From i Sion REALITY



WESTERN GOVERNORS' ASSOCIATION

Governor E. Benjamin Nelson, Nebraska, Chairman Governor Edward T. Schafer, North Dakota, Vice Chairman

Virtual University Lead Governors

Governor Roy Romer, Colorado Governor Michael O. Leavitt, Utah

Governor Tony Knowles, Alaska Governor A.P. Lutali, American Samoa Governor Fife Symington, Arizona Governor Pete Wilson, California Governor Carl T.C. Gutierrez, Guam Governor Benjamin Cayetano, Hawaii Governor Phil Batt, Idaho Governor Bill Graves, Kansas Governor Marc Racicot, Montana Governor Bob Miller, Nevada Governor Gary E. Johnson, New Mexico Governor Froilan C. Tenorio, Northern Mariana Islands Governor John Kitzhaber. Oregon Governor William J. Janklow, South Dakota Governor George W. Bush, Texas Governor Mike Lowry, Washington Governor Iim Geringer, Wyoming

> James M. Souby Executive Director

Thomas O. Singer, Ph.D. Research Director, Project Director



Western Governors' Association

600 Seventeenth Street • Suite 1705, South Tower • Denver, CO 80202-5452 (303) 623-9378 • (303) 534-7309 (facsimile)

GOVERNORS' GOALS FOR A WESTERN VIRTUAL UNIVERSITY

Il westem governors are feeling the press of increased demand on their state systems

of postsecondary education. All recognize that the strength and well-being of both their states and the nation depend heavily on a postsecondary education system that is visibly aligned with the needs of a transforming economy and society. At the same time, the states' capacity to respond to these challenges is severely constrained by limited resources and the inflexibility and high costs of traditional educational practices and by outdated institutional and public policies.

The governors of the western states see the exploding availability and capabilities of advanced technology-based teaching and learning as a potentially powerful means to address these challenges, and to make cutting-edge educational and assessment services much more widely available. Therefore, the governors, meeting in late Fall 1995, charged a WGA design team with creating a design plan for a western virtual university to serve the region and an implementation plan through which such an entity could be established and financed.

These actions received the unanimous support of the governors present. The basis for this unprecedented gubernatorial support is the potential for a regional virtual university to serve a number of important shared goals. These include:

- expanding access to a broader range of postsecondary education opportunities for citizens of the West;
- reducing the costs of providing these opportunities and providing a vehicle for cost sharing;

- providing a means for learners to obtain formal recognition of the skills and knowledge they acquire through advanced technology-based learning — at home, on the job, or through other means outside the formal educational system;
- shifting the focus of education to the actual competence of students and away from "seat time" or other measures of instructional activity:
- creating high performance standards that are widely-accepted and serve to improve the quality of postsecondary education; and
- demonstrating new approaches to teaching and assessment that can be adopted by more traditional colleges and universities.

More broadly, the governors want to better link educational and business opportunities by ensuring that state investments in and use of information technology contribute to a technology-rich environment within which private industry can function and on which it can depend. Specifically, they feel

that higher education has the potential to serve as an anchor tenant to spur the development of information technology networks within and among states in the West. To help move from vision to reality, this document

spells out the governors vision for a western virtual university and lays out their plan for its design and implementation. To avoid any confusion over terminology, a glossary of key terms is provided at the end of this document.

THE VISION

iving in a small community was everything Bob and Sarah Allen dreamed of when they moved from the city — no long commutes to work, beautiful scenery and a close-knit neighborhood. While they missed a few of the conveniences larger cities offer, the one thing they did not have to give up was having a first-rate higher education system close at hand.

Through a western virtual university, both the Allens found solutions for very different educational needs, literally at their fingertips.

As the CEO of a small software company, Bob discovered his programmers needed proficiency in C++ programming, but the nearest classroom training was three hours away. Through the regional Economic Development Council, Bob learned that other software companies were experiencing similar training challenges. Together, they approached the western virtual university and developed a set of expected competencies and assessment approaches for certifying C++ programmers. Using these established expectations, a competitive grants process was launched for courseware development. A joint venture between an in-state university and a private vendor won the development contract. Under the new program, every programmer's learning could be assessed continuously on-line, making certification of proficiency relatively easy. This certification gave Bob more confidence in hiring new employees, and it gave his employees the ability to prove their competence should workforce needs fluctuate and require them to move to

another job.

