This paper describes the origins and early development of the Institute for Technology Assisted Learning (ITAL) at New Mexico State University, which was established to assist faculty with both resources and training to teach in a distributed learning model. ITAL held seminars for eight faculty during a 3-week period in July 1997 with the expectation that they would be able to develop a distance education course for the 1997-98 academic year. Participants received laptop computers, computer software, and hands-on training in electronic research methods, video and Internet course delivery, World Wide Web publishing, PowerPoint presentations, teaching methods, and the integration of technology into curriculum development. Faculty participant evaluations rated the training sessions as satisfactory to excellent; however, faculty felt that they needed more time to learn about new, technical applications. It is concluded that for a program such as ITAL to be effective, adequate funding is essential. It is also noted that faculty participants need hands-on instruction and practice with all of the new technologies and tools introduced. Five appendixes provide ITAL background materials, program application forms, the program budget, information on library services for distance education students, and participant evaluations. (MDM)
Making the Leap to Hyperspace in Distributed Learning

by
Susan E. Beck,
Instruction Coordinator
New Mexico State University Library

and
Brian Ormand,
Manager, Scholarly Technology
New Mexico State University

A paper presented at the
16th annual conference for the
New Mexico Council for Higher Education Computing/Communications Services

October 23, 1997
New Mexico Highlands University
Las Vegas, NM
Making the Leap to Hyperspace in Distributed Learning

Abstract:

This paper focuses on helping faculty make the leap from a traditional classroom to a virtual one by using instructional technology that benefits residential and distance students alike. In order to meet these needs, ITAL, the Institute for Technology Assisted Learning, was established to assist faculty with both the resources and training to create and teach in a distributed learning model. ITAL's founders formed a unique partnership that involved a blending of skills and knowledge from five very different NMSU support organizations. The strength of this project lay in its combination of unique concepts and incentives including: a laptop computer equipped with course development software for each participant, hands on training, special treatment of pedagogical issues related to teaching at a distance, video and internet course delivery methodologies, electronic research methods and issues, and follow up support from ITAL partners. This paper also discusses the successes and failures of putting on an intensive, three week institute and examines future plans for ITAL.
Introduction

A new learning model is surfacing in higher education. We find we are needing to shift towards a student centered learning model and away from the professor dominated lecture hall. This shift is required because our student population has changed. Although many of our students are still campus residents and recent high school graduates, many commute to campus, have full time jobs, and are raising families. And just as the student population type is changing, student educational needs and expectations are moving away from the traditional model. Not only do students demand more institutional and professorial accountability, they also require more flexible course schedules and locations.

While universities and colleges are reaching out to students population with more creative methods of course delivery, we are trying to also change the ways we teach by focusing on new and exciting technologies that enhance student learning. PowerPoint class presentations, web-based course delivery, two way interactive video, CU See Me Internet camera technology, class listservs, bulletin boards and chat rooms are just a few of the new tools for educators. Moreover, course delivery is now neither time or place bound. Investment in distance education technologies – be they distant in time (time delay) or in place (geographically remote) – is not only the current focus of many university and college programs but it is also a large part of higher education’s future. Frequently, however, the key element to successful distance education programs is often overlooked: the faculty. Faculty training and technical support during training are essential elements. In conjunction with these is the assurance of follow up training and technical support measures. In a report on audioconferencing training, Boone and Bassett found that faculty will more readily adopt a
new process if they have effective training; otherwise they may avoid using both the techniques and equipment provided (p. 333). In any new program incorporating new technologies, the quality of not only course delivery but of the entire distributed learning program is dependent on the individuals providing the course content (Shaefer and Griffin). In fact, in 1989 the Office of Technology Assessment found that “...no technology can overcome poor teaching. But when skilled teachers are involved, enthusiasm, expertise and creative use of the media can enrich students beyond the four walls of the classroom” (U.S. Congress, 1989, p. 87).

Preparing faculty to teach in a distributed learning environment requires the involvement of many campus support services. Faculty need experience using new, technologically-advanced instructional materials and equipment, be they two way interactive video, software packages or web-based instructional programs. They also require a knowledge of hardware/software availability, their use in instruction, and methods to integrate these tools into their courses. Library research facilities and resources are other vital components in increasing faculty’s knowledge. The digital library, no longer a time and place bound institution, is rapidly becoming a reality. This is especially true with the increase of research databases, electronic journals and library services available on the Internet. Finally, faculty need to be aware of how the various administrative, technical, and instructional support departments can work together to ensure a successful course environment (Carter, p. 19). Thus, a coordinated training effort, combining the expertise of many non-instructional departments is mandatory.
Providing training is not enough. In helping faculty to make the leap to hyperspace, incentives are necessary. Some distance education programs offer extra income, or teaching load adjustment to allow for time in course preparation. Others provide inducements in the form of new computer equipment or professional development travel opportunities. Still others rely on giving faculty the opportunity to be on the cutting edge of technology-assisted learning, counting on faculty’s commitment to the notion that the university and its faculty will lose out if they fail to realize society’s new demands on higher education. These demands encompass reaching out to non-traditional students by providing new and different methods of learning opportunities. (Barker and Dickson). No matter what the incentive, its presence is required to ensure the success of a new distributed learning program.

**Program development**

**Goals**

With these factors in mind--faculty training, the involvement of many different support services, and an incentives package--New Mexico State University launched a unique course development program for faculty in the summer of 1997. ITAL, Institute for Technology Assisted Learning, was the brainchild of NMSU Computing and Networking staff. It was built on the tenet that through the provision of resources and training, faculty will have the tools and knowledge they need to prepare and deliver distance education courses. At its inception, ITAL drafted the seven goals. The Institute’s purpose was to provide:

1. An overview of the options available for presenting a distance education class.
2. An understanding of how the emerging technologies can be used in teaching at a distance and integrated into curriculum development.

3. Instruction and hands-on practice using electronic library resources and services, including searching electronic research databases and instruction on connecting from remote sites.


5. Faculty with the hardware and software they need to apply skills, techniques and new knowledge gained through the Institute.

6. Technical assistance, as-needed, to help faculty in any difficulties using their equipment in home or office environments during the Institute.

7. Follow up training and support after the Institute’s conclusion.

From these goals, a set of seven, very modest measurable objectives emerged. Faculty completing ITAL were expected to:

1. Create a class syllabus and professional page using Web publisher software and place these on a Web server

2. Create a PowerPoint presentation and show it using an equipment delivery option they typically expect to use (e.g., LCD panel, compressed video environment, television in instructional classroom)

3. Request and administer a listserv group for an instructional course.
4. Use a chat room to work with other participants on a class assignment

5. Use their laptop computers from an Ethernet connection, TAU, and from home.

6. Set up their laptops to print wherever they are, be it in a class lab, their home or their office.

**Incentives**

In order to both attract faculty and to immediately provide them with course development tools, the Institute offered participants Pentium laptop computers with all the software and peripherals required to complete ITAL seminars. These laptops could be purchased individually for $1,250 or charged to the participant’s departmental account. In the latter case, the ownership of the laptop would be transferred to the participant’s department pending

1. faculty participant’s completion of the Institute

2. development of distance learning course materials based on knowledge gained through ITAL.

With the equipment offer also came the guarantee of onsite technical assessment and setup assistance in connecting to the campus network and working within the campus server environment. Participants were also provided with technical assistance during the Institute so that the skills and knowledge learned during the ITAL seminars could be applied immediately in their own office or home environments.

Another incentive offered was free, ongoing, follow up technical support from Computing and Networking after the Institute was over. Since Computing and Networking, as is the case
at most universities, normally charges departments for its individualized field services this offer of free assistance was especially attractive.

Because many faculty had already agreed to redesign their courses for distance education delivery, the Institute offered them the opportunity to get a head start. Thus, faculty participating in ITAL had the advantage of immediately applying the skills they were learning to a known task. This final incentive was a powerful one. Because the Institute had full university support — funding, equipment, full set of workshops, technical support — faculty had assurance that their efforts in making the shift to a different learning model were appreciated, encouraged and subsidized.

