

March 27-29 Greensboro, NC





Conference Sponsored by





The University of North Carolina Faculty Assembly

Thanks to Our Corporate Sponsors









Welcome!

March 27, 2003

Dear Conference Participant:

More than 300 faculty and staff are gathering this year for the 2003 UNC Teaching and Learning with Technology Conference, an event that showcases the best and brightest uses of new technologies on UNC campuses.

This year's program spotlights cutting-edge issues such as grid computing, fair use copyright legislation, and faculty recognition for digital scholarship. All told, you can select from more than 90 presentations covering the widest range of topics in the conference's four-year history.

Back by popular demand are hands-on workshops Saturday morning in UNCG computer labs and interest group discussions on timely topics such as web accessibility. New to this year's program are poster sessions, allowing more in-depth discussion between participants and presenters.

Plus, during plenary sessions you'll enjoy the personal perspective of two highly regarded leaders in higher education. Dr. Jeremy Haefner, Dean of the College of Engineering and Applied Science at the University of Colorado at Colorado Springs and one of the two 2002 EDUCAUSE NLII Fellows, will review key principles for "deeper learning" and how to implement them in the classroom. Dr. Carl Berger, Director of Advanced Academic Technologies and Professor of Science & Technology Education at the University of Michigan-Ann Arbor, will offer insight into the exciting role that technology will play in our future learning environments.

The TLT Collaborative extends its appreciation to the UNC Faculty Assembly for its continuing assistance in planning the program, soliciting and reviewing proposals, and promoting participation at the conference among all University faculty members. We also thank our first corporate sponsors–Blackboard, CIBER, eCollege, and WebCT–for their financial support and participation in academic presentations.

Your comments on last year's conference helped us shape and define the 2003 program. To help us further identify areas for improvement, this year we invite you to complete an evaluation form at the end of each session you attend. In addition, please visit our website (www.unctlt.org/special/conference 2003/participate/ evaluation.cfm) after the conference and share your recommendations on ways to strengthen the overall program. Your comments provide valuable insight.

On behalf of the TLT Collaborative and the Faculty Assembly, I welcome you to this year's conference. Thank you for joining us.

Sincerely,

Frank Prochato

Frank Prochaska Executive Director UNC Teaching and Learning with Technology Collaborative

Table of Contents

General Information	4
Conference Highlights	5
Concurrent Session Overview (Thursday)	7
Concurrent Session Overview (Friday)	9
Hands-On Workshops and Seminars (Saturday)	12

THURSDAY

Preconference Seminar	13
Plenary Speaker (Thursday, 12:45–1:30)	.14
Corporate Presentations (Thursday)	15
Concurrent Session 1 (Thursday, 2:00–2:45)	16
Concurrent Session 2 (Thursday, 3:00–3:45)	24
Concurrent Session 3 (Thursday, 4:00–4:45)	31
Poster Sessions (Thursday, 4:45–5:30)	38

FRIDAY

Plenary Speaker (Friday, 11:00–11:45)	44
Corporate Presentations (Friday)	.45
Concurrent Session 4 (Friday, 9:00–9:45)	46
Concurrent Session 5 (Friday, 10:00–10:45)	51
Concurrent Session 6 (Friday, 1:00–1:45)	56
Concurrent Session 7 (Friday, 2:00–2:45)	62
Poster Sessions (Friday, 2:45–3:30)	66
Concurrent Session 8 (Friday, 3:30–4:15)	71
Concurrent Session 9 (Friday, 4:30–5:15)	78

SATURDAY

Hands-On Workshops and Semina	i rs (Saturday,	9:00-12:00)	
Map of Koury Conference Center	Rooms		94

GENERAL INFORMATION

Registration and Information Desk

The registration and information desk will be open in the Victoria Ballroom Prefunction area on the third floor of the Koury Convention Center on Thursday and Friday from 8:30 a.m. -5:30 p.m. and on Saturday from 8:00 a.m. -10:00 a.m. This desk also serves as the message center where all changes to the agenda and other important notices will be posted. Anyone trying to reach a conference participant should call (336) 292-9161 and ask for the UNC TLT Conference registration and information desk.

Please Note: We will not interrupt sessions to deliver messages unless there is an emergency situation. Participants should check the message board on a regular basis throughout the conference.

Name Badges

Attendees are required to wear their name badges at all conference functions. Your name badge is your ticket for lunch. Please assist the conference and hotel staff and other participants by displaying your badge in a prominent place. Entry to any conference function may be denied to anyone not wearing a name badge.

Slide Presentations and Other Handouts

While they last, extra copies of the slide presentations and other handouts will be available in the Victoria Ballroom Prefunction area after the specific presentations. Participants will also be able to download available slide presentations from the TLT Conference web site (http://www.unctlt.org/ special/conference2003.cfm) after the conference.

Conference Evaluation

The conference evaluation form will be posted on the following site after the conference: www.unctlt.org/special/conference2003/participate/evaluation.cfm. Please take the time to complete this form online, as your feedback is valuable in determining future conference agendas.

Session Evaluations

Session evaluations will be handed out at the beginning of each session or will be located on the table nearest to the entrance. Please take a few minutes after every session to complete the form and drop it in the evaluation box as you leave the room. You may also turn in evaluation forms at the registration and information desk.

Cellular Phones and Pagers

Please remember to turn off your cellular phone and/or pager while attending all sessions.

This is a no smoking conference. Thank you for not smoking.

CONFERENCE HIGHLIGHTS

Plenary Speakers

During lunch on Thursday and Friday, participants will have the pleasure of listening to the following two experts in the field of teaching and learning with technology.

Thursday

Deeper Learning—Stepping Back 500 Years

Dr. Jeremy Haefner, Dean of the College of Engineering and Applied Science, University of Colorado at Colorado Springs

A description of this presentation can be found on page 14 of this program book.

Friday

Predicting the Future—Stepping Forward Five Years

Dr. Carl Berger, Director of Advanced Academic Technologies, Collaboratory for Advanced Research and Academic Technologies, University of Michigan at Ann Arbor A description of this presentation can be found on page 44 of this program book.

Corporate Presentations

New this year are presentations from our Corporate Sponsors. We thank these companies for their valuable addition to the content of the conference as well as their support.

Thursday

Web Accessibility and e-Learning

Joel Sanda, Standards & Accessibility Consultant, Consulting Services Group, eCollege A description of this presentation can be found on page 15 of this program book.

Asset Management and Ubiquitous Access

Rich Pachler, Vice President & National Practice Leader, Internet Services, CIBER A description of this presentation can be found on page 15 of this program book.

Friday

Using Technology to Gain Strategic Academic Advantage Carol Vallone, President and Chief Executive Officer, WebCT A description of this presentation can be found on page 45 of this program book.

The Cultural Impact of New Learning Technologies

Deborah Everhart, Senior Requirements, Manager in Product Development, Blackboard, Inc. A description of this presentation can be found on page 45 of this program book.

Poster Presentations

Eighteen abstracts have been selected as poster presentations at this year's conference, with approximately half on display each day. Authors will be available to discuss their presentations on Thursday from 4:45 p.m.–5:30 p.m., and on Friday from 2:45 p.m.–3:30 p.m. More information on each poster presentation is available in the Concurrent Session Overview of this program book.

Saturday Workshops and Seminars

UNC Greensboro Campus

The following Hands-On Workshops will be available on Saturday from 9:00 a.m.–12:00 noon at the UNC Greensboro campus:

Designing Usable Learning Web Sites: From Text to Task Deborah S. Bosley, UNC Charlotte

3D Models—For the Love of Making Wayne Godwin, East Carolina University

Creating Digital Portfolios and Multimedia Content Using Lectora Madu Ireh, Winston-Salem State University

Creating A WebQuest Valorie Nybo, Western Carolina University

Educational Uses of Computational Science Shawn Sendlinger, North Carolina Central University

Please Note: Participants are responsible for their own transportation to UNC Greensboro. Directions to the campus and a map of the campus are available at the registration and information desk.

Koury Convention Center

Using Handheld Computers to Apply Principles of Effective Instruction (Hands-On Workshop) Mahnaz Moallem, UNC Wilmington

2 + 2 = 5: Collaborating to Meet TLT Support Needs (Seminar) Sallie Ives, UNC Charlotte

For Librarians: Discussion of Current TLT and Distance Education Issues (Seminar) Terry Brandsma, UNC Greensboro

Advance sign-up for the workshops and seminars is mandatory. If you would like to attend and have not signed up, log in to the conference registration page and look for the sign-up link. You may register online if any seats are available. The staff at the registration and information desk will also assist you in registering. If you have signed up to attend a workshop or a seminar and are no longer able to attend, please log in and change your workshop/seminar choice to "Will not attend" so that another participant can take your place.

CONCURRENT SESSION OVERVIEW (Thursday)

Preconference Seminar (Thursday, 9:00-10:45)

Blue Ash Accessible, ADA-Compliant Web Design

Concurrent Session 1 (Thursday, 2:00-2:45)

Blue Ash	Featured Presentation by eCollege: Web Accessibility and e-Learning
Augusta A	Developing Rich Media Content with SMIL
Augusta A	Editing and Revision: Creating Interactive Instructional Animations
Augusta B	Developing Simulations for Technology-Based and Enhanced Courses
Augusta B	Using the WWW—Phase Three: Pedagogy-Driven Online Laboratory Courseware
Grandover East	Seeing Atoms and Molecules in Three-Dimensional Space
Grandover East	Volumetric View of Tomography Images Within a RAVE Environment
Grandover West	ENTech Quality Teaching and Learning: A Collaborative Partnership with NCCU 's School of Education and Durham Public Schools
Victoria B	e-Learning Current Practices
Victoria C	Kids Say the Darndest Things

Concurrent Session 2 (Thursday, 3:00-3:45)

Augusta A	Taking the Pulse of the Faculty: Deconstructing Results from a Professional Development Survey on Faculty Attitudes Toward Online Teaching at UNCW
Augusta A	Southern Region Cooperative Curriculum Project
Augusta B	The UNC Pembroke Media Integration Project: Recent Collaborations
Blue Ash	TEACH Act: New Copyright Rules for Distance Education
Grandover East	High Tech—Making It Adaptable for Rural Delivery
Grandover East	Visualization Across the Curriculum
Grandover West	Grid Technology and the Concept of an "EduGrid"
Victoria B	e-Learning Pedagogy Interest Group
Victoria C	Panel: Academic Integrity in a Technological World