Sarah Allen had different educational needs. A long-time school counselor, she was ready to be her own boss. She set as her goal the creation of a private youth counseling practice. While she first had to go back to school to obtain the necessary professional certification, her family couldn't afford for her to give up her present job to do it. Bottom line — she had to continue working and attend classes when her schedule allowed.

Sarah consulted the virtual university catalogue and found a program that offered the necessary certification through a combination of technologies — cable television, internet-based courses, and summer seminars — offered by an out-of-state university. As a bonus, an interstate agreement worked out by the virtual university allowed her to enroll at in-state tuition rates and receive transferable credits.

For the Allens, living in a small community far from the nearest university no longer was an impediment to pursuing their educational or economic goals. Affordable, accessible higher education — that is the vision of a western virtual university.

What role will a virtual university play?

The vision of the western governors is

decisively shaped by the growing availability and capabilities of advanced information technologies based on telecommunications and personal computers. These technologies are making possible an approach to postsecondary education founded on the

premise of delivering instruction from anywhere, to anywhere, at any time. The barriers of time and place are eroding; opportunities to learn are everywhere.

While the potential is enormous, incentives are needed for these technologies to be more widely adopted in both teaching and learning. Students will not pursue alternatives to traditional higher education unless the learning they acquire is certified in ways that employers and colleges and universities recognize and value. Colleges and universities will be reluctant to embrace advanced technology without incentives to make necessary but potentially painful changes. And, without adequate access to traditional learners and institutions, private developers and users of advanced technology-based instructional material will be limited in their participation, or driven into separate, parallel markets.

The governors are looking to a regional virtual university to begin to create these incentives. They view its role as providing leadership and models for establishing markets for both certified learning and instruction, primarily by encouraging the action of others rather than functioning as a more traditional educational institution. Its three primary roles will be to:

- Expand the marketplace for demonstrated competence by assessing and certifying competencies and learning acquired in whole or in part via advanced technology, in ways that are recognized and valued by both employers and institutions of higher education. The intent is to provide individuals with a new currency that makes their learning portable in the market-places of employment and academe.
- Expand the marketplace for instructional materials, courseware, and

programs utilizing advanced technology that have already been devised by public and private sector providers, and to foster interstate and public-private cooperation in the development of new instructional materials that respond to unmet needs in the region.

Identify and work with the governors to remove barriers to the free functioning of these markets, particularly barriers imposed by statutes, policies and administrative rules and regulations at both the state and federal levels.

What will a virtual university look like?

Details regarding the structure and functions of a regional virtual university are yet to be determined. To begin the design process, the governors have endorsed a set of criteria. These criteria are intended to yield a virtual university that will be:

- market-oriented focused on developing markets for certified graduates and a wide variety of instructional materials;
- independent not controlled by those who represent established interests with regard to either the delivery of education or its certification;
 - client-centered focusing on needs of students and employers rather than instructional providers, e.g., flexible and responsive in instructional delivery rather than constrained by the fixed sched-

ules and sequential structures typical of current educational delivery;

- degree-granting empowered to grant certificates recognized by employers and degrees recognized by both employers and the academic community, initially in a limited number of areas, but ultimately from associate to the graduate level across a broad spectrum of fields;
- accredited fully accredited by regional and appropriate specialized accrediting bodies for the degrees and certificates it bestows:
- competency-based grounding the certification of learning on the demonstration of competency rather than the accumulation of credits or experiences, or judgements about the quality of providers;
- non-teaching not providing instruction directly, but drawing upon needed capacity wherever it exists, both in colleges and universities, and in the private sector and among individual experts as well;
- high quality setting competency expectations for certification that will help raise levels of quality for all learners and providers;
- cost-effective sharing information technology infrastructure, seeking other

- economies of scale, forging partnerships. drawing on existing educational resources, and reducing time to degree to the fullest extent possible to reduce the per-student costs of delivering instruction;
- regional offering opportunities for participation to states throughout the West in a manner that is flexible and adaptive, and interconnected in ways that follow regional economic and social interest; and
- quickly initiated not requiring lengthy study and developmental work but actually functioning and delivering benefits by the summer of 1997.