Partnerships

In May 1997, representatives from five different departments/service units met to begin developing the Institute. They included the Office of Distance Education and Weekend College, Computing and Networking Services, the Center for Educational Development, the Library, the College of Education Learning Technologies Graduate Program, and the Office of the Vice President. Each committed to providing at least one of three services: financial support, staff to conduct ITAL seminars, or technical assistance. Meeting weekly, training facilitators representing each of the five departmental units created a program of seminars for the Institute. Each of the sixteen facilitators brought both unique skills and a different perspective in developing an intensive faculty training program. Facilitators worked closely to ensure that the skills-based seminars built on one another, and that the schedule provided adequate time for faculty discussions and feedback. One of the facilitators, a doctoral
candidate from the School of Education, created evaluation and assessment tools based on course objectives to be used at the end of the Institute and as six month follow up assessment. This person also agreed to be the objective observer, attending all training seminars but not participating as either a trainer or learner. In this fashion, the project had at least one person with a broader view of the planning, the process and the product.

By mid June, Computing and Networking launched the ITAL web page (http://www.nmsu.edu/~scholars/ital/homepage.html), complete with a schedule of seminars, abstracts and learning objectives for each, vitas for all units and their representative facilitators, and a participants roster (Appendix A). This web page grew quickly both prior to and during the Institute. In addition to the web page, Computing and Networking created an ITAL listserv to keep facilitators current with new developments.

**Faculty recruitment**

Brochures were sent out to faculty in May along with application forms (Appendix B). Participation was limited to eight. The initial group was kept small due to both cost for the laptops and the desire to develop a supportive, cohesive cohort. In their application faculty agreed to:

1. Commit to developing a distance education course for the 1997-98 schedule.

2. Attend at least 90% of the seminars offered.

3. Develop course materials that utilize methods or technologies presented in the ITAL seminars.
Faculty members from every department and college were encouraged to apply. Although close to twenty faculty inquired about the Institute, only half that number applied to participate. Selection was limited to faculty who were already teaching a distance education course or to those who had committed to developing and teaching a course in the near future. Selection was also limited to those with the financial means to participate. In other words, applicants had a very good chance of acceptance if they had already secured departmental support and funding. Because the initial applicant pool was small, selection was not difficult. The selected cohort of eight faculty came from the colleges of Business, Education and Engineering, representing three of the five university colleges. These are same colleges that have taken the lead in distance education course development at New Mexico State University.

Budget

The Institute's budget (Appendix C) was lean but workable. The Office of the Vice President agreed to invest $19,600 in startup costs. This sum helped to defray the total cost of laptop computers and accompanying software and peripherals so that participants and their departments were assured of a real equipment bargain. The startup lump sum, combined with participant tuition of $10,000 and an additional $5,819 for Macintosh upgrades supplied by Computing and Networking, gave the Institute a total income of $35,419. Expense categories were equally spare, consisting of only computer hardware and software, computer accessories, stipends for facilitators working under a nine month contract, and miscellaneous costs (photocopying and supplies). Overall, expenses came to $35,253.78.
Program Administration

From the outset the project was an enormous undertaking not only in scope but in the short, two month time frame in which to work. All scheduling, budget coordination, advertising and publicity, communication among partners, facilitators and faculty, acquisition of external funding support and web page administration was handled by one person within the Computing and Networking department. Computing and Networking also managed all technical matters related to the Institute. This department provided research and recommendations on the laptop purchase, installed and configured all the hardware, assisted participants with connectivity needs, made faculty office visits for equipment setup and provided troubleshooting when necessary. Late in the planning phase of the project it was obvious that no one person nor one department should shoulder the entire job of program administration. After discussion, partners agreed to rotate program administration for future Institutes.

The Institute

Seminar Schedule and Scope of Activities

At the kickoff session, faculty participants set up their laptops and received a briefing on the particulars of distance education at the University, including course approval procedures, presentation options, course types considered for adoption, and tuition and fee calculation for courses.

Seminars were held during a three week period in July, 1997. Because many of the seminars required hands-on learning either in a networked computer lab or in a teleclassroom.
the Institute was not confined to one location. Depending on the seminar, participants traveled to training facilities in many different departments. These ranged from the Center for Educational Development to the Library’s electronic classroom to the University’s teleclassroom equipped for satellite broadcasts, video taping and two way interactive video.

Primarily due to their complex nature and depth of subject, most of the originally planned, eight general seminars expanded into double sessions. For example, “Communicating Electronically with Students” encompassed two sessions involving applications related to asynchronous communication (e-mail, bulletin boards, listservs, newsgroups) and synchronous communication (chat rooms, IRC, Cool Talk, CU-SeeMe, videoconferencing and electronic whiteboards).

In its first session, “The Electronic Library” examined library services and resources available to distance education faculty and students. It involved a demonstration and hands-on practice using web-based, commercial research databases, and a discussion of copyright issues related to distance education. The second session concentrated primarily on academic research on the Internet. Topics included search engines and search techniques, evaluation of Internet sources and connecting from remote sites to all resources discussed during both session.

In the “Basics of Web Publishing” participants learned HTML basics and practiced using Adobe Page Mill, a WYSIWIG editor, MS Word HTML converter, and Adobe Acrobat. During the second session, participants completed their course home page and syllabi begun earlier and learned how to upload them to the campus server.

Faculty received hands-on practice using PowerPoint to develop visual materials for the classroom and became familiar with all the equipment and delivery options available for
presenting distance education classes. They quickly became excited about the potential use of Web CT, a total course integration package that allows almost all typical course administration, communication, and delivery functions via the Internet.

Not all seminars concentrated solely on technology. “Teaching at a Distance With Emerging Technologies” incorporated current pedagogical practices in distance education. It included developing a telelesson plan, reconfiguring traditional courses to fit into the distance education learning framework, and student engagement techniques for teaching via two way video, audioconferencing, or one way telecast. “Integrating Technology into Curriculum Development” looked at how technology can help faculty to solve pressing instructional problems such as unprepared students, a lack of time to cover increasing amounts of content, the existence of a wide range of student abilities, and the need to help students think.

Midstream Adjustments

During the Institute, faculty actively requested extra training sessions. Because the Internet is widely available and relatively inexpensive, faculty instantly embraced its use as a teaching tool and communication medium. Therefore, all of the requested sessions were Internet based. Among these was a special three hour workshop on using Adobe PhotoShop to create and manipulate graphics and photographs. In addition, faculty felt they needed more time to practice using Adobe Page Mill, a web authoring software program. Finally, an additional session on Web CT was offered for those who felt they required more in-depth, hands-on experience.
Training sessions were not the only adjustments encountered during the three week program. Several support units needed to rethink their services to both students and faculty in light of the University’s distance learning, distributed education emphasis. In one case, the Library had to reformulate their service policies. How would delivery of books and articles be handled? Would distance education students be able to connect to the library’s commercial, electronic research databases from off campus? Would only one department take charge of services for distance education students or would these services be shared? Each question was resolved with the view that adjustments would need to be made as the University’s distance education initiative increased. It instituted standing policies and procedures, however, that ensured the same basic services were available to distance education students as those traditionally offered (Appendix D).

Computing and Networking also faced several new challenges with distance education. Many of these surfaced during the Institute and are ongoing projects for the department. First, Computing and Networking realized that it needed consider the type and method of access remote students have in connecting to the University’s server. Because most of these students typically have a different ISP than the University, Computing and Networking needed to make sure students have proper network access. Another concern, primarily for Computing and Networking but also for distance education faculty and program coordinators, are technical prerequisites for students. Are students required to have a computer for a particular course? What type of computer? What kind of software? Are these hardware and software requirements supported by the University? Also Computing and Networking needed to examine methods to password protect internet based course materials. The University should
consider funding for a fully staffed technical support area that would ensure that all students, whether remote or on campus, have access to support personnel to assist them with technical problems. Evenings and weekends are typically the times when students use the University’s computer network. Presently Computing and Networking only has funding to provide technical assistance during the traditional 8 to 5 work week.