Concurrent Session 3 (Thursday, 4:00-4:45)

Blue Ash	Featured Presentation by CIBER: Asset Management and Ubiquitous Access
Augusta A	It's ON Our Web Site! Why Are You Calling Me? How to Make Your Web Presence More Human Using Portal Technologies, Collaboration, and Common Sense
Augusta B	Using Java Applets to Illustrate Math and Science Concepts
Grandover East	Access Grid: Reaching the World
Grandover East	Research on Teaching and Learning with Technology
Grandover West	e-Learning Collaboration with UNC-TV
Grandover West	e-Learning: Lessons from the Corporate World
Victoria B	e-Learning Faculty and Student Support Interest Group
Victoria C	Recognition of Digital Scholarship: A MERLOT-Based Initiative at WCU

Poster Session (Thursday, 4:45-5:30)

Solving the Lab-Science Distance Learning Dilemma: Doing Chemistry in Your Kitchen How a Professional Technical Communicator Can Enhance Your Project LOBO: A Librarian/Faculty Collaboration Publishing an Independent Scholarly e-Journal Social Desirability Responding and the Motivation of World Wide Web Survey Takers Teaching WebPage Construction in Advertising and Marketing Classes Developing Courseware for Teaching, Learning, and Dissemination A Multimedia Introduction to Octatonic Theory and Bartók's Octatonic Practice Challenges, Content, Collaboration, and Creativity: LIS and Distance Education

CONCURRENT SESSION OVERVIEW (Friday)

Concurrent Session 4 (Friday, 9:00-9:45)

Blue Ash	Featured Presentation by WebCT: Using Technology to Gain Strategic Academic Advantage
Augusta B	Production of Interactive Digital Video for Multimedia Lectures and Web Sites
Augusta B	Using Web-Based Discussion Boards to Facilitate Student Learning
Grandover East	An Instrument for Peer Review of Web-Enhanced Courses
Grandover East	Team Teaching via Distance Learning with an Electronic Textbook
Grandover West	Using Reusable Learning Objects to Build Cross-Institutional Library Collaborations
Victoria B	Information Technology Fluency Initiatives on Campus Interest Group
Victoria C	Digital Library Development in Support of Teaching and Learning

Concurrent Session 5 (Friday, 10:00–10:45)

Augusta B	Online Assessment in Undergraduate Biology Education: Strengths, Limitations, and Lessons Learned
Augusta B	The PMABS Distributed Learning Network Progress Report: Enhancing Science Education for North Carolina's Underrepresented Minority Students via Distance Education
Blue Ash	WebCT Interest Group
Grandover East	Panel: Recognition and Reward for Technology in the Classroom
Grandover West	Evaluation Criteria for Learning Objects in MERLOT: Multimedia Educational Resources for Learning and Online Teaching
Grandover West	MERLOT and Faculty Development
Victoria B	Accessibility
Victoria C	Panel: Networking in the Round: How NC State's Teaching, Learning, and Technology Roundtable Changes Higher Education's "Business As Usual"

Concurrent Session 6 (Friday, 1:00–1:45)

Blue Ash	Featured Presentation by Blackboard: The Cultural Impact of New Learning Technologies
Augusta B	Journal Finder—One-Stop Access to Journal Literature
Augusta B	A Primer on the Effective Use of Threaded Discussion Forums
Grandover East	Interactive Web e-Texts in General Education
Grandover East	A Faculty Center for Teaching and e-Learning—Our First Year
Grandover West	Uses of Flash MX for Developing Online Learning Materials
Victoria B	Solutions ³ : Three Project-Based Models for Teaching with Technology
Victoria C	First Contact: Using Technology to Prepare Students for Class
Victoria C	The Relationship Between Text Display Method and Knowledge Retention

Concurrent Session 7 (Friday, 2:00-2:45)

Augusta B	We Are Many, We Are One: The New South Voices Community Partnership
Augusta B	Partnership: A Key to Successful University Distance Education
Blue Ash	Blackboard Interest Group
Grandover East	Streaming on a Budget: Inexpensive Solutions for Media-Rich Courses
Grandover West	TLT Assessment and Evaluation
Victoria B	Intellectual Property Rights
Victoria C	Using Technology to Remove Barriers to Student Success in Introductory Chemistry

Poster Session (Friday, 2:45-3:30)

The Impact of a WebQuest on a Humanities Class Assessment of Probeware-Based Laboratory Curricula for Introductory Physics The iLumina Digital Library: An Educational Resource Using Laboratory Probeware in Introductory Physics Online Lab for Network Security Courses Delivered via Distance Learning Teaching 3D Modeling and Design Impact of Technology on the Mathematics Curriculum and Assessment Using Threaded Discussions to Create Critical Thinking Collaborating with Students to Develop Online Courses

Concurrent Session 8 (Friday, 3:30-4:15)

Augusta A	Teaching and Learning with Virtual Teams
Augusta A	Use of the Internet Environment to Standardize Curriculum Implementation and Evaluation For Community-Based Health Sciences Students
Augusta B	Using Weblogs to Facilitate Collaboration
Augusta B	How Do We Get There From Here? Campus Collaboration to Achieve Information Literacy
Blue Ash	NC BioGrid—Towards Grid Services in North Carolina
Grandover East	PDA Applications in Education: Time for Renewed Consideration
Grandover East	Is It There Yet: Streaming Video Past the Stage of Hype—An Introduction to MPEG-4
Grandover West	TLT Assessment Interest Group
Victoria B	Panel: Embers of the Real: Human Factors in Online Teaching and Learning
Victoria C Victoria C	TEACH Act: What Are the Institution's Technological Responsibilities? Internet-Based Homework Can Provide Significantly Enhanced College-Level Student Performance: A Case Study

Concurrent Session 9 (Friday, 4:30–5:15)

Augusta A	Destination Berlin: A Multimedia Approach to Foreign Language Learning
Augusta A	Teaching Literature in the Technology Classroom, and Technology in the Literature Classroom: The Case of William Blake
Augusta B	PA Distance Learning—Gross Anatomy, 1998-Present
Augusta B	Characteristics and Performance of Students in an Online Section of Business Statistics
Blue Ash	Web Accessibility Interest Group
Grandover East	Panel: What's the 411?
Grandover West	SMIL The Lab Comes to You!
Grandover West	Secure Digital Mobile Classroom
Victoria B	Using Just-in-Time Teaching in the Principles of Economics Course: Blending Active Learning with Web Technology
Victoria B	Effectiveness of Computer-Assisted Instruction of Pediatric Heart Sounds
Victoria C	Best Library TLT Practices

HANDS-ON WORKSHOPS AND SEMINARS (Saturday, 9:00-12:00)

Hands-On Workshops

UNCG	Designing Usable Learning Web Sites: From Text to Task
UNCG	3D Models—For the Love of Making
UNCG	Creating Digital Portfolios and Multimedia Content Using Lectora
UNCG	Educational Uses of Computational Science
UNCG	Creating A WebQuest
Koury	Using Handheld Computers to Apply Principles of Effective Instruction

Seminars

Koury	2 + 2 = 5: Collaborating to Meet TLT Support Needs
Koury	For Librarians: Discussion of Current TLT and Distance Education Issues

Advance sign-up for the workshops and seminars is mandatory. If you would like to attend and have not signed up, log in to the conference registration page and look for the sign-up link. You may register online if any seats are available. The staff at the registration and information desk will also assist you in registering. If you have signed up to attend a workshop or a seminar and are no longer able to attend, please log in and change your workshop/seminar choice to "Will not attend" so that another participant can take your place.

Thursday, March 27

Preconference Seminar

Accessible, ADA-Compliant Web Design (1 hour, 45 minutes)

Lisa Fiedor Director Learning Technology Service North Carolina State University lisa_fiedor@ncsu.edu 919-513-4616

The session will be introduced by Lisa Fiedor, who is a specialist in accessibility and usability within the Learning Technology Service at NCSU. Federal law requires that all university programs and services, including web pages, must be accessible to persons with disabilities. This session will introduce participants to the concept of web accessibility, and will explore a variety of accessibility problems and solutions. It will include an overview of the Federal Section 508 web accessibility guidelines, and will examine and critique a variety of web pages (good and bad) on their accessibility. A variety of tools for assessing and repairing accessibility problems will also be reviewed. A video about web design for accessibility that was developed as a part of the Faculty Development Outreach Initiative of NCSU will be shown and will be followed by a question and answer session about accessibility and web design, facilitated by session leaders.

Thursday, March 27

Plenary Speaker (12:45-1:30)

Dr. Jeremy Haefner

Dean College of Engineering and Applied Science University of Colorado at Colorado Springs haefner@eas.uccs.edu 719-262-3543

Deeper Learning—Stepping Back 500 Years

With severe budget cuts hitting many higher education institutions across the country, the quality of education at universities is fundamentally at stake. Now more than ever, we must be strategic at how we make these cuts while preserving a quality educational experience for our students. Using the recent research regarding how we learn, we can identify key principles for 'deeper learning' and we can implement these principles in the classroom. More importantly, technology CAN effectively be used in conjunction with these principles to make a true learning environment. Course Management Systems are one such example but so are the hands-on, project-oriented curriculums that are now gaining favor in engineering education.

Jeremy Haefner has been a professor of mathematics at the University of Colorado (CU) at Colorado Springs since 1989. He received his bachelor of arts degree in mathematics from the University of Iowa in 1979, and he completed his master of science and Ph.D. degrees in mathematics at the University of Wisconsin at Madison in 1983 and 1986, respectively. He spent three years at the University of Tennessee at Knoxville before joining the faculty at the University of Colorado.

Professor Haefner has served the Colorado Springs campus in a wide variety of roles and positions. From 1992 to 1995, he served as the associate director of the Mathematics Learning Center and was charged with integrating technology into the mathematics curriculum. Dr. Haefner has served as chair of the Department of Mathematics from 1989 to 2001 and as the senior faculty associate for Information Technology, a campus-wide position he continues to hold. He also was director of the campus Teaching and Learning Center and senior faculty associate for Teaching and Learning, before his appointment as dean of the College.