In summary, the governors expect a virtual university to be operating in the near-term through which instruction is accessible via advanced technology throughout the West at the learner's convenience, learning can be certified to the satisfaction of both employers and academic institutions through the assessment of competencies, and states and the private sector will share in the development and use of instructional materials. To realize this vision, the governors called for creation of a design plan which is described in the following sections.



DESIGN PLAN

he timetable agreed upon by the governors calls for completion of the design plan and recommendations for implementation it by their annual meeting in June, 1996.

Project Organization

The project has been organized to move forward with leadership by the region's governors and extensive input from higher education and business leaders and other stakeholders. The effort is being managed by the Western Governors' Association staff.

Design Team — WGA has put together a core design team responsible for preparing this vision statement and design plan. The design team will be responsible for implementing the workplan. Membership on the design team may be adjusted over time to reflect different areas of expertise required as a virtual university moves forward.

Regional Advisory Group — Each participating governor will serve on a regional advisory group and name up to three additional individuals to serve on it, providing input from a broad range of stakeholders. The governors may name designees to represent them. Additional members will be drawn from among prominent leaders in industry, academia, participating corporate supporters

and other interested communities. The governors and their designees will constitute a steering committee of the regional advisory group to provide leadership and decision making on questions of policy and procurement. Other group members will serve in an advisory capacity to the governors. The regional advisory group will provide feedback on work products to the design team, and serve as spokespeople for the initiative within the region and throughout the nation. The governors may adjust the regional advisory group's membership over time as needed.

State Advisory Groups — Each governor may also establish a state advisory group for communicating with broad stakeholder groups within their state.

Workplan

The design plan for a virtual university consists of five tasks.

Task I: Enhancing the Marketplace for Demonstrated Competence

Task 2: Enhancing the Marketplace for Instructional Materials

Task 3: Organization and Financing

Task 4: The Policy Environment

Task 5: Communications

Task I: Enhancing the Marketplace for Demonstrated Competence

A fundamental role of a virtual university is to make a broader range of learning opportunities more accessible to citizens of the West through advanced technology. Underlying Task I is a key premise that these opportunities will be far more valuable to individuals and society if competencies resulting from such learning are widely-accepted and recognized. The purpose of Task I is to determine how a virtual university can enhance the marketplace for demonstrated competence through certification that is widely-accepted both by employers and traditional institutions of higher learning. This will be accomplished by developing and testing a prototype of the process for specifying expected competencies and employing assessment methods. Subtasks include:

- a. Compiling information about alternative methods available for determining level of competence in the various domains of learning — basic skills, vocational skills, disciplinary knowledge, etc.— and analyzing their strengths and weaknesses. This information will provide guidance for subsequent prototype development.
- b. Identifying areas in which
 expected competencies and
 assessment methods are
 currently available. These run
 the gamut from statements of
 needed workplace skills
 described by the U. S. Education
 Secretary's Commission on
 Achieving Necessary Skills
 (SCANS) to statements of required
 competencies and associated assessments
 currently being used in a number of the
 licensed health care professions (allied
 health fields, nursing, etc.).

- c. Based on recommendations of the
 Regional Advisory Group supported by
 private market research and the conclusions
 of industry partners selection by the
 governors of a small number of "high
 demand" areas for which expected competencies and assessment methods are not
 now available. Possibilities include:
 - math and English skills that are commonly required as a precondition for entry into college-level work;
 - a vocational skill area of particular importance to high technology industries in the West, selected in cooperation with private partners with a demonstrated interest in participating in this activity; or
 - the content of a transferrable Associate of Arts degree, or the major components of such a degree, such as basic skills, higher order academic skills, or general education.
- d. Developing illustrative sets of expected competencies with the involvement of skill and content experts in each identified area, and their review and improvement by participating public and private partners who will be "customers" for graduates expected to possess these competencies; i.e., employers and faculties of colleges and universities.
 - e. Developing suggested methods for assessing and certifying the extent to which individuals possess the competencies identified in (d), with the involvement of experts in assessment. Proposed assessment methods will also be

reviewed by both participating skill and content experts and public and private partners in an effort to determine the degree to which these methods might yield widely-accepted evidence of competence.

