

Distance Education UpClose

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Digital Pathways

Best Practices in Distance Education for American Indians



Post-secondary distance education programs targeted to tribal employment needs offer great potential for solving the economic and social problems that hinder development in the Pueblos and reservations. New Mexico's tribal leaders, many of whom recognize this relationship between educational attainment and economic development, see distance education as one resource for improving American Indian participation in higher education and are aware of its success at

other sites, such as Salish Kootenai College in Montana and Arizona State University. By combining customized distance education programs, learning technologies, and proven support practices for American Indian students, NMSU and tribal leadership strongly believe they can significantly impact the number of American Indians who successfully access and complete college programs and return to assume professional and leadership positions in their communities.

Eager to build a statewide community that will more effectively support American Indian students pursuing post secondary degrees, the tribal leaders have voiced a deep commitment to working closely with NMSU toward this end. Both NMSU and the tribal leadership believe the next stage in this collaborative process should be a statewide conference that focuses on American Indian students and distance education possibilities. The goal of this conference will be to create a solid knowledge base of best practices in distance education for American Indian students that can then be drawn on for program development. Additionally, this event will provide the opportunity to further build relationships between stakeholders with the aim of creating a positive and proactive environment for educational innovation and implementation.

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Distance Education Accessibility

Expanding access for diverse students

The Office of Distance Education (ODE) is working hard to insure access for diverse students in distance education including those with disabilities. As online instruction becomes more learner-centered and self-directed, the ODE is working to ensure that technology-based learning is accessible to all students by encouraging the use of universal design principles among online course developers. The goal is for any student to be able to use their own settings, language options, and any specialized assistive hardware or software they may require to easily and seamlessly integrate with NMSU's distance education delivery systems and access online course materials.

Students with disabilities, in particular, use assistive software/hardware tools that render electronic content (including web pages, email and video captions) into a format that they can use. For example, a student with a visual impairment may prefer to use his auditory

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November 2003

NMSU Events

ICT Training Services

November 18 - **Using Respondus to Create Quizzes & Surveys in WebCT**

November 14 - **WebCT Quiz Module**

Title V Technology Events

November 13 - **Designing a Database**

NMSU Library DE Events

November 4 - **MLA Citation Style**

November 5 - **Census Website: What It Can Do for You**

November 7 - **Searching Chemical Abstracts Via SciFinder Scholar**

Visit the *Faculty* area of the DE site [<http://www.nmsu.edu/distance>] and click the *Professional Development* link for these and other events.

National & International Events

November 4-7 **EDUCAUSE Annual Conference 2003**

Anaheim, California USA

November 6-8 **EADTU Annual Conference**

- European Association of Distance Teaching Universities (EADTU)
Madrid, Spain

November 7-11 **E-Learn 2003** - Association for the Advancement of Computing in Education (AACE)
Phoenix, Arizona USA

For more events, information and links, visit the *DE Clearinghouse Conference Database* [www1.uwex.edu/disted/conf/].

Profiles



Norman Marshall Neel
Student

College of Health and Social Services

Marshall is currently a student in the Bachelor of Health and Community Services distance education degree program. Marshall is a great example of a non-traditional student who benefits from distance education:

"After completing a career in banking and many years in entrepreneurial endeavors, I recently found the opportunity to pursue my next career, law, only to learn that a bachelor's degree is required for admission to law school. I explored my options in completing my degree and learned that at any school but NMSU, the 15 hours that I lacked in 1978 has turned into 55 hours, tuition at the "online degree" programs is triple that of a state university, and regular classroom instruction conflicts with my work and responsibilities as a single parent. Completing the degree looked impossible and my dream of law school virtually unattainable, until that is, I found the BCHS program.

The distance education program at NMSU will enable me to complete my degree by providing maximum credit for my previous work, workable tuition fees, and the flexibility to work school into my schedule as a working single parent. This program puts it all within reach, and the BCHS curriculum will provide me with a solid knowledge base for the family law I intend to practice. I am certain that as the distance education expands it will bring many former Aggies back into the fold to become graduates."

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NMSU will host, in partnership with the Sloan Foundation, this statewide conference on best practices in distance education for American Indians March 18-19, 2004. The conference will cover such topics as reducing technological barriers, program development, pedagogy, learning styles, effective use of technology, faculty preparation, integration of culturally relevant material, and student motivation. These will be moderated by national experts in distance education for American Indians. The second day will be spent in strategic planning sessions resulting in an action plan for sharing resources to develop effective programs and support best practices in American Indian distance education.

Invitees from New Mexico will include representatives from institutions of higher education currently offering distance education programs (including the tribal colleges), members of the New Mexico Tribal Higher Education Commission, a representative of the New Mexico State Department of Education, a representative of the Governor's Office, a representative of the New Mexico Commission on Higher Education, tribal and pueblo leaders, and current American Indian distance education students.