Dr. Haefner's research interests include integral representation, module and matrix theory, while emphasizing a broad range of teaching interests. He has numerous refereed publications in these fields as well as within the field of technology-enhanced instruction. He developed the program in Applications in Technology for Mathematics Education in 1995, which provides technology training to students interested in careers in mathematics education. He also has codeveloped the MathOnline program, which provides university-level mathematics courses over the internet to high school students across the State of Colorado.

Professor Haefner has been recognized with a National Security Agency Young Investigator Award, a research fellowship from the Universidad de Murcia in Spain, and numerous research contracts with the National Security Agency, the University of Colorado, and the University of Tennessee. In 1998, Dr. Haefner won the inaugural Innovations in Teaching with Technology Award from the University of Colorado at Colorado Springs and the inaugural University of Colorado President's Faculty Excellence Award for Advancing Teaching and Learning through Technology. The CU system has recognized him for his collaborative contributions to using technology in education. In 2002, he served as a Fellow with the National Learning Infrastructure Initiative (NLII) of EDUCAUSE.

Corporate Presentations

Thursday

Rhue Ash	2.00	- 2	.15
		- 2	.45

Web Accessibility and e-Learning

Joel Sanda

Standards & Accessibility Consultant **Consulting Services Group** eCollege joels@eCollege.com 303-873-7400



This presentation discusses how a campus-wide implementation of an accessible e-learning platform can reduce the cost of institutional compliance with existing disability law. After discussing existing accessibility laws and their application to e-learning, the presenter will review eCollege's three-year research and development project to deliver an accessible eLearning platform that is accessible and can be integrated with on-campus teaching and learning.

Joel Sanda is a standards and accessibility consultant for the Consulting Services group at eCollege, where he ensures that online educational offerings are accessible and meet U.S. federal and state laws. Joel began researching disability issues while pursuing his master's degree at the University of Denver and now is managing the release of the eCollege Accessible Assessment Tool-online assessment software for use with high stakes testing that is accessible to students with disabilities.

Blue Ash......4:00 - 4:45

Asset Management and Ubiguitous Access

Rich Pachler Vice President & National Practice Leader **Internet Services** CIBER c/o bstephens@ciber.com 919-518-0800



In the 80's we consumed high-end graphics and multimedia. In the 90's we surfed the web. This decade will mark universal access and just in time information. From teenagers to insurance adjusters, the capture, assembly and delivery of content are as easy as snapping a picture. Cell phones, PDA's, 802 wireless local area networks and portals make the transport or access to content a personal, on demand option. However, from the early days of computing the same old adage applies: garbage in-garbage out. The difference is now we all have guicker, anytime access to what is often misconstrued as guality or accurate content. If we can manage guality and accuracy, how do we manage ownership? With content quality and ownership under control, how do we manage context? How do we balance providing requesters with all possible options so they can reach their own conclusions with narrowing the possibilities based on our knowledge? Within the educational or corporate structure, the opportunities and challenges are the same. The entity owns, creates and consumes information. This information — knowledge — can be used to enhance intellectual capital, generate revenue and elevate the level of performance of the entire entity which in turn creates value for students, professors, and institutions. Information architecture is the foundation for building an environment and infrastructure that promotes creativity, flexibility, and collaboration while delivering consistency, context and quality. The presentation will discuss how stewardship, governance and classification will enable a collaborative environment for e-learning and the assembly of content modules.

Vice president Rich Pachler is the national practice leader of CIBER's Internet Services. Rich's 25-year experience in information technology (IT) systems and solutions has included positions in operations, sales, and marketing. He has been involved in the development of CIBER's Center of Excellence for Managed Content Services, a business unit dedicated to maximizing the value of intellectual capital. Rich earned a B.S. degree in electrical engineering from Villanova University and am M.B.A. from Farleigh Dickinson University.

Concurrent Session 1

Thursday

Blue Ash......2:00 - 2:45

Featured Presentation by eCollege: Web Accessibility and e-Learning (45 minutes)

Joel Sanda

Standards & Accessibility Consultant Consulting Services Group eCollege joels@eCollege.com 303-873-7400

This presentation discusses how a campus-wide implementation of an accessible e-learning platform can reduce the cost of institutional compliance with existing disability law. After discussing existing accessibility laws and their application to e-learning, the presenter will review eCollege's three-year research and development project to deliver an accessible eLearning platform that is accessible and can be integrated with on-campus teaching and learning.

Augusta A......2:00 - 2:45

Developing Rich Media Content with SMIL (20 minutes)

Theresa-Marie Rhyne

Multimedia/Visualization Specialist Learning Technology Service North Carolina State University tmrhyne@ncsu.edu 919-513-4623

We highlight the development of a Synchronized Multimedia Integration Language (SMIL) prototype for Electrical and Computer Engineering 's Introduction to Electrical Engineering Course (ECE 200) at North Carolina State University (NCSU). The processes of recording video sequences, converting the video segments to streaming media using RealMedia, converting PowerPoint slides to GIF or JPEG images, synchronizing the video and PowerPoint slide content, creating captioned content, and designing a user interface to the Rich Media presentation are discussed. The asynchronous online delivery of this content will also be reviewed. During Autumn 2002, ECE 200 was offered as a distance education course in the NCSU Engineering Online's 2plus2 program. This included participation by students located at UNC Asheville, Lenior Community College, and UNC Wilmington.

Thursday		

Augusta A	2:00	- 2:45
-----------	------	--------

Editing and Revision: Creating Interactive Instructional Animations (20 minutes)

Sally Lawrence

Lecturer, English East Carolina University lawrences@mail.ecu.edu 252-328-1474

During the development of my Business Writing Distance Education (DE) course, I knew that the "Editing and Revision" module would be the most challenging to present effectively online. In a face-to-face classroom, I show students editing techniques by using transparencies that illustrate the evolutionary process of revision. To meet this challenge, I knew that I needed to create visual representations of abstract concepts, so I chose to work with Macromedia Flash and the two techniques that are most difficult for students to learn—reducing the number of prepositional phrases and changing passive voice to active voice. For each editing technique, I created a demonstration animation, so students could see the abstract concept as a whole. Then, I created another animation that shows the editing technique in a how-to sequence, so students can learn the procedure and apply the technique to their own writing. And, to reinforce the concepts, I created interactive practice animations. By using color-coding, fading, movement, sequencing, highlighting, and rollovers, I simulated what I did in the face-to-face classroom so that the online students participated in a highly interactive learning experience. In an anonymous survey, the majority of respondents rated these Flash animations as "excellent."

Augusta B......2:00 - 2:45

Developing Simulations for Technology-Based and Enhanced Courses (20 minutes)

Todd Nicolet

Manager, Online Instruction Group School of Public Health UNC Chapel Hill todd_nicolet@unc.edu 919-843-5312 Jerry Calleson UNC Chapel Hill

Simulations and role-play have long been an effective strategy for promoting active learning in the classroom. Technology-based or enhanced courses offer expanded opportunities for students to interact and collaborate without restrictions of time and place, making it easier to design simulation activities that weave more seamlessly into the fabric of the course. Simulations are most appropriate for supporting learning goals that focus on process and problem solving, providing a chance for students to integrate knowledge and apply concepts to real-world contexts. This approach can be especially effective when working with adult learners who come to a course with significant real-world experience to share. In that context, the students themselves may help to construct the simulation itself. This presentation will examine the contexts in which simulations are most effective and appropriate and explore ways to implement simulations in technology-based courses that will avoid placing undue time demands on instructors. We will show an example of a successful simulation in a web-based course, along with findings from a preliminary evaluation of the experience. This example will serve as a model for how instructors can successfully implement simulations with the assistance of technology.

Augusta B	2:00	- 2	:45

Using the WWW—Phase Three: Pedagogy-Driven Online Laboratory Courseware (20 minutes)

Jerry Meisner Professor Physics UNC Greensboro jm@curie.uncg.edu 336-334-4217 Harol Hoffman UNC Greensboro

Many advances in transmitting information over the WWW have occurred since physicists first shared data over a collection of networks. Advances in learning have been more complicated and therefore more problematic. In the first phase, physics teachers used the WWW in a transmission mode, wherein class notes, syllabus, and text as information were transmitted to the end user. In phase two we went beyond text to graphics in its various forms, from animated GIFs to java applets which illustrate a particular problem. With LAAPhysics we are now entering phase three, wherein we are authoring complete sets of (virtual) highly interactive laboratory tutorials/courses, guided entirely by PER based pedagogy, in effect, putting the horse before the cart. The comprehensive nature of phase three requires collaborative group work with complementary but uniquely individual skills of pedagogy, GUI design, knowledge of various client/server and database languages, and project management skills.

Grandover East......2:00 - 2:45

Seeing Atoms and Molecules in Three-Dimensional Space (20 minutes)

David Bjorkman

Irene Gerow East Carolina University Roger Jones East Carolina University

Assistant Professor Chemistry East Carolina University bjorkmand@mail.ecu.edu 252-328-1641

Ken Flurchick East Carolina University

Three-dimensional models of atomic and molecular structures were constructed to present geometric concepts to students in introductory chemistry courses. Models were constructed using 3D Studio and AVS Express and were presented by RAVE, Reconfigurable Advanced Visualization Environment, technology. Students view and navigate three-dimensional visualizations of electron orbitals and molecular geometries. RAVE visualizations are interactive environments. Students control image size, orientation and content, controlling the pace of their learning. Two hundred and thirty chemistry students participated in an evaluation of the RAVE visualizations. An experimental group learned electron configuration and molecular geometry using the RAVE. A control group learned by traditional classroom methods. The visualization experience was evaluated by comparison of examination scores and by a student survey. Preliminary results indicate the experimental group scored an average of two points higher on examinations than the control (67.5 vs 65.7). Positive student responses to the survey indicated that students found the visualization experience beneficial. RAVE visualization appears to be a dramatic and effective technique that facilitates student learning of electron configuration and molecular geometries. A demonstration of these models is available on the web: www.ecu.edu/rave and will be available for viewing on the day of the presentation.