Deliverables: Prototype expected competencies and assessment methods in selected areas and a pilot test of the process. This task will provide the governors with concrete examples of how a virtual university could enhance the marketplace for demonstrated competence.

Timeline: Tasks I (a), (b), and (c) will be completed by mid-February, with (b) ongoing. Task I (d) will be completed by late March and Task I (e) by early April, although review and refinement will be ongoing. A project timeline is provided at the end of this document.

Task 2: Enhancing the Marketplace for Instructional Materials

Three premises underlie this task. First is that considerable advanced technologybased instructional material has already been developed in both the public and private sectors which could be made more widely available to citizens of the western states if markets and networks were sufficiently developed. Second is that expanding this inventory significantly is beyond the means of individual western states; cooperative efforts will be necessary, both interstate and with the private sector. Third is that many learners will need access to a variety of student services to support their participation in this new learning environment. Subtasks include:

a. Collecting best practices in the implementation of advanced educational technology. An audit will be conducted of instructional material providers who have overcome infrastructure, interconnectivity, and other technical barriers in providing access to advanced technology-based education. This audit will be used to develop proto-

type technology standards to be used in soliciting materials from instructional providers.

- b. Constructing a virtual catalogue. A standard protocol for describing available advanced technology-based programs and courses will be developed with the involvement of providers from institutions of higher education and the business community. A prominent feature of this protocol will be requiring an explicit statement of the competencies that should be achieved upon completion, as well as an indication of the assessment methods that will be employed to certify these competencies. Another feature will be a set of criteria for comparing catalogue entries against recognized good practice in advanced technology-based education. Once the protocol is adopted, public and private providers will be invited to prepare entries that describe their advanced technology-based offerings for inclusion in a regional on-line virtual catalogue.
- c. Developing specifications for new materials. Using the results of Tasks I (c), (d), and (e), a model request for proposals (RFP) will be developed to solicit bids from providers interested in offering advanced technologybased learning materials through a virtual

university which address the areas of competency that have been selected. The model RFP would indicate at least the technical requirements for delivery, the competencies expected to result, and the conditions under which materials could be reviewed by

prospective learners. The model RFP will be written in such a way that providers in both the public and private sectors can respond. In addition, representatives of states and higher education systems that maintain set-aside funds to support the cooperative or competitive multi-institutional development of learning materials will be asked to review the model RFP and suggest modifications. They will also be asked to indicate their willingness to pool resources to support the development of learning materials. Further, a dry-run bidders meeting will be conducted with potential providers to identify desired modifications to the model RFP that would make potential bidders more willing or able to respond.

d. Recommending specifications for providing support services. Specifications will be developed for providing support services that will need to be available to learners, in consultation with the variety of public and private sites currently supporting learning through advanced technology. Support services include administrative information, registration, advising, library services, and financial aid. Suggestions will be provided for ways in which learners might gain access to such services from home, their workplace, local college or university, or other distributed learning sites.

Deliverables: Prototype elements of the marketplace for instructional materials, including best practices in technology implementation, a prototype virtual catalogue and test of its use, a model RFP for soliciting new learning materials, and recommended specification for support services for learners.

Timeline: Task 2(a) will be completed by early April and be ongoing. Task 2(b) will be completed by early March. Task 2(c) and (d) will be completed in early April, with review and refinement ongoing.

Task 3: Organization and Financing

The organization of a virtual university will determine the relationships among its founding state sponsors and with its customers and providers. Several organizational arrangements are possible for a virtual university, from a memorandum of understanding to an interstate compact. Each of these arrangements has specific strengths and weaknesses. Based on the proposed functions of a western virtual university emerging from Tasks I and 2, a set of options for organization and governance will be prepared for consideration by the governors. An evaluation of the pros and cons of each will be provided, and recommendations will be offered on the most appropriate approach based on the governors goals and criteria and recommendations from the Regional Advisory Group.