Institute post mortem

Course evaluations

Faculty participant evaluations (Appendix E) provided insight and guidance for future Institutes. They also revealed areas needing further emphasis. Overall, faculty rated all sessions (1 = poor, 5 = excellent) as satisfactory to excellent. Predictably, faculty felt they needed more time learning about new, technical applications. Sessions on Power Point, Synchronous/Asynchronous Communication, Web Publishing and Web CT received at least three requests for more instruction. Faculty felt that adequate instructional time was given to sessions on the electronic library and video delivery options but that less time was needed for the two pedagogical sessions.

Other than time allotted for specific topics, faculty participants rated each seminar according to organization, clarity, pace, quality and usefulness, depth and scope of coverage, potential application relevancy for instruction and whether individual seminar objectives had been achieved. The Electronic Library garnered the highest total ratings (4.51) with seminars
on PowerPoint applications (4.36), Web Publishing techniques (4.26) and using Web CT (4.25) not far behind.

Faculty were also asked to give comments on their evaluations. Many felt that the most valuable sessions were those that either had direct application to distance education instruction or areas where the faculty had little experience. Among these were sessions on Web CT, Adobe PageMill and electronic research sources. For the most part, faculty were most appreciative of methods and tools that helped them make the shift to technology-based instruction. Pedagogical seminars, however, were not valued as highly. Perhaps this is because these seminars presented material already known to faculty and practiced for many years. Faculty participants were fully cognizant of the need to adjust their teaching style to the distance education environment; however, they felt the need to try out and practice these new styles, not discuss principles and theories.

Faculty suggested adding topics for future seminars. They wanted to know more about connectivity – from their offices, from home or while traveling. Another request was for more sessions on creating and manipulating graphics such as the special session on Adobe PhotoShop. They felt that experience with using multimedia programs would be especially helpful. One participant suggested working on a single project during the Institute to prepare faculty for one interactive or video-based course.

Overall, the Institute met or surpassed participant expectations. They received a solid introduction to many useful technology tools and felt motivated to begin course development using these new tools and applications. Because of the intensive, concentrated nature of the Institute, faculty felt they learned more than in single workshops attended in the past. The
Institute gave faculty both a broader picture of teaching with technological tools and the time to apply techniques. If these seminars had been presented in isolation, they would have supplied only one piece of the puzzle, out of context within the entire spectrum of technology-based instruction.

**Unforeseen Benefits**

During the three week training, faculty participants developed into a team, often helping and learning from each other. This unexpected benefit arose from the different perspectives each brought to the Institute. Participants learned as much from each other as they did from the training facilitators. Another benefit was the high level of collegiality among participants. Many faculty had only a passing acquaintance with each other although they had been teaching at the same institution for many years. From their weeks together faculty members forged new partnerships that reached across departments and colleges.

**Future adjustments: What we learned**

ITAL was not only a learning experience for faculty participants but also for partners and facilitators. In the initial planning phases the original team had little inkling that so many factors would become increasingly important during the Institute. For example, creating and managing an intensive, three week faculty training institute is an enormous undertaking. Early on it became obvious that the program administrator’s role is extremely important. Without solid guidance and hard work from our initial program administrator, the Institute may well have foundered in midstream.
Another lesson learned is that participants want and need hands-on practice and instruction with all the new tools. While a few of the seminars required faculty to bring syllabi or course assignments to work on (Web Publishing, Electronic Library), not all seminars took this need into account. Participants felt the most rewarding sessions were those in which they were able to see immediate benefits. Publishing their course schedules and syllabi in web format, developing new teaching materials in PowerPoint, or creating research assignments based on newly discovered electronic research tools are just a few examples of tasks the faculty felt were most rewarding.

A final essential ingredient for Institute's future is adequate funding. Without University support, the Institute would never have been possible. And without future funding, either internal or external, the Institute cannot continue. But financial support is just one requirement. Fortunately, the University has already recognized the need to upgrade faculty skills through on-going training. Without this recognition and support, the Institute could not exist nor would the University's distance education program be successful.

Future Plans

ITAL partners are committed to continuing the Institute. Original plans called for one ITAL per semester. At this point, however, the university's financial situation is not robust enough sponsor the program for the fall semester. While ITAL partners actively seek external funding through grants and corporate sponsorship, plans are still underway to launch another ITAL in either spring or summer of 1998. In the meantime, Computing and Networking has
initiated a substitute mini-training program for the fall. The “Technology Toolkit Series” (TTS) is targeted at faculty members wanting to implement new technology in their delivery of a course. TTS will include 8 to 10 workshops that are hands-on and focus on creating course materials with new technological tools. The total cost for the workshop series is $500 which covers all software. If faculty already have some of the software programs, the cost is decreased appropriately. To ensure that individual computers are working, the Computing and Networking department will provide a certain amount of follow-up technical support. This support is included in the $500 tuition. To participate, faculty will need a computer capable of running the software used in the workshops. This includes a PC or a Macintosh that will run the University’s Aggie Access software, Microsoft Office 97, Adobe PageMill, Adobe Photoshop LE and McAfee virus scan.

Conclusion

When undertaking course development for distance learning programs, faculty are frequently overwhelmed by the many course delivery options and various technology-based tools available. Not only are faculty deterred by the sheer numbers of options available but also they may not fully understand how the various technology tools function. ITAL provided its faculty participants the opportunity to examine and evaluate many different technology-based options. It provided a framework from which faculty selected and applied the skills and methods learned to their particular course. Without this Institute and the cooperation between many different campus support units, faculty might still be hesitant to tackle new teaching tools and course delivery methods.
Through future technology institutes and with the increased cooperation between campus support units, the University’s goal of providing quality distance education program may well be reached. Without strong financial support and the belief in the need for ongoing training, however, the University’s distance education initiative would find itself in jeopardy of failure. Fortunately, New Mexico State University has made a small but successful start in the shift to providing instruction in a new, distributed learning environment.
References


Appendix A

ITAL Background Materials
Welcome to the ITAL '97 Home Page!

ITAL '97, the Institute for Technology-Assisted Learning, is a summer institute designed to provide NMSU faculty with the resources they need to prepare and teach distance education classes. ITAL runs from July 8 through 31, four afternoons a week, from 1 to 4 p.m. For more information about ITAL, check out the following pages:

- Sponsoring Groups
- Partners
- Participants
- Schedule
- Vitas of Facilitators
- Application Form

Background Copyright © JPayne 1997
ITAL Sponsors

ITAL is sponsored by a partnership of

- Distance Education and Weekend College
- NMSU Computing and Networking
- Center for Educational Development
- NMSU Library
- College of Education Learning Technologies Graduate Program
- Office of the Executive Vice President
## Partners