Grandover East	2:00	- 2:45
----------------	------	--------

Volumetric View of Tomography Images Within a RAVE Environment (20 minutes)

Ken Flurchick

Assistant Professor and Visualization Scientist Physics and CIITR East Carolina University flurchickk@mail.ecu.edu 252-328-2669 Hu Xin-Hua East Carolina University

Computed tomography (CT) has been widely used in health care to reconstruct three-dimensional (3D) images from multiple projections of a patient for diagnosing diseases or tracking therapeutic processes. Therefore, teaching of the CT principle is a very important part of medical imaging courses for medical physics students, especially for those in graduate programs. However, the combined difficulty in teaching the abstract mathematical operations used in CT and visualization of CT data has presented a significant roadblock for students to gain a command of the technology in a teaching environment of a conventional classroom. We present here a recent project to introduce our medical physics students to the CT principles using the system known as the RAVE [1] for 3D virtual reality display of the CT data. With the developed visualization system, the students are presented with multiple volumetric view of the CT images and allowed to navigate through the visualization to select different view angles or structures. With this visualization system, we were able to provide students with the effect of 3D volumetric view of the CT images that have not been used in the teaching of medical imaging. More importantly, the success of this project has demonstrated the possibility of using the latest 3D visualization tools to significantly improve the teaching quality of abstract imaging principles.

Grandover West......2:00 - 2:45

ENTech Quality Teaching and Learning: A Collaborative Partnership with NCCU's School of Education and Durham Public Schools (45 minutes)

Deborah Eaton

James Osler North Carolina Central University

Technology Director School of Education North Carolina Central University deaton@wpo.nccu.edu 919-530-6416

This 45-minute presentation will provide participants with information about ENTech and the collaborative partnership between North Carolina Central's School of Education and Durham Public Schools to engage public school teachers, university faculty, and students in a model of best practice teaching using technology. ENTech is a research-based professional development program that focuses on quality teaching and learning in a technology-enriched environment. The program was developed around national standards for professional development and meets the requirements of No Child Left Behind legislation. The ENTech program design and professional development model emphasizes the North Carolina standard course of study, best teaching practices, new designs for learning, classroom management strategies, and linkages to school improvement plans and processes. Participants receive hands-on, research-based practices that maximize learning in a technology-enriched environment. NCCU ENTech Partnership with Durham Public Schools, North Carolina Central University's School of Education, and Durham Public Schools have collaboratively worked to develop an ENTech Learning Laboratory at the Durham Public School Staff Development Center. The School of Education provided major funds from its federal Teaching Matters Quality Counts grant to Durham Public Schools and it's PT3 grant, NC Catalyst at NCCU which assisted in opening the new ENTech Learning Lab in the fall of 2002. Since its opening, over 100 Durham Public teachers and administrators, NCCU faculty, IT specialists from Union and Franklin counties and NCDPI have received training. For more information about ENTech, visit the website and link to ENTech at: www.explornet.org.

VICTORIA B2:00 - 2:45	Victoria B	2:00	- 2:45
-----------------------	------------	------	--------

e-Learning Current Practices (45 minutes)

Laura Rogers Program Coordinator UNC TLT Collaborative Irogers@northcarolina.edu 919-218-0282

This session will provide overview and discussion of current practices in eLearning. Discussion will address pedagogical and support aspects of eLearning.

Victoria C......2:00 - 2:45

Kids Say the Darndest Things (45 minutes)

Patricia Barber	Rowanne Joyner
Associate CIO	UNC Charlotte
Information & Technology Services	
UNC Charlotte	
plbarber@email.uncc.edu	Susan Wagoner
704-687-2674	UNC Charlotte

How do you develop a campus portal for students and faculty that will meet their needs to enhance the teaching and learning process? Promote collaboration! Ask them what they want! This presentation will discuss effective ways that were used to engage students and faculty in the design of a campus portal for the purpose of providing services that enhance the educational experience. The Players: Central IT–Tasked with the daunting mission of implementing a campus-wide portal, this group is wringing their hands as they access limited internal resources. Students–Shimmering with uncontained energy, thousands of students beg, plead, and demand opportunities for real-life experience in their educational experience and demand to be heard. Faculty– Eager to meet the highest pedagogical standards of excellence by providing hands-on experiential opportunities, this group desperately examines the horizon (and scholastic journals) for solutions. The Players Meet: Central IT meets Faculty, discuss scenario. Central IT finds valuable resource, Faculty offers students opportunity, Students channel energy into real-life experience and have their voices heard. Everyone lives happily ever after!

Concurrent Session 2

Thursday

Taking the Pulse of the Faculty: Deconstructing Results from a Professional Development Survey on Faculty Attitudes Toward Online Teaching at UNCW (20 minutes)

Patricia Turrisi Director Center for Teaching Excellence UNC Wilmington turrisip@uncw.edu 910-962-7392 Richard Dixon UNC Wilmington

Do faculty members value online teaching? What is their sense of the value placed on online teaching by their students, their colleagues, and university administrators? In an effort to elicit attitudes on these topics, an online survey commissioned by the Academic Affairs Division of the University of North Carolina at Wilmington was administered to UNCW faculty members in February, 2003. The primary focus of the survey concerned perceptions among UNCW faculty about the value of online teaching in the context of teaching in general, the effort to learn to use instructional software and media, and the time and effort involved in teaching online. Additional questions were included to tap faculty members' level of technological preparedness and/or willingness to incorporate the multimedia skills that they have mastered into their teaching efforts. UNCW's Teaching Center Director and Technology College Director examine key results of this survey and invite attendees to join them in exploring ways in which such surveys might be used to plan professional development programs and incentives. Learning description standards for insuring quality.

Augusta A	3:00	- 3:45
Augusta A		- 3.43

Southern Region Cooperative Curriculum Project (20 minutes)

Mitch Owen

Innovation and Organizational Development Leader Personal and Organizational Development North Carolina State University Mitch_Owen@ncsu.edu 919-515-8448

Extension subject matter specialists, communications, information technology specialists, and academic professors develop a wealth of education and training resources for use in teaching and extension in the land grant system. As more and more content is placed online, the potential for collaboration is greatly enhanced, but in the development of these resources there are often: 1. Significant duplication of resources, 2. Lack of encouragement for collaboration, 3. Inconsistent quality. To address these issues, in 2001, the Association of Southern Regional Extension Directors (ASRED) in cooperation with the 1890 Extension Administrators (AEA), agreed to support an effort to develop and launch a multi-state curriculum development project in the Southern Region. The Cooperative Extension Curriculum Project (CECP), relying on the commitment of each 1862 and 1890 land grant institution to provide team members, has developed a framework for collaborative work in the southern region. The products of the effort include a curriculum taxonomy and priority setting process, specification of a "Southern Region" content management system, communication and information technology standards, a CECP meta-data model as a subset of SCORM, and learning description standards for insuring quality.

The UNC Pembroke Media Integration Project: Recent Collaborations (45 minutes)

John Antoine Labadie

Director, Media Integration Project Art Department UNC Pembroke john.labadie@uncp.edu 910-521-6618 Larry Arnold UNC Pembroke

George Johnson

UNC Pembroke

The UNC Pembroke "Media Integration Project" offers a truly integrated new media undergraduate curriculum, as well as community service activities and professional services. Participating faculty from the Art, Mass Communications, and Music departments have successfully developed and co-offer these opportunities to students and faculty and maintain an abiding connection to the academic roots of these supporting disciplines. Using these resources, the faculty of the UNCP MI project have accomplished a number of significant collaborations during this past academic year, including completed digital projects with: the UNCP Native American Resources Center; the National Park Service; the International Association of Jazz Educators; and a number of collaborations with working professionals in the performing and visual arts. An explication of selected projects is the focus of the MI project proposal. Therein we will describe (in brief) the planning for, the working relationship with, and the products produced for these various and diverse collaborators.

	Blue Ash	.3:00	- 3:4	ł5
--	----------	-------	-------	----

TEACH Act: New Copyright Rules for Distance Education (45 minutes)

David Harrison

Associate Vice President UNC Legal Affairs harrison@northcarolina.edu 919-962-0330

The Technology, Education and Copyright Harmonization (TEACH) Act has significantly changed the landscape of copyright rules for distance education by expanding the types of works and methods of delivery which can be used without permission from the copyright holder.

High Tech—Making It Adaptable for Rural Delivery (20 minutes)

Doug Barnum Multimedia Producer Center for Health Sciences Communication East Carolina University barnumd@mail.ecu.edu 252-744-2126 Thomas Irons, Jr. East Carolina University

Pathophysiology is a dynamic science. This 3-semester-hour course, primarily offered online, is required for Registered Nurses returning to complete their baccalaureate degrees in nursing. A large number of these students, while clinically active, have not taken formal classes for 5 or more years. Pathophysiology is one of the most difficult courses for students to understand, and it is made more difficult by virtue of being online. This collaborative interdisciplinary project between the School of Nursing and School of Medicine allowed students to "visualize" pathophysiological concepts via an immersive virtual reality (RAVE). It is believed this immersive arena will foster student learning and positively impact patient outcomes. Visualizations included interactive models of the fluid environment of blood with the addition of the cellular components and structure of the vessel wall lining. Complex concepts such as blood coagulation are visualized to facilitate student learning. Evaluative results are being compared and analyzed for project review. In addition, these models will provide the framework for future endeavors for undergraduate and graduate physiological courses in the Health Sciences Division. With limited financial resources, interdisciplinary cooperation and a marrying of expertise, content and technical, maximizes fiscal and personnel resources to promote student learning.

Grandover East	3:00	- 3:45

Visualization Across the Curriculum (20 minutes)

Patricia Lindsey

Visualization Across the Curriculum AMID East Carolina University lindseyp@mail.ecu.edu 252-756-8925

In the field of interior design education, being able to see the future is the greatest gift. Interior design demands mastery and understanding of a complex array of topics. Knowledge bases cross the arts, architecture, human behavior, health and safety legislation, along with design history and current mode. Understanding and ideation are communicated through drafting, illustration, and modeling skills. Today, technology, in the form of computer graphics and visualization, helps design students see the future, eliminating errors and cost overruns, creating the environment that the client has in mind. Our visualization curriculum begins with two-dimensional (2D) and three-dimensional (3D) CAD drafting and viewing small 3D models in the VR lab. Students move forward through larger, more complex environments that they may "walk through" to evaluate, and large virtual models with color and materials application are presented at the end of the semester. This instruction stretches across the curriculum after students are admitted to the professional level of our program. Project clients have included the creators of the Seaside, FL, New Urbanism Community, local commercial interests, the NC Rural Health Initiative, NASA, and the Space Islands in California. This presentation represents our students' visualization across the curriculum and into the future.