The financial implications of a virtual university will also be examined, from the perspectives of sponsors, customers, and providers. Implications for state sponsors include whether a virtual university can or should be self supporting or receive state assistance, and whether it is expected to be cost effective relative to traditional modes of delivery. This analysis will need to distinguish between start up and recurring costs. Implications for customers — individuals, institutions of higher education, and businesses —

include their expected costs for instruction, assessment, and support services, and the availability of student financial aid. Implications for providers include how revenues will be distributed among providers of instructional materials and support services,

and how the development of new materials will be financed and yield a return on investment. The governors will need a thorough assessment of the financial outlook for a virtual university prior to making decisions about implementation.

Deliverables: Analysis and recommendations for the governors on an approach to organization and financing for a western virtual university.

Timeline: Task 3 will be completed by May with refinement ongoing.

Task 4: The Policy Environment

Each participating state has a set of existing laws, regulations, and policies that will affect the ability of the governors to bring a virtual university to life. Also important are the policies and procedures of accrediting bodies and the federal government (particularly, for the latter, student financial aid policy). Intellectual property issues concerning instructional material must be addressed. To ensure that the design plan recognizes and addresses critical issues raised by the existing policy environment, barriers must be identified and strategies developed through which they can be overcome. Subtasks include:

- a. Preparing a prospectus for a virtual university. Drawing on the results of Tasks 1, 2, and 3, a prospectus will be developed that describes the proposed approach to organization and financing, and the range of specific actions in which a virtual university might be expected to be engaged.
- b. Meeting with accrediting bodies.

 The governors will meet with representatives of regional and specialized accrediting bodies to test this prospectus against established rules, and to explore any reasons why a western virtual university might have difficulty in attaining full accreditation. Approaches to resolving such difficulties will be explored.

- c. Conducting policy audits. Background research and interviews will be conducted in selected participating states to test the prospectus against the existing policy environment and to identify specific areas where state or federal laws, regulations, or policies might act as barriers to the smooth functioning of the market for demonstrated competence, the market for interstate development and distribution of learning materials, or other operations of a virtual university. Private partners and other industry leaders, professional and licensing associations, providers of postsecondary education, state higher education officials, and others will be interviewed for their perspectives.
- d. Addressing intellectual property protection. A legal framework for a virtual university will be developed that will provide those contributing instructional materials with strong intellectual property protections.
- e. Developing a guide to good practice. Based on the information provided in (b), (c), and (d), a Guide to Good Practice in Implementing a Western Virtual University will be developed. The Guide will describe state and federal policies and procedures, as well as accreditation requirements, that should be in place to support the functioning of a virtual university.

Deliverables: A Guide to Good Practice in Implementing a Western Virtual University will be proposed to the governors that lays out major barriers and strategies for overcoming them. The Guide will be based on testing a detailed prospectus for a virtual university against current accredita-

tion requirements and audits of the state and federal policy environment.

Timeline: Tasks 4(a) and (b) will be completed in mid-April, Tasks 4(c) and (d) by early May (with both tasks ongoing), and Task 4(e) by early June.

Task 5: Communications

The design plan explicitly seeks to inform and engage interested parties in matters of substance at every step. Subtasks include:

- a. Publishing materials about a western virtual university. The vision statement and design plan will be published in early February. On or before March I, WGA will begin publishing a monthly newsletter providing updates on its SmartStates initiative, including a western virtual university. Initially, the audience will include all western governors and their staffs, members of state and regional advisory groups, public and private partners, regional and national media, and individuals who attended the WGA Higher Education and Technology Leadership meeting in late 1995. The newsletter will be available upon request from any other participants and interested individuals. Final recommendations to the governors for a virtual university will be published and distributed to interested parties in June, 1996.
- b. Using the Internet. A WGA SmartStates home page is being established on the World Wide Web (www.wga.gov/smart as of 2/19) which will include an area for a western virtual university. Newsletters and other public documents, including the vision statement and design plan and final recommendations, will be available on the home page.
- c. Conducting public workshops.
 Workshops will be held in each
 of the participating states during implementation of the design plan to ensure

adequate opportunity for comment from learners, educators and the business community. Each state's representative(s) on the advisory group steering committee will chair the workshop, and at least one member of the design team will attend. Results of design plan tasks will be summarized on the SmartStates home page and in the monthly newsletter prior to public workshops.