ITAL is sponsored by a consortium of partners from across the NMSU campus. The individuals from each of these groups include the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Phone</th>
<th>E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ames, Lyn</td>
<td>Office of Distance Education/Weekend College</td>
<td>6-5837</td>
<td><a href="mailto:lames@nmsu.edu">lames@nmsu.edu</a></td>
</tr>
<tr>
<td>Beck, Susan</td>
<td>Library</td>
<td>6-6171</td>
<td><a href="mailto:susabeck@lib.nmsu.edu">susabeck@lib.nmsu.edu</a></td>
</tr>
<tr>
<td>Brown, Marlo</td>
<td>Library</td>
<td>6-7485</td>
<td><a href="mailto:marlo@lib.nmsu.edu">marlo@lib.nmsu.edu</a></td>
</tr>
<tr>
<td>Cadena, Fernando</td>
<td>College of Engineering</td>
<td>6-3023</td>
<td><a href="mailto:fcadena@nmsu.edu">fcadena@nmsu.edu</a></td>
</tr>
<tr>
<td>Clark, Charles</td>
<td>C&amp;N</td>
<td>6-4390</td>
<td><a href="mailto:cgclark@nmsu.edu">cgclark@nmsu.edu</a></td>
</tr>
<tr>
<td>Conway, Jean</td>
<td>CED</td>
<td>6-2204</td>
<td><a href="mailto:econway@nmsu.edu">econway@nmsu.edu</a></td>
</tr>
<tr>
<td>Cyrs, Tom</td>
<td>CED</td>
<td>6-2204</td>
<td><a href="mailto:tcyrs@nmsu.edu">tcyrs@nmsu.edu</a></td>
</tr>
<tr>
<td>Dyson, Anna</td>
<td>C&amp;N</td>
<td>6-8163</td>
<td><a href="mailto:adyson@nmsu.edu">adyson@nmsu.edu</a></td>
</tr>
<tr>
<td>Leask, Steve</td>
<td>College of Education</td>
<td>522-8453</td>
<td><a href="mailto:sleask@zianet.com">sleask@zianet.com</a></td>
</tr>
<tr>
<td>Molloy, Molly</td>
<td>Library</td>
<td>6-6931</td>
<td><a href="mailto:mmolloy@lib.nmsu.edu">mmolloy@lib.nmsu.edu</a></td>
</tr>
<tr>
<td>Ormand, Brian</td>
<td>C&amp;N</td>
<td>6-1949</td>
<td><a href="mailto:bormand@nmsu.edu">bormand@nmsu.edu</a></td>
</tr>
<tr>
<td>Seager, DD</td>
<td>C&amp;N</td>
<td>6-5968</td>
<td><a href="mailto:dseager@nmsu.edu">dseager@nmsu.edu</a></td>
</tr>
<tr>
<td>Watkins, Cindy</td>
<td>Library</td>
<td>6-7676</td>
<td><a href="mailto:cwatkins@lib.nmsu.edu">cwatkins@lib.nmsu.edu</a></td>
</tr>
<tr>
<td>Watts, Joe</td>
<td>C&amp;N</td>
<td>6-5484</td>
<td><a href="mailto:joe@nmsu.edu">joe@nmsu.edu</a></td>
</tr>
<tr>
<td>Welsh, Denise</td>
<td>CED</td>
<td>6-1402</td>
<td><a href="mailto:dwelsh@nmsu.edu">dwelsh@nmsu.edu</a></td>
</tr>
<tr>
<td>Wiburg, Karin</td>
<td>College of Education</td>
<td>6-2390</td>
<td><a href="mailto:kwiburg@nmsu.edu">kwiburg@nmsu.edu</a></td>
</tr>
</tbody>
</table>
ITAL's class of Summer '97 includes faculty from the colleges of Education, Business, and Engineering. They include:

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armendariz, Abe L.</td>
<td>Educational Management &amp; Development</td>
<td><a href="mailto:rderlin@nmsu.edu">rderlin@nmsu.edu</a></td>
</tr>
<tr>
<td>Derlin, Bobby</td>
<td>Educational Management &amp; Development</td>
<td><a href="mailto:ghampton@nmsu.edu">ghampton@nmsu.edu</a></td>
</tr>
<tr>
<td>Hampton, Gerald</td>
<td>Marketing &amp; General Business</td>
<td><a href="mailto:athanson@nmsu.edu">athanson@nmsu.edu</a></td>
</tr>
<tr>
<td>Hanson, Adrian</td>
<td>Civil, Agricultural and Geological Engineering</td>
<td><a href="mailto:givory@tenet.edu">givory@tenet.edu</a></td>
</tr>
<tr>
<td>Ivory, Gary</td>
<td>Educational Management &amp; Development</td>
<td><a href="mailto:nkhandan@nmsu.edu">nkhandan@nmsu.edu</a></td>
</tr>
<tr>
<td>Khandan, NN</td>
<td>Civil, Agricultural, and Civil Engineering</td>
<td><a href="mailto:smills@nmsu.edu">smills@nmsu.edu</a></td>
</tr>
<tr>
<td>Mills, Sherry</td>
<td>Accounting and Business Computer Systems</td>
<td><a href="mailto:esautter@nmsu.edu">esautter@nmsu.edu</a></td>
</tr>
<tr>
<td>Sautter, Pookie</td>
<td>College of BA &amp; Econ</td>
<td></td>
</tr>
</tbody>
</table>
ITAL '97

Class Schedule

July 8
ITAL Kickoff
Welcome to ITAL; introduction of partners. Dr. Mike Wolf, Director, C&N.
Overview of how distance education works at NMSU, including the process of getting a distance education course approved, options for presenting it, types of courses that can be presented, timeline, and how fees and tuition are calculated. Dr. Lynford Ames, Director, Distance Education/Weekend College.
1 to 4 p.m., Corbett Center, Room 214.

July 9,10
Communicating Electronically With Your Students
This two-part session covers the common Internet tools instructors can use to facilitate communication in their classes. These tools can be based on either asynchronous or synchronous communications methods.
Part I (July 9) - Asynchronous Communication. Asynchronous communication tools allow interaction to be initiated at different times by the various people involved. The common tools in the category are email, listservs, newsgroups, and bulletin boards. How these tools are implemented in the NMSU environment will be examined.
Part II (July 10) - Synchronous Communication. Synchronous communication tools feature interaction at the same times by the various people involved. This interaction can occur between student and instructor, student to the class, students with other students in the class, at remote sites, etc. The tools include chat rooms, IRC, Cool Talk, Cu-SeeMe videoconferencing, electronic whiteboards, etc. Session includes an overview at some of these options, practice at using some of them, and demonstrations of others.
Both days - 1 to 4 p.m., C&N Building, Room 142.

July 14, 15
Teaching at a Distance With the Emerging Technologies
Workshop based on some of the Center for Educational Development (CED) workshops.
Part I - Topics include (1) reconfiguration guidelines for distance education; (2) criteria for choice of delivery media; (3) development of a telelesson plan and correlated handouts for teaching at a distance; and (4) an instructional systems approach to teaching at a distance.
Part II - Topics include (1) let them see what you are saying: visualization for a visual medium; and (2) the active teleclassroom: engaging students at field sites. Dr. Tom Cyrs, Professor, Educational Management and Development, and Eugenia Conway, Asst. Director, Center for Educational Development (CED).
Both days, 1 to 4 p.m., Milton Hall, Room 50.

July 16
Using PowerPoint
Hands-on practice at developing visual materials to accompany a lecture or presentation. Participants will learn how to use PowerPoint to create a series of slides that can be projected on a screen or be used to generate professional looking, colored transparencies for use in more traditional settings. Ann Dyson, Systems Analyst, C&N
1 to 4 p.m, C&N Building, Room 142.

July 17, 28
The Electronic Library
Part I (July 17) - Overview of library services and research sources for distance education faculty and students. Practice using electronic databases, remote library catalogs, and document delivery resources. Presentation on and discussion of copyright issues.
Part II (July 28) - Instruction and practice in conducting academic research on the Internet. Topics include (1) search engines and subject indexes - their uses and limitations; (2) effective Internet search techniques; (3) evaluation of Internet sources and citation style methods for electronic resources. Discussion of connecting from remotes sites to all resources covered during both sessions. NMSU Library staff: Susan Beck, Instruction Coordinator; Molly Molloy, Reference
Librarian; Cindy Watkins, Research Support Services Librarian; and Marlo Brown, Instructor, Library Reference. Both days, 1 to 4 p.m., New Library, Library Instruction Room.

**July 21**

**Integrating Technology Into Curriculum Development**
A look at the kinds of learning required in an information age, how learning technologies can assist students to gain these skills, and how technology can help teachers solve related instructional problems. Dr. Karin Wiburg, Associate Professor, Curriculum and Instruction, College of Education.
1 to 4 p.m., Corbett Center, Curry Room.

**July 22, 29**

**Basics of Web Publishing**
Part I - Across the NMSU campus, many departments are publishing information on the Web, including class schedules, departmental and degree information, professional pages, class syllabi, assignments, and other class materials to the Web. This class include an introduction to HTML, use of a WYSIWYG editor (FrontPage), practice in using HTML conversion in MS Word, and use of Adobe Acrobat. Participants will complete the class with a class home page, syllabus, and handouts posted to a Web server.
Part II - Continuation of projects begun in class from previous week. ITAL participants will take pages they have created and learn how to upload them to a server and maintain them afterward. Overview of use of graphics, page design concepts.
DD Seager, Computer Systems Coordinator/Technical Writer, C&N.
Both days, 1 to 4 p.m., C&N Building, Room 142.