Grandover West	3:00	- 3	3:45
----------------	------	-----	------

Grid Technology and the Concept of an "EduGrid" (45 minutes)

William Youngblood

Paul Fletcher East Carolina University

Director of Academic Initiatives UNC High Performance Computing and Communications william@ncsc.org 919-962-4630

Joyce Williams-Green

Winston Salem State University

Emerging "Grid Technology" operating on high-performance inter-institutional networks is ushering in a strategic revolution in the architectures of shared high performance computing, data storage, and communications systems. "Middleware"—a grid's operating system software—is the key element for making a heterogeneous, hierarchical, transparent research and education grid as reliable a tool to faculty and students as is today's word processing and e-mail applications. The first part of this presentation will review the operational concepts of grid technology and middleware. The presenters will provide evidence that North Carolina's universities already have access to technologies that can be marshaled to become the national test bed for an education grid ("NC EduGrid"). An education grid supporting many applications for research, simulation, interactive asynchronous learning, and K-12 outreach can provide North Carolina cutting edge teaching and learning with technology options that are increasingly important to faculty and students. This presentation complements a later presentation (Friday, 3:30pm) on the NC BioGrid, a specific grid technology application whose test bed successes reinforce the belief that an NC EduGrid can become a reality.

e-Learning Pedagogy Interest Group (45 minutes)

Laura Rogers Program Coordinator UNC TLT Collaborative Irogers@northcarolina.edu 919-218-0282

This interest group session will facilitate discussion of issues associated with eLearning pedagogy. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Panel: Academic Integrity in a Technological World (45 minutes)

Meg Morgan

Ann Newman UNC Charlotte

Director of Rhetoric and Writing English UNC Charlotte mpmorgan@email.uncc.edu 704-687-4210

Chris Anson

North Carolina State University

The three panelists will examine the challenges faced by educators in understanding academic integrity issues and articulating standards and strategies for maintaining academic integrity in an increasingly technological environment. We will ask what is academic integrity, what must institutions do to create a culture that fosters it, and what can teachers do to prevent violations? Professor Chris Anson chaired a committee of the Council of Writing Program Administrators that just released its academic integrity statement; Professor Ann Newman is researching academic integrity at the institutional level; Professor Meg Morgan works daily with writing faculty challenged by issues of academic integrity.

Concurrent Session 3

Thursday

Blue Ash......4:00 - 4:45

Featured Presentation by CIBER: Asset Management and Ubiquitous Access (45 minutes)

Rich Pachler

Vice President & National Practice Leader Internet Services CIBER c/o bstephens@ciber.com 919-518-0800

In the 80's we consumed high-end graphics and multimedia. In the 90's we surfed the web. This decade will mark universal access and just-in-time information. From teenagers to insurance adjusters, the capture, assembly and delivery of content are as easy as snapping a picture. Cell phones, PDA's, 802 wireless local area networks and portals make the transport or access to content a personal, on demand option. However, from the early days of computing the same old adage applies: garbage in- garbage out. The difference is now we all have quicker, anytime access to what is often misconstrued as guality or accurate content. If we can manage guality and accuracy, how do we manage ownership? With content quality and ownership under control, how do we manage context? How do we balance providing requesters with all possible options so they can reach their own conclusions with narrowing the possibilities based on our knowledge? Within the educational or corporate structure, the opportunities and challenges are the same. The entity owns, creates and consumes information. This information — knowledge — can be used to enhance intellectual capital, generate revenue and elevate the level of performance of the entire entity which in turn creates value for students, professors, and institutions. Information architecture is the foundation for building an environment and infrastructure that promotes creativity, flexibility, and collaboration while delivering consistency, context, and guality. The presentation will discuss how stewardship, governance and classification will enable a collaborative environment for elearning and the assembly of content modules.

Augusta A......4:00 - 4:45

It's ON Our Web Site! Why Are You Calling Me? How to Make Your Web Presence More Human Using Portal Technologies, Collaboration, and Common Sense (45 minutes)

Lori Casile Director of Special Projects and Portal Information Technology Services UNC Chapel Hill Icasile@email.unc.edu 919-962-1230

Kathy Thomas UNC Chapel Hill

How many times have you clicked and squinted through countless web pages and searches to find one simple, essential piece of information? And, when you finally (if you're lucky) hook up with a real person on the phone or e-mail, they say, "It's ON our website, can't you find it?!" In creating Carolina's portal, the MyUNC team has learned a great deal about how large institutions and their departments entrench themselves in arcane information structures, isolating their customers from the information they need.

Augusta B......4:00 - 4:45

Using Java Applets to Illustrate Math and Science Concepts (45 minutes)

Holly Hirst

Associate Professor of Mathematics Mathematical Sciences Appalachian State University hirsthp@appstate.edu 828-262-3050

Java is a great environment for creating interactive, hands-on activities (sometimes called virtual manipulatives) to illustrate a variety of concepts from math and science. This session will examine several sources of applets and discuss using them in the classroom. Come and learn about existing applet repositories, including those at the Shodor Education Foundation, National Council of Teachers of Mathematics, and the National Library of Virtual Manipulatives. In addition, many software packages are incorporating applet generating routines so that users can create their own applets with little knowledge of Java. Two such dynamic modeling packages will be reviewed: Stella and Agent Sheets.

Grandover East......4:00 - 4:45

Access Grid: Reaching the World (20 minutes)

Sandra Huskamp Interim Director Center for Interdisciplinary Instructional Technology Research East Carolina University huskamps@mail.ecu.edu 252-328-1121

Wendy Creasey East Carolina University

Jennifer Farris East Carolina University

ECU's Access Grid (AG), an advanced videoconferencing system, offers compelling collaborative sessions and teaching and learning experiences for faculty, students, and administrators by connecting them to other domestic and international higher education institutions, supercomputing centers, and science and engineering laboratories in "persistent electronic spaces." ECU faculty and students can link-up with other instructors, researchers, and learners worldwide through participation in enriching educational events to share research developments and methods, joint-teach undergraduate and graduate-level courses, and host special educational seminars. Students can exchange ideas and join dynamic discussions while learning to effectively interact with their peers in a virtual environment. Administrators can schedule large-scale distributed meetings with colleagues worldwide, using the Access Grid to update teams on the status of collaborative projects while sharing and gathering valuable information needed to implement "next steps." The Access Grid, developed by Argonne National Laboratory, a U.S. Department of Energy lab operated by the University of Chicago, uses Internet2 network applications and technologies designed for the national research community.

Grandover East......4:00 - 4:45

Research on Teaching and Learning with Technology (20 minutes)

Wendy Creasey

Sandra Huskamp East Carolina University

Academic Computing - Manager Academic Computing East Carolina University creaseyw@mail.ecu.edu 252-328-9175

Jennifer Farris East Carolina University

The Student Learning Environment project, undertaken by the Center for Interdisciplinary Instructional Technology Research (CIITR) with East Carolina University (ECU) faculty, investigates innovative technology use in the classroom, the impact on student learning, the needs of faculty in technology integration, and the next step to a large-scale university effort. The purpose of the project was to work with faculty to integrate various technologies into the classroom, collect a broad range of data to help us better understand our students and their use of technology, assess the impact of using technology in the classroom, understand how different technologies affect student learning in diverse classes, and provide a basis for future decision making. By answering specific teaching and learning with technology questions through targeted experiments incorporating proven assessment methodology, important information can be derived. The study is powered by newly deployed technologies such as personal digital assistants (PDAs), three-dimensional immersive interactive visualization (RAVE), Internet Protocol Television (IP/TV), Video-on-Demand, and comparable online courses. The project provided an opportunity to begin an in-depth examination of how technology can be applied to aide faculty in their endeavor to enhance student learning. The project also provided a good learning opportunity for those involved regarding what is needed and how to bring together the resources to cast a critical eye at the application of technology in the teaching environment. In addition, we obtained very useful information about our student population and how our students learn.
Grandover West......4:00 - 4:45

e-Learning Collaboration with UNC-TV (20 minutes)

Jay Holloway	Rashaunte Hinnant
UNC-TV	North Carolina Central Oniversity
holloway@unctv.org	Kim Phifer-McGhee
919-549-7165	North Carolina Central University

This session will show how to integrate high-quality video from UNC-TV into an online course at North Carolina Central University. The course was offered during the first summer session of 2002 utilizing Blackboard.com as a pilot in the Birth to Kindergarten degree completion program. The course incorporated one PBS telecourse, THE WHOLE CHILD, plus UNC-TV's original MODELS OF TEACHING series. Following are the delivery methods for the video content: 1. Broadcast television (analog or digital), 2. Video cassette, 3. Streaming video on the Web, 4. Cable television, 5. DVD. NCCU was the first (constituent institution): 1. in recent years to utilize video from UNC-TV for traditional distance education course delivery, 2. to use UNC-TV video in course delivery, as part of delivery of blended technologies, 3. in America to receive rights from PBS to stream a traditional telecourse, 4. to offer the MODELS OF TEACHING series towards course credit.

Grandover West......4:00 - 4:45

e-Learning: Lessons from the Corporate World (20 minutes)

Ann-Marie Grissino	Jennifer Raisig
President	IBM
Keypoint Consultants, Inc.	
amgrissino@keypointconsultants.com	Frances Wirth
919-562-2464	whizID Instructional Design

Whether learners tote backpacks or briefcases, academic teachers and corporate trainers face similar challenges implementing e-learning solutions. In this session, three professional instructional designers/technical writers share their in-the-trenches experiences designing and developing award-winning e-learning courseware for corporate clients. Topics include: analyzing your audience, challenges in moving instructor-led courses online, anatomy of an online course, designing the interface, working with developers, and more. They'll discuss what works, offer tips, and answer your questions about designing, developing, and implementing effective self-study courseware.