- d. Holding press briefings and editorial board visits. The western governors will carry the vision and plans for a western virtual university to the regional and national media as opportunities allow.
- e. Creating state and regional advisory groups. As discussed above, each participating governor will name up to three members to a regional advisory group. These citizens, drawn from participating corporate supporters and other industry leaders, academia, and other stakeholder communities, will serve as reviewers and spokespeople for the initiative as well as a sounding board for the governors.

Deliverables: Task 5 will provide the governors with a robust communications effort for a regional virtual university, including a newsletter, information on the Internet, workshops, and press and editorial briefings. Public

outreach and input will also be achieved through state and regional advisory groups.

Timeline: Deliverables from Task 5(a) will be available on at least a monthly basis. Task 5(b) will be initiated by mid-February and will be ongoing. Tasks 5(c), (d), and (e) will

be ongoing. be ongoing.

CONCLUSION

GLOSSARY OF TERMS

n the Charge issued at their December 1995 winter meeting, the western governors called for a team to prepare a conceptual design for a western virtual university defining its key characteristics and an implementation plan through which such an entity could be established and financed. This document represents a major milestone in carrying out that charge. At the governors direction, the workplan described above will be executed to render a series of deliverables during the next six months that, taken together, will constitute a detailed conceptual design for a regional virtual university. Recommended actions will then be presented to the governors at their annual meeting in June 1996 that will enable them to move from conceptual design to implementation.

Accreditation

The process of certifying that a provider of postsecondary education has met minimum standards of quality, organizational functioning, and fiscal viability.

Assessment

The means for determining presence of the proficiency or competency in questions.

Certificate

A document providing validation of an individual's proficiency/competence in a specified skill area. Primarily a mechanism for indicating presence of requisite job skills to employers.

Certify

To provide an assurance that an individual has demonstrated proficiency or competence in a skill or content area.

Credential

A document providing validation of an individual's proficiency/competence in a broader range of skill and content areas. Primarily a mechanism for indicating attainment of knowledge and skills in a way appropriate to an academic customer.

Standard

The level of attainment that must be demonstrated before competence/proficiency will be certified.

ATAMETRA POT MERCHA

VIRTUAL UNIVERSITY PROJECT TIME LINE

		FEB	MAR	APR	MAY	JUN
١.	Marketplace for Competence					
	a. assessment methods		D			
	b. current assessment activity				in ma	A THE
	c. selection of competency areas	6	9			
	d. suggested expected competencies		STATE OF STREET			7.51
	e. suggested assessment methods			•	100	
	f. stakeholder reviews					
2.	Marketplace for Materials					
	a. implementation of "best practices"	Tel Year	150 150		Kill Control	
	b. virtual catalogue	1 (, , , , 5)	0	Terran		
	c. specifications, for new materials			0		
	d. specifications for learning sites	NO. NO.	dy J. E. Vil	0	MERCE	A. O.S.
	e. stakeholder reviews			,(1)	الأستاكية	
3.	Organization and Financing	A I ASS				d L. Wil
4.	Policy Environment					
	a. develop prospectus					
	b. meet with accreditors				0	
	c. policy audits	WE W		E SAN	9	
	d. intellectual property policy	ENE ST	June 11		0	
	e. good practice guide				CONT. LE CONT.	
5.	Communications					
	a. publishing materials			0		•
	b. use of internet		•			
	c. public workshops	ACP V	MALLEY A	SUF BY S	HARACON.	71.75
	d. press briefings	Parket.	11/20/14		. 7 SQ 18	140 580
	e. advisory committees	D. Dire			100.70	
	Deliverables	F1 m1	Timetab	le for A	ctivity	