**July 23, 24**

**Video Delivery Options**
Parts I & II - Overview of the video delivery options available for presenting a distance education class, including video taping, satellite broadcasts, and two-way interactive video. Presentation will include introduction to the facilities as well as techniques and methodologies for course presentation.
Denise Welsh, Teleclassroom Manager, CED, Joe Watts, Visualization Specialist, C&N.
July 23 - 1-4 p.m. Milton Hall, Room 169
July 24 - 1-4 p.m. Business Complex, Room 343

**July 30**

**Pulling It All Together With Web CT**
Demonstration of how WEB CT enables total course integration, including such features as class administration, communication with students, collecting assignments, publishing class materials, collecting evaluations, administering a test, and perhaps even delivering the class totally over the Internet. Dr. Fernando Cadena; Professor; Civil, Agricultural, and Geological Engineering, College of Engineering.
1 to 4 p.m., C&N Building, Room 142.

**July 31**

**ITAL Wrapup**
Communicating Electronically With Your Students

July 9-10
1 to 4 p.m. - Room 142 C&N building

Facilitators
Brian Ormand - Manager, Scholarly Technology - Computing & Networking (bormand@nmsu.edu, 6-1949)
Jeff Wall - Computing & Networking (jewall@nmsu.edu, 6-5487)

Abstract
Part I (July 9) - Asynchronous Communication
Asynchronous communication tools allow interaction at different times by the various people involved. The common tools in the category are email, listserves, newsgroups, and bulletin boards. How these tools are implemented in the NMSU environment and how to use them will be examined.

Part II (July 10) - Synchronous Communication
Synchronous communication allows interaction to occur between student and instructor, student to the class, within student groups, between students and students in remote classes, etc. Synchronous communication tools require the interaction to be done at the same times by the various people involved. The tools in the category are chat rooms, IRC, Cool Talk, CU-SeeMe, electronic whiteboards, etc. This session will provide an overview of how each of these works and practice at using some of them.
Syllabus

Teaching at a Distance With the Emerging Technologies

July 14-15
1 to 4 p.m. - Room 50 - Milton Hall

Facilitators
Dr. Tom Cyrs (tcyrs@nmsu.edu), professor of educational management and development, and Eugenia Conway (econway@nmsu.edu), Assistant Director. Both are from the Center for Educational Development (CED).

Description of Class
Part I (July 14)
Topics include:

- Reconfiguration guidelines for teaching at a distance
- Criteria for choosing a delivery system: audio, video, computing, and print
- The telelesson plan and interactive study guide
- The instructional systems approach to teleteaching

Learning Performance Objectives:
1. Describe the four levels of quality in telecourses.
2. Explain the instructional systems approach to teleteaching.
3. Describe the four levels of cognitive outcomes.
4. Describe the five components of the telelesson plan and the relationship of the telelesson plan to student handouts.
5. Explain the criteria for selection of a telecourse delivery system: audio, video, computing, and print.
6. Describe how to modify a traditional course for distance learning.

Part II (July 15)
Topics include:

- Visualization for a visual medium
- The active teleclassroom: Engaging students at field sites

Learning Performance Objectives:
1. Construct examples of word pictures and visual analogies.
2. Given 156+ potential activities, select those most appropriate to your teleteaching.
3. Identify and evaluate the teaching strategies used during this seminar.
Syllabus

Using PowerPoint
July 16
1 - 4 p.m. - C&N Building - Room 142

Facilitator
Anna Dyson, Systems Analyst, Computing and Networking
adyson@nmsu.edu
6-8163

Abstract
Hands-on practice at developing visual materials to accompany a lecture or presentation. Participants will learn how to use PowerPoint to create a series of slides that can be projected on a screen or be used to generate professional looking, colored transparencies for use in more traditional settings.
Syllabus

The Electronic Library
July 17 & 28
1 to 4 p.m. - New Library - Library Instruction Room

Instructors - All from NMSU Library

- Susan Beck, susabeck@lib.nmsu.edu, 6-6171
- Marlo Brown, marlo@lib.nmsu.edu, 6-7485
- Molly Molloy, mmolloy@lib.nmsu.edu, 6-6931
- Cindy Watkins, cwatkins@lib.nmsu.edu, 6-7676

Abstract

- **Part I (July 17)** - Overview of library services and research sources for distance education faculty and students. Practice using electronic databases, remote library catalogs, and document delivery resources. Presentation and discussion of copyright issues.
- **Part II (July 28)** - Instruction and practice in conducting academic research on the Internet. Topics include (1) search engines and subject catalogs - their uses and limitations; (2) effective Internet search techniques; (3) evaluation of Internet sources and citation style methods for electronic resources. Guidance in connecting from remote sites to all resources covered during both sessions.

Prerequisites

So that sessions can be tailored to meet your specific needs, please bring teaching projects, course assignments, or your own concerns, questions or topics that include any of the following:

- traditional library research
- use of the Internet for research
- student use of library services

Objectives

When you complete this class, you should be able to:

- Identify the NMSU library research services and resources most useful and appropriate to developing and teaching a distance learning course, including document delivery, electronic reference services and research databases as well as class assignments, student research projects, and your own specific research needs.
- Select and search the most appropriate research database(s) and Internet search tools based on the type, content and subject area of the information you need.
- Apply Educational Fair Use guidelines and procedures to both your course materials (web pages, digitized images, audio/video files, digitized text readings) and course delivery methods (live video transmission, tape delay, electronic-only)
• Apply evaluation criteria to web sites found through Internet searches.
• Recognize the major components, as well as the complexities, of electronic citation style, its use in research papers and projects, and the importance of documenting specific elements.
• Successfully connect to all services and databases presented from a remote, off-campus location.

Outline of Sessions

I. Electronic Library I - July 18

A. Library Services and Resources Faculty and Students
1:00 - 1:30 p.m. (Susan Beck)

1. Services
2. Document delivery
3. Reference assistance
4. Electronic reserves
5. Resources
6. Catalog
7. Electronic databases
8. Web page of resources
9. Who to contact

B. Electronic Databases and Catalogs
1:30 - 2:40 pm (Molly Molloy and Marlo Brown)

1. NMSU databases/catalogs - proprietary
2. Coverage
3. Functions
4. Search features
5. Classroom applications
6. Hands on practice
7. Other databases/catalogs - nonproprietary
8. Coverage
9. Functions
10. Search features
11. Classroom applications
12. Hands on practice

C. Copyright issues
2:50 - 4:00 pm (Cindy Watkins)

1. Fair use described
2. Fair use and distance education: the issues
3. Liability: individual vs. institutional
4. Fair use for:
   • Coursepacks
   • Performance broadcasts
   • Digitized images
Electronic Library

- Digitized works for multimedia
- Music
- Research copies
- Electronic reserves

5. Web pages
6. CONFU & the muddy issues

Electronic Library II - July 28

A. Internet Research
1:00 - 2:30 pm (Marlo Brown)

1. Search Methods
2. Search Tools
3. Classroom applications
4. Hands on practice

B. Evaluating and Citing Internet Resources
2:30 - 3:20 pm - (Susan Beck)

1. Internet Evaluation
2. Basic principles for evaluation
3. Examples of good & bad web for principle
4. Citation Style
5. Web specific concerns/issues
6. APA vs. MLA
7. Guidelines

C. Connectivity
3:20 - 4:00 pm - (Molly Molloy)

1. Remote connections to
   -- Library web page
   -- Web databases (proprietary and nonproprietary)
   -- External databases/catalogs
2. Troubleshooting

35
Syllabus

Integrating Technology 
Into Curriculum Development 

July 21 
1 - 4 p.m. - Corbett Center - Curry Room

Facilitator 
Dr. Karin Wiburg, Assistant Professor, Curriculum and Instruction - 
College of Education. 
kwiburg@nmsu.edu 
6-2390

Abstract 
This class takes a different angle on teaching and learning with technology. It asks, why should one 
teach with technology. In other words, if technology-assisted learning is the answer, what is the 
question? How can using technology help students learn the kinds of abilities required in the 
information age? How can technology help faculty solve pressing instructional problems, such as, 
unprepared students, a lack of time to cover increasing amounts of content, the existence of a wide 
range of student abilities, and the need to help students think. Faculty will be provided with a very 
practical curriculum design model which integrates technology tools with content teaching and the 
new learning foundations.