Victoria B......4:00 - 4:45

e-Learning Faculty and Student Support Interest Group (45 minutes)

Hilarie Nickerson

Program Coordinator UNC Teaching and Learning with Technology Collaborative hil@northcarolina.edu (919) 787-2848

This interest group session will facilitate discussion of issues associated with eLearning faculty and student support. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Victoria C	.4:00 -	4:45
------------	---------	------

Recognition of Digital Scholarship: A MERLOT-Based Initiative at WCU (45 minutes)

Irene Mueller, EdD, RHIA	Debra Randleman
Assistant Professor	Western Carolina University
Health Sciences	
Western Carolina University	
imueller@email.wcu.edu	Laura Chapman
828-227-3510	Western Carolina University

How can faculty members integrate the effective use of digital learning objects into their courses? How will they gain recognition of their digital scholarship in the reward and tenure structure of their university? Since 2002, a small group of faculty and support staff members at WCU has been working to increase the use of MERLOT (Multimedia Educational Resource For Learning and Online Teaching), an international, peer-reviewed, online index of open source, digital learning objects supported by the University of North Carolina system. Now that the group has achieved universitylevel committee status, it is working to build campus-wide recognition of digital scholarship in the tenure review process. The successful processes represented in this presentation can serve as a model for other higher education institutions.

Poster Sessions

Thursday

Victoria Prefunction Area.....4:45 - 5:30

Solving the Lab-Science Distance Learning Dilemma: Doing Chemistry in Your Kitchen

Jimmy Reeves	Jennifer Mullen
Associate Professor	Cape Fear Community College
Chemistry	
UNC Wilmington	
reeves@uncw.edu	Barbara Heath
910-962-3456	UNC Wilmington

Offering a distance learning course in the sciences is complicated by the need to provide a meaningful lab experience for the distance learners. Although virtual laboratories can provide some semblance of the lab experience, they cannot reproduce the sights, smells, and sounds of a laboratory, or help students develop lab techniques. To address this problem we have developed a series of Internet-based "Kitchen Chemistry" experiments that utilize equipment and chemicals available in local food and hardware stores, and enable students to experience chemistry in their homes. By combining these laboratory exercises with web-based lecture materials created at UNCW, we have developed a distance learning general chemistry course for science majors that has been successfully taught for five semesters at Cape Fear Community College. This presentation will outline the basic features of the course, examine some of the laboratory exercises, and provide assessment data that compares the performance of these distance learning community college students with university students taking a traditional chemistry course for science majors.

Victoria Prefunction Area.....4:45 - 5:30

How a Professional Technical Communicator Can Enhance Your Project

Chris Adams

Senior Member Online Communication Society for Technical Communication (Carolina Chapter) adams919@bellsouth.net 919-835-9722

Creating educational materials that use teaching and learning technology involves a wide variety of tasks that must all be performed well. While a faculty member's expertise in the subject matter is essential, so is the expertise that technical communicators (writers, editors, illustrators, etc.) can provide. This poster presentation will address the following topics: (1) The types of tasks that technical communicators perform (including some essential tasks that are often overlooked; (2) How to determine when a project could benefit from help provided by a technical communicator; (3) Tips on locating and selecting a technical communicator for a specific project; (4) How to work effectively and efficiently with a technical communicator; (5) How the mentoring program of the Society for Technical Communication (Carolina Chapter) can improve the skills of an on-staff technical communicator. The presenter has experience working with academic organizations in North Carolina develop projects involving teaching and learning technology. During the time scheduled for discussion, participants will be encouraged to ask questions, and to describe their own experiences of working with technical communicators.

Victoria Prefunction Area	.4:45	- 5:	:30)
---------------------------	-------	------	-----	---

LOBO: A Librarian/Faculty Collaboration

Linda Saunders

Department Head Research & Information Services North Carolina State University linda_saunders@ncsu.edu 919-515-5757

The original NCSU Libraries' Library Online Basic Orientation (LOBO) was introduced in 1997. Since then advances in technology allow much more interactivity, and the examples within the tutorial needed to be updated. The Instruction Team of the Research & Information Services Department worked with library staff in other departments and with English instructors to craft an entirely new LOBO. The new version was introduced in English 111 classes in the Fall, 2003. LOBO provides a basis for information literacy instruction and support for the information needs of English 111 students. The new structure of LOBO is modular, allowing students to go directly to any section of the tutorial. The modules can be adapted by library subject specialists working with faculty in other departments to develop a tutorial which will focus on a specific subject area. LOBO has been selected for the 2003 ALA/Information Today Library of the Future Award to be presented at the ALA Annual Conference in Toronto in June. Features of LOBO identified as the primary reasons for selection for the award were -The technology used (including keyword searching and citation builders, viewlets, and wizards) -The collaborative effort with faculty -The link from within LOBO to Ask a Librarian LIVE virtual reference service, which gives students with questions an interactive real-time connection with librarians.

Publishing an Independent Scholarly e-Journal

David Siar

Assistant Professor English Winston Salem State University siard@wssu.edu 336-750-2439

I am founding co-editor of two academic e-journals—Cultural Logic: An Electronic Journal of Marxist Theory and Practice, and Early Modern Culture: An Electronic Seminar—both of which reside on the English Server at the University of Washington . (I am also in the early planning stage of developing a journal in African American cultural studies.) I would like to discuss the soup-to-nuts process of developing an academic e-journal, which includes website design; the establishing of an editorial group and advisory board; the obtaining of an ISBN number; finding an appropriate server for the journal; soliciting articles; etc.

Victoria Prefunction	Area	.4:45 -	5:30
victoria Prefunction	Агеа	.4:45 -	5:30

Social Desirability Responding and the Motivation of World Wide Web Survey Takers

Dawson Hancock

Educational Leadership UNC Charlotte DHancock@email.uncc.edu 704-687-4723 Claudia Flowers UNC Charlotte

Social desirability responding (SDR) is the tendency to provide answers on surveys that make the respondent look good. The growing popularity of the Internet suggests that WWW-administration of surveys will continue to increase in many fields. Therefore, it is important to know how survey responses obtained through the WWW compare with responses obtained on more traditional formats. In this study, 58 university students completing the same survey on both the WWW and paper demonstrated significantly more SDR when taking the survey on the WWW. In addition: (1) females exhibited more SDR than did males when taking the WWW-administered survey; (2) people who were suspicious of the WWW and its potential impact on their lives demonstrated higher levels of SDR than did people whose attitudes toward the WWW were more moderate; and (3) people with high levels of anger, upset, and resentfulness demonstrated lower levels of SDR on the WWW than did individuals who were not as emotionally influenced by the WWW-administered survey. Potential explanations for these findings are discussed and should be considered by all professions interested in using the WWW to obtain truthful and accurate information from survey-takers.

Victoria Prefunction Area	1:45	- 5	5:3	0
---------------------------	------	-----	-----	---

Teaching WebPage Construction in Advertising and Marketing Classes

Richard Ellis

Assistant Professor Marketing and Business Education Fayetteville State University rellis@uncfsu.edu 910-672-1987

This presentation is about the innovative improvement of the learning environment by teaching the students to use FrontPage to design their own websites and post their homework to the sites in Marketing and Advertising courses. The learning benefits for the students from the multi-faceted topic of webpage design include collaborative learning, posting Excel and PowerPoint projects, exposure to the different types of picture output formats, sound, animated gifs, and layout.

Victoria Prefunction Area......4:45 - 5:30

Developing Courseware for Teaching, Learning, and Dissemination

Shih-Liang (Sid) Wang

Professor Mechanical and Chemical Engineering North Carolina A&T State University wang@ncat.edu 336-334-7620

In the past few years, the author has developed courseware in kinematics, machine design, and pre-calculus math to help teaching and learning. At this time, one courseware project has been released and several others are to be released this year by a textbook publisher. The author has been using a laptop computer with LCD projector in the past few years for classroom teaching, and has developed courseware in motion simulation and in engineering computation with graphical representation. The objective of the courseware is to help the author teach more effectively with comprehensive examples, and to help students learn, especially those visual and active learners. Courseware in motion simulation is developed based on Working Model 2D and visualNastran 4D, and the courseware is organized in html files with hyperlinked text, photos, videos, and simulation files. MATLAB courseware is developed for machine design, kinematics and pre-calculus math. Extensive use of Graphical User Interface (GUI) in MATLAB makes the courseware easy to navigate and rich in graphics and help information. Dissemination of the courseware is to help colleagues and students in other campuses. In order to gain financial resources to sustain these projects to make them complete and useful, the author has worked with a textbook publisher to adopt the courseware for companion CDs to textbooks and for learning resources in the publisher's website.

Victoria Prefunction	Area	4:45	- 5:3	30

A Multimedia Introduction to Octatonic Theory and Bartók's Octatonic Practice

J. Kent Williams Professor School of Music

UNC Greensboro jkwillia@uncg.edu 336-334-5468

The presenter will demonstrate a method for introducing music majors to the "octatonic" scale (or collection) and to music based on that scale. Instruction during the initial, theoretical stage will progress from the more familiar to the less familiar, and from the specific to the abstract. Students will learn various ways of conceiving and representing octatonic collections and investigate basic properties of those collections. They will then be guided through analyses of pieces from volume IV of Bartók's Mikrokosmos. To compensate for the broad coverage and facilitate presentation of crucial concepts, the presenter will make extensive use of color-coded, interactive, clockface representations of pitch class collections and of QuickTime movies that provide analyses whose appearance and movement is synchronized with the musical events they represent. With such aids an instructor can alleviate the computational burden of integer representation, move freely between conceptions that are more or less abstract, and correlate analytical readings of musical works with the sound they purport to describe.

Victoria Prefunction Area4:4	5 -	5:	3	0
------------------------------	-----	----	---	---

Challenges, Content, Collaboration, and Creativity: LIS and Distance Education

Julie Reinhart
Assistant Professor
Library and Information Studies
UNC Greensboro
jmreinha@uncg.edu
336-256-0162

Pamela Barron UNC Greensboro

Gail Dickinson UNC Greensboro

Julie Hersberger UNC Greensboro

Distance education allows many excellent students access to quality education by expanding the educational opportunities that are offered. Programs that provide distance education rapidly find themselves confronting practical delivery problems. We offer some solutions to a few of these important problems. Our student population has benefited greatly from distance education because of the flexibility in time and physical location that it affords as well as the increased pedagogical opportunities. Program success has further increased the demand for distance courses. However, institutional constraints on budget, faculty and studio space do not allow for increased program offerings. These constraints have provided the impetus for us to become creative with distance course delivery and scheduling. The faculty collaborates to develop methods to meet the needs of our students, professional field, and institution, while taking into account course content and course activities. This presentation includes a discussion of collaborative processes for determining course delivery methods and course scheduling. There will also be a discussion of our solutions to our program expansion challenges. Our solutions include shared TV time, hybrid courses, and scheduling synchronous online discussion times in the course bulletin. Additionally, we will present student feedback.

