students. The graduate students both facilitate research and are prepared to become future researchers through the mentoring relationship with their professors. Providing ongoing support for graduate students and the faculty that work with them is a high return investment of state funds.
- **Support faculty development.** Investing in faculty development through internally funded programs enhances a faculty member’s to engage in research. Funding faculty development helps create grants which in turn creates research with new ideas that can be translated into commercial applications.
- **Encourage and support the creation of university research structures that can respond quickly to grant opportunities and the needs of the economy.** In response to the dramatic increase in the need for coordinating and managing research projects, Central officially launched the CWU Research Foundation in September 2007. The Foundation provides the infrastructure the university needs in order to manage the significant increase in research funding and will enable CWU to use its unique research expertise to serve the community in a more agile and responsive way. By spring 2008, the Research Foundation

also will bring together critical research administration and lab functions, which now are spread throughout the campus, with the creation of an "Innovation Park." Located close to campus, the park will allow the practical application of research to meet the needs of public and private entities throughout the region.

Sincerely,



Jerilyn S. McIntyre
President