Prerequisites 
Bring a syllabus and materials for a class you currently teach. Consider especially those content 
areas that have been a problem for students to learn. We will design ways that technology tools tied 
to teaching strategies can help you enhance student learning.

Intended Outcomes 
When you complete this class, you should be able to do the following:

1. Describe some of the new learning foundations students will need and how they interact with 
   the content you teach.
2. Use a template to design a learning activity which integrates the use of technology tools with 
   content learning.
3. Describe how a variety of different technology tools, with an emphasis on 
   telecommunications and use of the Internet, which can help solve instructional problems.
4. Know about web and print resources which provide guidance in integrating technology with 
   teaching.
5. Think in new and different ways about teaching.
Syllabus

Basics of Web Publishing

July 22 & 29
1 to 4 p.m. - Room 142 C&N building

Facilitator
DD Seager - Computing & Networking
dseager@nmsu.edu
6-5968

Abstract
Part I (July 22) - Across the NMSU campus, many departments are publishing information on the Web, including class schedules, departmental and degree information, professional pages, class syllabi, assignments, and other class materials to the Web. This class include an introduction to HTML, use of a WYSIWYG editor (Adobe PageMill), practice in using HTML conversion in MS Word, and use of Adobe Acrobat. Participants will complete the class with a class home page, syllabus, and handouts posted to a Web server.

Part II (July 29) - Continuation of projects begun in class from previous week. ITAL participants will take pages they have created and learn how to upload them to a server and maintain them afterward. Overview of use of graphics, page design concepts.

Prerequisites
To save time, please bring the following documents when you come to class on the first day. Items 1 and 2 should be in MS Word or WordPerfect.

1. Class syllabus
2. A copy of your resume.
3. A typical class handout, preferably something that would not be prepared as word processing document (diagram, map, chart, etc.).

Objectives
When you complete this class, you should be able to do the following:

1. Convert a document to HTML using the Word/HTML conversion facility.
2. Use an WYSIWYG editor (PageMill) to create a syllabus that will serve as a home page for a class. It will link to the handouts page and professional page.
5. Download the pages to your PC and modify them, then move them back to the Web.
6. You will also understand some HTML basics, have an overall understanding of the Web server environment on campus, be able to use different kinds of graphics images, and have learned about some of the unique requirements of Web page design.
Syllabus

Video Delivery Options
July 23 - 1-4 p.m. Milton Hall, Room 169
July 24 - 1-4 p.m. Business Complex, Room 343

Facilitator
Denise Welsh - Teleclassroom Manager - CED, Instructional Video Services
dwelsh@nmsu.edu
6-1402

Abstract
Part I (July 23) - This session will acquaint participants with the teleclassroom environment. Available technologies will be explained and demonstrated. Broadcast capabilities will be described along with the pros and cons associated with the use of those technologies. Faculty and telecourse preparation, considerations and concerns will also be discussed.

Objectives
1. Gain knowledge of the broadcast delivery modes available
2. Understand the advantage and/or limits to the different delivery options
3. Gain insight as to what it takes to do a telecourse

Part II (July 24) - Orientation and demonstration with a hands-on component of two-way video/audio equipment housed in the Business Complex and used to teach courses to NMSU branches at Carlsbad and Alamogordo. Annette Claycomb, whose duties include acting as a site facilitator in the compressed video lab at the Alamogordo campus, will comment from her experience as a participant/observer of two-way classes for the last two semesters. Because her interactive discussion/presentation will be made from the facilities at Alamogordo and transmitted to the main campus, participants will experience an interactive learning situation in which they are the ones receiving information from an instructor at a distant site.

Objectives
1. Understand and experience the difference between one-way and two-way video technology
2. Gain insight from someone who has been involved with type of course delivery.
Syllabus

Pulling It All Together
With WebCT

July 30
1 - 4 p.m. - C&N Building - Room 142

Facilitator
Dr. Fernando Cadena, Professor, Civil, Agricultural, and Geological Engineering, College of Engineering
fcadena@nmsu.edu
6-3023

Abstract
Demonstration of how WEB CT enables total course integration, including such features as class administration, communication with students, collecting assignments, publishing class materials, collecting evaluations, administering a test, and perhaps even delivering the class totally over the Internet.

Prerequisites
Bring copies of the class materials that you developed in the Web Publishing Classes so that you can try your hand at integrating them into the WebCT environment.

Intended Outcomes

1. To see first hand how WebCT integrates key components of distance learning into one comprehensive.
2. To gain a little experience on how you as a teacher would set up a class using the WebCT environment.
ITAL Facilitators

Computing and Networking

Brian Ormand has a BA in Business Computer Systems '82 and MBA '90 from NMSU. He is Manager of Scholarly Technology within NMSU's Computing and Networking and has been with the university for ten years. He has worked with Internet information and communication tools during most of that time. He has regularly presented papers on different aspects of computer services at various conferences. Prior to coming to NMSU he worked for Central & Southwest Services Corp. in Dallas, Texas for five years. Brian and his wife Julie are originally from Silver City, NM and currently live in Las Cruces with their three children, Hannah (14), Bethany (10), and Zachary (7).

DD Seager has a both a BA and MA in English from NMSU with the master's degree work in Technical and Professional Communication. She has worked as a full-time college instructor in the English department where she taught freshman composition, business writing, and technical writing. She has also worked as a technical editor for a government contractor, and for the past seven years as a technical writer and later computer systems coordinator for C&N. Since joining C&N's Scholarly Technology group a year ago, she has assisted faculty in their efforts to incorporate some of the latest developments in learning technologies into both traditional and distance learning classes. Providing customer support, developing technical documentation, and planning and conducting training are the areas of responsibility she enjoys most at C&N.

Anna Dyson has been with Computing & Networking since 1989, most recently as a Systems Analyst in Desktop Support Services where she provides Macintosh and PC support campus-wide. Anna has served as one of the C&N instructors who teach Microsoft Word and Excel classes to NMSU faculty and staff.
ITAL Facilitators

Office of Distance Education/Weekend College

Dr. Lynford L. Ames, Director of Distance Education and Weekend College, came to NMSU as an assistant professor of chemistry in 1966. He served as department head of Chemistry for eleven years. Lyn was Associate Dean and the Acting Director of the College of Arts and Sciences Research Center in 1988. He organized the Weekend College in 1986 and served as its first director. He was Interim Dean of the Graduate School during 1992-93 and served three years as the Associate Dean in the College of Health and Social Services. In November, 1995 he became the first Director of Distance Education at NMSU. He coordinates all off-campus courses, both those taught live and those that are delivered by television. In addition, he directs both the Weekend college and the Center for Educational Development. He is a member of the Dean's Advisory Council and chairs the NMSU Committee on the Western Governors University.
ITAL Facilitators

Center for Educational Development

**Thomas E. Cyrs, Ed.D.**, is the senior faculty advisor for teaching and professor of educational management and development at New Mexico State University. Prior to this position he was director of the Curriculum Office at the College of Pharmacy at the University of Minnesota and director of the Division of Instructional Systems development at Northeastern University in Boston. He is the 1995 recipient of the Mildred B. and Charles A. Wedemeyer Award for outstanding contributions in the application of distance education in North America presented at the Annual Conference on Distance Teaching and Learning at the University of Wisconsin-Madison. This award is presented in partnership with The Pennsylvania State University, the American Center for the Study of Distance Education, and the *American Journal of Distance Education*. Dr. Cyrs teaches graduate courses in university teaching and distance learning for faculty and graduate teaching assistants. He consults and conducts workshops in university teaching and teaching at a distance for many institutions across the United States and internationally. Major books include *Teleclass Teaching: A Resource Guide, 2nd edition*, with Frank A. Smith, *Essential Skills for College Teaching: An Instructional Systems Approach, 3rd edition*, and *Teaching at a Distance with the Merging Technologies: An Instructional Systems Approach* (in press).