Friday, March 28

Plenary Speaker (11:00-11:45)

Dr. Carl Berger

Director of Advanced Academic Technologies Collaboratory for Advanced Research and Academic Technologies University of Michigan-Ann Arbor 734-763-4668 cberger@umich.edu

Predicting the Future—Stepping Forward Five Years

Predicting the future can be fun but difficult. Sometimes predictions work and sometimes they don't (Where are the flying cars?). Often we use history to help predict the future but new technologies pop up unexpectedly along the way. Ideas and technologies shared from the recent past and some unexpected technologies just appearing can help predict an exciting future. We'll also use research from 20 years of work on how people actually learn with technology to help to understand what's important in the future for teaching and learning with technology. Adding WINWINI to WYSIWYG, developing the next "Killer App"... who knows what the future can bring!

Carl Berger is currently a professor of science and technology education, codirector of CARAT (Collaboratory for Advanced Research and Academic Technologies), Office of the Associate Provost for Academic, Information, and Instructional Technology Affairs, and co-investigator on the Next Generation Internet Visible Human project at the University of Michigan, Ann Arbor. Carl is a graduate of the University of Denver, California State University at Sacramento, and holds a doctorate from the University of California at Berkeley.

Dr. Berger began his career as a research programmer on a UNIVAC in the 1950's. Realizing that computers were a passing fad, he left computer programming for teaching and curriculum design. He was a research scientist at Berkeley in the 60's, a public school educator in California, director of education for Detroit Edison, and professor of science education at Michigan in the 70's. In the 80's Dr. Berger became dean of the School of Education at the University of Michigan, Ann Arbor. After 9 years, he turned to something more fun . . . working with faculty and administrators at the University of Michigan in the development and deployment of instructional technology. He has served as president of the National Association for Research in Science Teaching and has sat on higher education advisory boards for Apple, Zenith, Addison Wesley, the Seaborg Science Center, and is past chair of the CIC (Big Ten) Learning Technology Initiative. Dr. Berger is currently board chair of the IMS Global Learning Consortium and serves as UM project director for MERLOT. In 2001, he received an EDUCAUSE Leadership in Information Technologies Award for contributions to the field.

Corporate Presentations

Friday

Using Technology to Gain Strategic Academic Advantage

Carol Vallone President and Chief Executive Officer WebCT c/o John.Lowe@webct.com 919-264-4591



Leading institutions today are achieving their mission-critical goals by utilizing academic technologies on their campuses. In this discussion, Carol Vallone will discuss how institutions have moved from the philosophy of "technology for technology's sake" to using technology to gain "strategic academic advantage". She will also discuss the different multi-institutional approaches to e-learning and shared e-learning services will give educators a roadmap to lower technology costs, more productive course development and more powerful e-learning programs.

Carol A. Vallone is president and chief executive officer (CEO) of WebCT, the world's leading provider of integrated e-learning systems for higher education. Carol brings more than 20 years of experience managing technology companies and bringing new software products to market. She was recently named one of the most influential women in science and technology by Women In Technology International (WITI) and was named one of the 10 "People to Watch in 2002" by Mass High Tech News. She holds a B.S. degree in business administration from the University of Delaware.

Blue Ash......1:00 - 1:45

The Cultural Impact of New Learning Technologies

Deborah Everhart

Senior Requirements Manager in Product Development Blackboard, Inc. 202-463-4860 DEverhart@blackboard.com



The movement from ad hoc, individualized development of course content and Web pages to standardized, enterprise-wide implementation of learning management systems involves profound cultural changes and challenges to closely-held traditions. Questions as fundamental as "who owns course materials?", "who has access to courses?", and "what pedagogical tools and strategies meet the needs of students?" come to the fore, as well as a host of practical, technical, and policy issues. This presentation will analyze the long-term cultural impacts of new learning technologies with regard to issues such as intellectual property, data management and control, security, and privacy. Most importantly, it will consider the challenges institutions and instructors face in an increasingly learner-centric educational world.

Dr. Deborah Everhart is the senior requirements manager in Product Development at Blackboard Inc. She teaches as an adjunct assistant professor in Medieval Studies at Georgetown University. Before coming to Blackboard, she coordinated and supported web development at Georgetown University and was co-project manager for the university's implementation and integration of Blackboard's first Enterprise product. Dr. Everhart has been using computers in the classroom since 1985. She has written numerous articles and presented papers and seminars on learning management systems, web/database development, knowledge management, medieval literature, and the future of the scholarly profession.

Concurrent Session 4

Friday

Featured Presentation by WebCT: Using Technology to Gain Strategic Academic Advantage (45 minutes)

Carol Vallone

President and Chief Executive Officer WebCT c/o John.Lowe@webct.com 919-264-4591

Leading institutions today are achieving their mission-critical goals by utilizing academic technologies on their campuses. In this discussion, Carol Vallone will discuss how institutions have moved from the philosophy of "technology for technology's sake" to using technology to gain "strategic academic advantage." She will also discuss the different multi-institutional approaches to e-learning and shared e-learning services that will give educators a roadmap to lower technology costs, more productive course development, and more powerful e-learning programs.

Production of Interactive Digital Video for Multimedia Lectures and Web Sites (20 minutes)

Betty Black	Marianne Niedzlek-Feaver
Professor	North Carolina State University
Zoology	-
North Carolina State University	Harold Heatwole
betty_black@ncsu.edu	North Carolina State University
919-515-2309	-

Our team of Zoology faculty is developing interactive digital movies that elucidate basic laboratory procedures and selected topics of animal form, function, and natural history. We have obtained digital video clips and still images both locally and worldwide (India, Australia, Madagascar, Antarctica, Galapagos) to create these visuals for use in zoology and biology classes. To provide interactivity in video clips or image sequences, we have added chapters, moving arrows, pop-up labels and diagrams, 3-D rotation, and links to text, related images, or additional movies. Some video clips have moving "hotspots" which serve as links. All visuals are in the form of QuickTime movies, suitable for use in computer-equipped laboratories and multimedia lecture rooms. Since the user interface is a web browser, these materials may also be placed on course web sites for student use outside the classroom. Our "Biovideos" soon will be available for distribution to interested faculty throughout the nation, and we solicit feedback from conference attendees.

Augusta B	9:00 - 9:45
-----------	-------------

Using Web-Based Discussion Boards to Facilitate Student Learning (20 minutes)

Linda Lisowski	Joseph Lisowski
Associate Professor	Elizabeth City State University
School of Education and Psychology	
Elizabeth City State University	
Irlisowski@mail.ecsu.edu	
252-335-3916	

In this presentation, we will discuss the use of web-based discussion boards (specifically, Blackboard Discussion Boards) to facilitate student learning and student ownership of learning in two different areas of study: English and Teacher Education. One goal for the use of these discussion boards is to help students transition from passive learning to an active perception of themselves as writers, thinkers, and (in the case of teacher education) teachers in a vital learning community. Critical issues to be discussed include: effective facilitation of discussions (the guide on the side, rather than the sage on the stage), setting ground rules, the advantages of asynchronous discussion, managing the reading and responding level for the instructor, and ensuring high quality student participation through evaluation and grading criteria.

An Instrument for Peer Review of Web-Enhanced Courses (20 minutes)

Cynthia Bell Assistant Professor Occupational Therapy	Irene Phillips Winston Salem State University
Winston Salem State University bellcs@wssu.edu	Dorothy Bethea Winston Salem State University
336-750-3175	5

There is a wealth of information supporting effective teaching methods. There are also standards or essentials for web-based or web-enhanced courses. However, there is not a readily available tool for peer review of teaching that considers a combination of in-class and web-enhanced teaching methodologies in one course. This session presents a developing instrument that takes into account both in-class practices and web-based content for evaluation by peers. The developing instrument is based upon criteria often used for peer review of scholarly work and includes: clarity of goals, preparation, methods, results, and communication of content. The format of this presentation will lead participants to consider the criteria for review of scholarly work and its application for use in peer review of teaching a combination in-class and web-enhanced course.

Team Teaching via Distance Learning with an Electronic Textbook (20 minutes)

This session will report on an ongoing project at the North Carolina School of the Arts to develop a specialized series of graduate-level career courses. These courses are augmented by team teaching via distance learning and the use of collaborative e-text as a bridge between each instructor's area of specialization. We will report on the reasons we undertook this project; demonstrate the e-text and materials developed for it and discuss the problems we have encountered, resolved, and are working on, as well as the future potential of this project.

Grandover West......9:00 - 9:45

Using Reusable Learning Objects to Build Cross-Institutional Library Collaborations (45 minutes)

Lisa Stimatz Coordinator of Instructional Services Academic Affairs Library UNC Chapel Hill stimatz@email.unc.edu 919-843-2310 Joy Gambill Appalachian State University

Jeff Church Appalachian State University

In a world of rapid technological change and proliferating information resources, librarians are faced with the challenge of helping students navigate the complex information world. While each library system is different, there are a number of information literacy concepts that are common to all. When the librarians at UNC-Chapel Hill created their online Library Research Tutorial, they decided to use a simple, modular design based on the theory of reusable learning objects (RLO). The RLO format enables parts of the tutorial to be reused in other tutorials or customized by other institutions. Librarians at ASU were able to collaborate with UNC-CH to adapt this tutorial for their Freshman Seminar classes. Lisa Stimatz (UNC-CH) will present the process of the development of the tutorial. Joy Gambill (ASU) will talk about the revision process and how the tutorial is being used in the ASU library. Jeff Church (ASU), a Freshman Seminar instructor, will share his personal experience with how the ASU Library Research Tutorial is being used in Freshman Seminar WEB CT classes.

Victoria B	9:00	- 9:45
------------	------	--------

Information Technology Fluency Initiatives on Campus Interest Group (45 minutes)

Laura Grady	Stan Martin
Computing Consultant	North Carolina State University
Information Technology	
North Carolina State University	Sarah Noell
laura_grady@ncsu.edu	North Carolina State University
919-513-3945	_

From minimum, entrance level IT competencies to graduating IT competencies and all points in between, UNC Campuses are beginning to address the need to define IT Competency on their campus. NC State has initiated a process to define and support IT Fluency on campus and will share their experiences (http://www.ncsu.edu/itfluency). All campus representatives are invited to discuss what is being done on their campus and enter into a discussion of future trends and desired outcomes in this area. Among the topics to be considered are: Incoming student testing? IT Fluency across the curriculum? Training Interventions? Surveys of Faculty Expectations? and more.