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capabilities to comprehend text. This students would use a screen reader to render the on-screen text into speech. This function is built into most modern operating systems, providing a simple and inexpensive solution. More sophisticated screen readers (JAWS and Window Eyes) are also available. Using assistive technology, however, is not enough to insure that electronic content is accessible. In New Mexico, House Bill 708 addresses this by requiring institutions offering distance learning to provide content in electronic formats that are usable by an individual with a disability using assistive technology. HTML (hypertext markup language), the language of most web pages, can readily be made accessible by following the guidelines of the Web Accessibility Initiative (WAI), provided that web and content developers take the time to learn the guidelines. For instructors developing web-based distance education courses, creating accessible web pages and content benefits all users because accessible content is viewable in a wider variety of devices (including cellular phones and PDAs) and accessible content helps search engines find and catalog information more efficiently. Online classrooms, such as WebCT, do include some automatic accessibility features but course developers need to be aware of accessibility so as not to inadvertently create barriers for students. For these reasons, the Office of Distance Education is committed to continue to create accessible content as well as to provide ongoing support to faculty on this topic. See the side bar on page 3 for more information on our accessibility resource partners. -By Bill Newroe, Assistive Technologist with the New Mexico Division of Vocational Rehabilitation [wnewroe@state.nm.us].

Articulation

Where credit is due

Across the nation, an increasing number of students are arriving at universities with credit earned from community colleges and other institutions. When attempting to transfer prior credit, students often discover that many of their credits do not directly transfer to their universities of choice. At this point, students can elect to retake courses, find other institutions that accept their credits, or discontinue their educations.

Some states have addressed the transfer issue by creating lower-division common course guides. The New Mexico Commission on Higher Education (CHE), in an attempt to address the issue, established seven academic transfer modules consisting of approximately 65 credit hours each. According to the CHE, "Courses selected in accordance with these modules are guaranteed to transfer between institutions and to apply toward requirements

Accessibility Issues

By Bethany Bovard and Julia Parra

When we think of distance education accessibility, the first things that usually come to mind are Section 508 and House Bill 708 that provide for students with disabilities. Bill Newroe's article will help you make your courses accessible for assistive technology users in compliance with these legal guidelines. However, there is another aspect of accessibility that has quite an impact on courses here at NMSU. Students who enroll in distance education courses at NMSU distance have diverse levels of experiences with technology. According to Ann Luck, an instructional technologist from the Department of Distance Education at Pennsylvania State University, we should consider these diverse learners and "their access to and familiarity with distance education technologies."

Many students face accessibility issues because of a lack of experience working with common distance education tools such as WebCT, Centra, and multimedia plug-ins. Additionally, student Internet access ranges from the 56K modem, to a cable/DSL connection or, for those lucky enough, a T1 line. This range of connectivity and diversity of technology skills means that you should provide course content materials in a variety of ways to ensure that all of your students can access them easily. Ann Luck provides a media selection matrix to help instructors select and provide materials using alternative media types [http://www.outreach.psu.edu/de/id&d/media_selection_matrix.html#Top]. Her Matrix uses the following general categories and lists of media tools:

Low Tech	Medium Tech	High Tech
<ul style="list-style-type: none"> • Paper (via surface mail) • Video tape • Audio tape • E-mail • LISTSERV postings • Local resources (e.g. libraries, mentors, local faculty, etc.) • Phone 	<p>would add...</p> <ul style="list-style-type: none"> • Audioconferencing • Web-based resources (w/o plug-ins) • FTP • Newsgroups • Existing software • Conference call (e.g. Edify) • Fax • Voice mail (e.g. Edify) • Telnet 	<p>would add...</p> <ul style="list-style-type: none"> • 2-way video-conferencing • Satellite (1-way videoconferencing) • Desktop video-conferencing • Web-based resources (w/plug-ins) • Audiographics • RealAudio • RealVideo • New software (e.g. multimedia apps) • Computer conferencing • Chats • Web-based telephony • Shared workspace • Digital drawing pads • Hand-held scanners

The Matrix also provides a list of instructional strategies with appropriate low tech, medium tech, and high tech media. For example, if you wanted to provide a guest lecture for your DE class you could choose from these options:

- Low-Tech – paper (transcript), video tape, audio tape, email, and listserv posting
- Medium Tech – audioconferencing, Web-based resources (no plug-ins required), FTP, newsgroup, and existing software
- High Tech - 2-way videoconferencing, satellite, Web-based resources w/ plug-ins, audiographics, RealPlayer, new software, and computer conferencing

Another example of an instructional strategy that can benefit from low, medium and high tech options is web-based video. When including web-based video clips in your course materials, you should provide low bandwidth and high bandwidth options as well as a transcript of the video clip. Providing alternative methods for accessibility, whether for compliance with 508 and 708 or to provide for learner diversity of technology skill and Internet access, is good practice for distance education.

Office of Distance Education Accessibility Resource Partners

The New Mexico Technology Assistance Program (NMTAP) [www.nmtap.com] with the Division of Vocational Rehabilitation has loaned the NMSU Office of Distance Education an accessible computer station containing a range of assistive hardware, software and alternative digital formatting tools for use by students and faculty. It is located in the Distance Education Learning Center, Milton Hall, Room 80.

Region VI Accessible Information Technology in Education (RAITE) Network of the Disability Law Resource Project and U.S. Department of Education, provides online connections to national and regional resources [www.dlrp.org].

The following are other key resources for accessible distance education:

AccessIT Project with the University of Washington [www.washington.edu/accessit].

I.T. Technical Assistance and Training Center at the Georgia Institute for Technology [www.ittatc.org/].

IT and Universal Design Overview [www.diverseAbility.net].