**Eugenia (Jean) D. Conway, M.A.**, is the assistant director for faculty development and coordinator of graphics in the Center for Educational Development at New Mexico State University. As assistant director for faculty development, she oversees the CED faculty development and instructional design programs as well as graphics, photography, and audio/visual distribution. She teaches courses in university teaching and distance learning and co-presents a national workshop on teaching at distance with Dr. Cyrs. Her specialization is in visual thinking.

In her capacity as coordinator of graphics, she works with faculty to prepare presentation materials for both traditional and television teaching. These materials include hand-produced original displays, computer-generated color overhead transparencies, electronic images for video, and accompanying study guides. In addition to classroom material, she prepares artwork for publication, creates poster sessions, and designs printed materials. Prior to this position she was the graphic artist for West Texas State University in Canyon, Texas.
Denise Welsh has been with New Mexico State University for the past 13 years working in the Center for Educational Development, Instructional Video Services Division. Prior to coming to NMSU she was with El Paso Community College, Media Services for eleven years coordinating their audio visual center.

Denise played an instrumental role the development and planning of teleconferencing services and distance education course production and broadcast for NMSU. She currently manages the university CATV system, schedules and coordinates the origination and reception of two-way video/audio and satellite teleconferences, in addition to coordinating and overseeing the production and broadcast of NMSU distance education courses. She works with each telecourse professor to assist and guide them in preparing their course for television broadcast as well as handling the distribution of course materials to and from their remote sites. Denise also produces, shoots, and edits promotional, training and orientation video programs for various NMSU departments and oversees video duplication and standards conversion services offered by her office. Her responsibilities include the supervision of production student assistants and one full time employee.
Susan Beck (MS, University of Illinois at Urbana-Champaign, 1985; MA, Ohio University, 1990) is the Coordinator of Information Instruction at New Mexico State University Library. She has taught doctoral and masters level courses on research methods in Education (University of Missouri-Kansas City) and business (City University) and has also taught English as a Second Language both overseas and in the United States. Last year Susan team-taught with faculty and computing services personnel a series of Internet workshops, sponsored by the Texas Higher Education Coordinating Board, for South Texas community college faculty and administrators. She will teach LSC 311 “Information Literacy” this fall.

Mario Brown has a BA in Management and Spanish from Sonoma State University (1985) and an MLIS (Master of Library and Information Studies) from the University of California, Berkeley (1989). His title is Reference Librarian/Information Technology Specialist, and he holds the rank of assistant professor. His research interests include the use of computer networks in teaching, computer and network security, and privacy issues.

Molly Molloy (MLIS-Louisiana State University, 1990) is currently Reference Librarian and Latin American Information Specialist at New Mexico State University Library. Molly teaches LSC311 -- Information Literacy, and provides course-related instruction for many NMSU graduate and undergraduate courses in social sciences and humanities. She is currently the author of "Internet Resources for Latin America," an online guide to finding Latin American information on the Internet (http://lib.nmsu.edu/subject/bord/laguia) and maintains other library web pages. Molly is a frequent speaker at national and international academic conferences on the use of Internet information for research on Latin America.

Cindy Watkins (MLIS-University of Texas at Austin, 1995) has been with the New Mexico State University Library for many years and is currently Research Support Services Librarian. Cindy is responsible for Pegasus, the document delivery service of the library. She works with the math department in selecting books for the library and works at the Branson Reference Desk several hours each week.
Dr. Karin Wiburg is an associate professor of instructional and information technology in the Curriculum and Instruction Department of the College of Education, where she has written and received over $600,000 in grants to support the integration of technology in schools. Dr. Wiburg has also developed a new masters specialization in learning technologies and assisted the College of Agriculture to implement a training program in multimedia for vocational/technical teachers. She has developed, implemented, and evaluated technology-based learning modules in both the teacher education program at NMSU and in the local schools and served as the research editor for the ISTE journal from 1993-1996. She is currently working on completing the textbook for Harcourt brace on technology and design for learning. Prior to working in higher education, she supervised and evaluated programs in reading, mathematics, and E.S.L., and was involved in implementing the first computer-assisted learning labs in the district.

Steve Leask has a BS in Business from Humboldt State University and an MBA '97 from NMSU. This fall he will begin a Ph.D. program with Educational Management and Development and plans to study various aspects of distributed learning. Steve has taught computer subjects at the community college level and worked as a teaching assistant during the last year of his MBA program.
Appendix B

Application Form
Application for ITAL - Summer '97

Instructions: Please fill out this form and return it via campus mail to Brian Ormand, Computing and Networking, Box 3AT, or fax it to 6-5278. You can also copy the text below, paste it into an email message, complete the information, and mail to scholars@nmsu.edu. If someone other than yourself controls the fund number, please request that he or she send email verification. Deadline for applications is May 30!

I would like to participate in the Institute for Technology-Assisted Learning (ITAL) - Summer '97.

If I am selected, charge the tuition of $1250 to fund number ___________ for the _______ fiscal year.

I understand

1. That as a participant in ITAL, I will be furnished with a laptop computer installed with all the software needed to complete ITAL workshops and seminars.

2. That ownership of the laptop will be transferred to my department when I meet certain conditions. These conditions are the following:

   - I commit to the development of a distance education class that could be offered in 1997 or 1998.
   - I attend at least 13 of the 15 sessions that will be offered during the Summer '97 ITAL.
   - I develop some course materials that utilize some of the methods or technologies presented the ITAL seminars

Name __________________________  Department __________________________
Campus Box _______________  Campus Phone _______________
Email Address _______________  Home Phone _______________

Please describe the goals you expect to achieve through ITAL, including specifics about the distance education course you are planning or would like to teach:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Your Signature __________________________
Approval of Individual __________________________
Who Controls Fund Number __________________________
Appendix C

ITAL Budget
Making the Leap to Hyperspace in Distributed Learning

<table>
<thead>
<tr>
<th>ITAL</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME SOURCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Donation - Dr. Conroy</td>
<td></td>
<td>$19,600.00</td>
<td></td>
</tr>
<tr>
<td>Participant Fees</td>
<td>8</td>
<td>$1,250.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>Additional Upgrade Costs for Macs</td>
<td></td>
<td></td>
<td>$5,819.00</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td></td>
<td></td>
<td>$35,419.00</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Computers</td>
<td></td>
<td>$27,450.00</td>
<td></td>
</tr>
<tr>
<td>Total Software</td>
<td></td>
<td>$1,843.65</td>
<td></td>
</tr>
<tr>
<td>Total Computer Accessories</td>
<td></td>
<td>$3,087.21</td>
<td></td>
</tr>
<tr>
<td>Faculty Stipends</td>
<td></td>
<td>$1,000.00</td>
<td></td>
</tr>
<tr>
<td>WebCT beta test server upgrade</td>
<td></td>
<td>$1,200.00</td>
<td></td>
</tr>
<tr>
<td>Total Miscellaneous Items</td>
<td></td>
<td>$672.92</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td></td>
<td></td>
<td>$35,253.78</td>
</tr>
<tr>
<td><strong>Amount Available = Income - Expenses</strong></td>
<td></td>
<td></td>
<td>$165.22</td>
</tr>
</tbody>
</table>
Appendix D

Library Services for Distance Learning Students & Faculty
Library Workshops for ITAL
- Databases & Catalogs
- Copyright & Distance Education
- Searching the Internet
- Evaluating Internet Resources

Library Services for Distance Learning Students & Faculty

|| Document Delivery | Reference Assistance | Electronic Databases | Reserves | Instruction ||

Document Delivery

Articles

Students may request articles from Pegasus, the library's document delivery service. To contact Pegasus students have a choice of several different options. They can:
1. Use the fill-in form on the library's web page
2. Send a request for articles via e-mail directly to Pegasus (pegasus@lib.nmsu.edu)
3. Phone in the request by calling 505-646-7676
4. Mail the request to: Pegasus Document Delivery, University Library, MSC 3475 P.O. Box 30006, New Mexico State University, Las Cruces, NM 88003

Faculty must send their class roster to the Pegasus office to ensure that students receive this service. Without a list of your currently enrolled students, Pegasus cannot verify your students' special status and, in turn, your students will not be able to order articles at all.

For each article requested, students must provide the complete citation, their name, status (i.e., distance learning student) address, phone number and electronic mail address.

Books

Onsite distance learning students, or those who are nearby and can visit the library, have full circulation privileges. Offsite distance learning students can order NMSU books on interlibrary loan through their local libraries.

Offsite students will need to initiate interlibrary loan requests at their local libraries for books that NMSU does not own.
Reference Assistance

Students have many options when asking for Reference Assistance. They can:
- send an e-mail message to answers@lib.nmsu.edu
- phone the Reference Desk at 505-646-6928
- fax us a request at 505-646-4335
- directly contact a reference librarian via e-mail. See the list of librarians' subject specialties at http://lib.nmsu.edu:80/aboutlib/librarian.html
- or send us a letter at Reference Dept., University Library, Dept. 3475 P.O. 30006, New Mexico State University Las Cruces, NM 88003-8006

Students should let us know their preferred method of communication (e.g., e-mail, phone, fax) as well as their status as a distance learning student.

Ed Erazo, Education Librarian is the current, primary contact in the Reference Dept. for distance learning students.

Reference librarians will assist students with their research in a variety of ways. For example, we will help them formulate a search strategy for their research topic. We can suggest other, unexplored, resources. These can be print, proprietary and non-proprietary electronic databases, or even web sources. In special cases, where students haven't any means of electronic access, they can work individually with a reference librarian who will perform a search on several agreed-upon databases. Students will then receive the search results and from that list can evaluate and select source materials to be ordered via the Pegasus web page or by e-mail to Pegasus or by phone.

As with all students, distance learning students are expected to be the owners of their research projects. In other words, they are the decision makers for shaping their research questions, for selecting resource materials and for initiating document delivery requests.

Electronic Databases

Distance learning students have unlimited access to the library's catalog, its web and telnet-based proprietary and nonproprietary databases, as well as its subject collections of web resources. All of these are available on the library's web page. Students without web access can telnet to the library's Cafe Ole menu at lib.nmsu.edu.

Two of our most popular databases, PAN Plus and ABI Inform, are also available via telnet. Students will first need to login to their UNIX account. At the UNIX prompt they can enter lynx http://libcdl.nmsu.edu/cgi-win/panplus.exe for PAN Plus or lynx http://libcdl.nmsu.edu/cgi-win/abiplus.exe for ABI Inform.

Distance learning students will need to have, or have access to, a computer with modem hookup in order to take advantage of the library's electronic services and databases. In cases where they don't have access, students should contact the Reference Dept. by mail, phone or fax.

We are currently creating easy-to-use and seamless connection processes to verify students' status so they can access our web-based proprietary databases from off campus, remote sites.
Reserves

Students will have full access to electronic reserves.
Faculty can place copyright-cleared or non-copyrighted materials through our electronic reserve desk.

Instruction

Students can gain basic library skills through Shortcuts, the library's web-based tutorial.
Group instruction is also available. Contact Susan E. Beck, Instruction Coordinator at 646-6171.
Appendix E

Program Evaluation
TABLE 1: ITAL Evaluation Summary

On a scale of 1 - 5 (1=poor, 3=satisfactory, 5=excellent)

<table>
<thead>
<tr>
<th>Presenter</th>
<th>B. Ormand</th>
<th>CED</th>
<th>A. Dyson</th>
<th>Library</th>
<th>K. Wiburg</th>
<th>DD Seager</th>
<th>D. Welsh</th>
<th>F. Cadena</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Responses</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Overall Reaction</td>
<td>4.33</td>
<td>3.29</td>
<td>4.14</td>
<td>4.50</td>
<td>3.86</td>
<td>4.33</td>
<td>3.82</td>
<td>4.75</td>
</tr>
<tr>
<td>Organization</td>
<td>4.00</td>
<td>4.00</td>
<td>4.29</td>
<td>4.50</td>
<td>3.71</td>
<td>3.67</td>
<td>3.14</td>
<td>3.75</td>
</tr>
<tr>
<td>Clarity</td>
<td>4.17</td>
<td>4.14</td>
<td>4.43</td>
<td>4.50</td>
<td>3.86</td>
<td>4.17</td>
<td>3.86</td>
<td>4.25</td>
</tr>
<tr>
<td>Pace</td>
<td>3.83</td>
<td>3.43</td>
<td>4.14</td>
<td>4.50</td>
<td>3.71</td>
<td>3.83</td>
<td>3.29</td>
<td>3.75</td>
</tr>
<tr>
<td>Quality &amp; Usefulness of Materials</td>
<td>4.00</td>
<td>3.00</td>
<td>4.57</td>
<td>4.50</td>
<td>4.00</td>
<td>4.67</td>
<td>4.33</td>
<td>4.75</td>
</tr>
<tr>
<td>Depth of Coverage</td>
<td>3.33</td>
<td>3.00</td>
<td>4.14</td>
<td>4.33</td>
<td>3.71</td>
<td>4.17</td>
<td>3.29</td>
<td>3.75</td>
</tr>
<tr>
<td>Scope of Coverage</td>
<td>3.67</td>
<td>2.86</td>
<td>4.00</td>
<td>4.00</td>
<td>3.71</td>
<td>4.17</td>
<td>3.57</td>
<td>3.50</td>
</tr>
<tr>
<td>Potential Relevant Application</td>
<td>4.50</td>
<td>3.57</td>
<td>5.00</td>
<td>5.00</td>
<td>4.00</td>
<td>4.83</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Met Stated Objectives</td>
<td>4.33</td>
<td>3.14</td>
<td>4.57</td>
<td>4.83</td>
<td>4.00</td>
<td>4.50</td>
<td>4.43</td>
<td>4.75</td>
</tr>
<tr>
<td>Time Allotted for Topic:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please enter &quot;less, OK, more&quot;</td>
<td>3.00</td>
<td>-2.00</td>
<td>3.00</td>
<td>0.00</td>
<td>-1.00</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>
ITAL Evaluation Summary

What segment of the institute was MOST USEFUL to you? Why?
1. Library: availability of info
2. Electronic library - opened my eyes to resources available to students which is often overlooked
3. The material showing how to do the shift from non-technological to technology based instruction. Most have thought at length about the teaching aspects of what we do, but we need info on technology.
4. Web CT, Adobe Pagemill; knew least about these so leaned most
5. Hard to say - probably library and web publishing since I knew nothing and I need to know about them immediately.
6. I thought sending video images to communicate over the net was awfully cumbersome and of little use. Everything else was very useful.
7. All - Everything was new to me.

What segment of the institute was LEAST USEFUL to you? Why?
1. Teaching at a distance: not appropriate for higher education (in my opinion)
2. PowerPoint: have fairly good grasp of but still learned new things so would definitely keep it
3. CED class appeared to be geared toward grade school/junior high audience. I question the application of hats, puppets, puzzles with college students.
4. CED and video; too much time to do too little new stuff
5. Video delivery - should have been most useful; need hands-on.
6. Tom Cyrs & Denise Welsh both covered how to dress for TV. Some of DD's presentation was hard to follow.
7. NA

How will this institute make a difference in learning for your students?
1. Extra efforts in becoming aware of info/data that is already available.
2. Makes learning more exciting & uses diverse tools to keep interest & motivation high.
3. I have already created web syllabi, added a picture gallery, and I am restructuring both local & distance classes to reflect class material from ITAL.
4. Will use WWW more
5. I will provide more options for learning & increase student technology skills while they learn content.
6. I have at least a fighting chance of making distance learning a meaningful & rewarding experience for them.
7. I am not quite sure yet. I am having to familiarize myself with a great deal of the info provided. Once I do this, I will figure out how it will aid my students.