Victoria C......9:00 - 9:45

Digital Library Development in Support of Teaching and Learning (45 minutes)

Steve Morris

Head of Digital Library Initiatives Digital Library Initiatives North Carolina State University Steven_Morris@ncsu.edu 919-515-1361 Megan Winget UNC Chapel Hill

Noel Fiser UNC Chapel Hill

Representatives from UNC-CH and NC State will discuss digital library development in support of teaching and learning at their respective institutions. The Digital Library Project at UNC-CH is working to institute a set of web-based tools and services to help instructors and researchers manage their media collections and promote resource-sharing across disciplines. Services include guidelines and solutions for the digitization, storage, retrieval, and effective use of images, audio files, and other digital objects. Digital Library Services, now being piloted in seven departments on campus, is more than just a repository for storing digital assets. The infrastructure makes it possible for scholars to present these materials in ways that promote understanding and learning. NCSU's Digital Library Initiatives Department leads the library in creating new digital services and collections, as well as new initiatives that integrate advanced web-based and multimedia resources into teaching and learning. The Digital Media Laboratory enables users to create and develop digital instructional and research materials, and the Usability Research Laboratory offers state-of-the-art equipment capable of collecting video, audio, and computer data in real time for observation and analysis. The department works closely with NCSU's Learning Technology Service.

Concurrent Session 5

Friday

Augusta B......10:00 - 10:45

Online Assessment in Undergraduate Biology Education: Strengths, Limitations, and Lessons Learned (20 minutes)

Jory Weintraub

CELL Coordinator, Biology Instructor Biology UNC Chapel Hill jory@unc.edu 919-843-9035

Whether it is bundled within a courseware suite or used as a stand-alone application, online assessment software can be a powerful tool to enhance undergraduate biology courses, both in-class and asynchronously. However, as with many instructional technology (IT) tools, online assessment has limitations and pitfalls. This presentation will provide a brief overview of the online assessment tools that are currently available as well as how these tools can be effectively used to enhance comprehension of basic concepts in biology. This will be followed by a detailed discussion of the relative strengths and weaknesses of two of these tools–QuestionMark software and Blackboard Assessment tools–which have been used extensively by the presenter over the last three years in upper division Biology courses. Future applications, including use of handheld personal digital assistants (PDAs) to implement in-class assessment, will also be discussed.

Augusta B......10:00 - 10:45

The PMABS Distributed Learning Network Progress Report: Enhancing Science Education for North Carolina's Underrepresented Minority Students via Distance Education (20 minutes)

Jory Weintraub CELL Coordinator, Biology Instructor	Michael Cato UNC Chapel Hill	Brian Rybarczyk UNC Chapel Hill
Biology		
	Laska Lawaa	o !! o
UNC Chapel Hill	Leslie Lerea	Caroline Seay
jory@unc.edu	UNC Chapel Hill	UNC Chapel Hill

The Partnership for Minority Advancement in the Biomolecular Sciences (PMABS) is a consortium of biology faculty at seven at North Carolina's historically minority universities (Elizabeth City State University, Fayetteville State University, Johnson C. Smith University, North Carolina Central University, North Carolina A&T State University, Shaw University, and UNC Pembroke) and at UNC Chapel Hill. PMABS' goals are to enhance science education throughout our partnership and, ultimately, to create greater diversity in the life sciences. One approach has been the development of a Distributed Learning Network (DLN) which combines videoteleconference (VTC) classrooms and a content delivery network (CDN), linking all eight PMABS universities. The DLN allows PMABS to offer otherwise unavailable, cutting-edge bioscience courses throughout the partnership via videoteleconference, better preparing students at our partner universities for success in graduate and professional schools, as well as careers in the biotechnology/pharmaceutical industries. At the 2002 UNC TLT Conference, the PMABS DLN was introduced. This presentation provides an update on the successes and challenges of this project.

Blue Ash......10:00 - 10:45

WebCT Interest Group (45 minutes)

Mark Sivy

Associate Director Faculty Center for Teaching and e-Learning UNC Charlotte mjsivy@email.uncc.edu 704-687-3959

This interest group session will facilitate discussion of issues associated with the WebCT course management system. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Panel: Recognition and Reward for Technology in the Classroom (45 minutes)

Jose D'Arruda Professor and Chair	Bonnie Kelley UNC Pembroke	Betsy Brown UNC Academic Affairs
Physics		
UNC Pembroke	Jill Harp	
jose@uncp.edu	Winston-Salem State L	Jniversity
910-521-6247		5

Several faculty and administrators from various UNC institutions will form a panel to look at recognition and rewards in place for the use of technology in the classroom and discuss ideas for situations where they do not exist. Each panel member will give a short overview of things going on at respective campuses and suggestions for new methods to reward efforts. The discussion will then be opened up to the audience for additional input. Notes from this session will hopefully generate a list of concerns, ideas, and suggestions that can be circulated to Teaching and Learning Centers and Faculty Assembly committees in an effort leading to new ways to encourage, recognize, and reward innovative use of technology.

Friday

Grandover West......10:00 - 10:45

Evaluation Criteria for Learning Objects in MERLOT: Multimedia Educational Resources for Learning and Online Teaching (20 minutes)

Barbara Levin

Associate Professor Curriculum and Instruction UNC Greensboro bblevin@uncg.edu 336-334-3443

Michael Rothkopf

North Carolina School of the Arts

The purpose of MERLOT is to identify high-quality, web-based learning materials that are appropriate for use in higher education settings. MERLOT has perfected a review process for learning objects that is comparable to the peer review process for journal articles (http://merlot.org). The MERLOT review process is rigorous and provides important information to potential users of online learning materials. Three major areas are evaluated. (1) Quality of Content; (2) Potential Effectiveness as a Teaching-Learning Tool; and (3) Ease of Use. The MERLOT peer review process yields high-quality reviews, which can also be used to support faculty by validating the importance of online learning materials they have developed for students. For peer reviewers, engagement in the peer review process is an excellent means of examining sites in their own instructional areas and offers opportunities for service to the field by participating in the peer review process. During this presentation we will share criteria for evaluating online resources, show examples of peer reviews on MERLOT, engage in discussion about the process for peer review of online learning resources, and provide information about how you can become involved in the MERLOT peer review process.

Friday			
Grandover West			
MERLOT and Faculty Development (20 n	ninutes)		
Ray Purdom Director University Teaching and Learning Center UNC Greensboro rcpurdom@uncg.edu 336-334-5078			
MERLOT's mission is to develop organized collection to the needs of various academic disciplines and review process. MERLOT launched a new and som addition of the Faculty Development discipline. Th effort and discuss its relationship to the UNC TLT	ons of online teaching-learning resources tailored to evaluate materials through a systematic peer newhat different initiative this past year with the is presentation will summarize the progress in this C Professional Development Portal.		
Victoria B			
Accessibility (45 minutes)			
Kathleen ThomasCaroManager, CITUNCInformation Technology SystemsUNC Chapel Hillkdt@email.unc.edu919-962-6042	lyn Kotlas Chapel Hill		
Assuring that students and faculty can access we levels. First, to set the context, we'll talk about th We'll tour through our web site, talk about the les goals, and finally discuss our next steps.	b-based materials requires effort on several le support and expectations of our administrators. sons we've learned as we've worked toward our		

Victoria C......10:00 - 10:45

Panel: Networking in the Round: How NC State's Teaching, Learning & Technology Roundtable Changes Higher Education's "Business as Usual" (45 minutes)

Sarah Stein Assistant Professor Communication North Carolina State University sstein@unity.ncsu.edu 919-515-9741 Sam Averitt North Carolina State University

Henry Schaffer North Carolina State University

Donna Petherbridge North Carolina State University

Harry Nicholos North Carolina State University

As educational technologies become more integrated into all dimensions of university life, decisionmaking processes require the involvement of a network of constituents. Though hierarchical administrative ranks have been accustomed to control over infrastructure issues, the far-reaching impact of new communication technologies in the realms of hardware, software, faculty training, student services, technical support, instructional advances, and distributed education needs a much greater diversity of perspectives and experience to provide appropriate oversight. The Teaching, Learning & Technology Roundtable on NC State's campus was established in response to that need. It is now completing its fourth year as an active and vital part of the integration of educational technologies on campus. While the Roundtable does not function as a policy-making or implementation body, its recommendations carry weight because of its engagement with such thorny issues as course management systems and open source software. This proposal is for a panel that will present reflections from a diverse array of individuals on the changes the formation of the Roundtable reflects, produces, and responds to on a Research I university campus. The topics covered will include some of the consequences of the interactions among groups that had rarely conversed directly before.

Concurrent Session 6

Friday

Blue Ash......1:00 - 1:45

Featured Presentation by Blackboard: The Cultural Impact of New Learning Technologies (45 minutes)

Deborah Everhart

Senior Requirements Manager in Product Development Blackboard, Inc. DEverhart@blackboard.com 202-463-4860

The movement from ad hoc, individualized development of course content and Web pages to standardized, enterprise-wide implementation of learning management systems involves profound cultural changes and challenges to closely-held traditions. Questions as fundamental as "who owns course materials?," "who has access to courses?," and "what pedagogical tools and strategies meet the needs of students?" come to the fore, as well as a host of practical, technical, and policy issues. This presentation will analyze the long-term cultural impacts of new learning technologies with regard to issues such as intellectual property, data management and control, security, and privacy. Most importantly, it will consider the challenges institutions and instructors face in an increasingly learner-centric educational world.

Augusta B.....1:00 - 1:45

Journal Finder—One-Stop Access to Journal Literature (20 minutes)

Tim Bucknall

Assistant Director Jackson Library UNC Greensboro bucknall@uncg.edu 336-256-1216

Journal Finder was developed at UNCG's Jackson Library. It allows students and faculty to immediately and easily access any journal articles in electronic and print format. This intuitive access is available even within specialized academic databases such as MLA, MathSciNet, or PsycLit that have no full text. Within dozens of these databases, citations link researchers and students to the full text of a desired article with just a few clicks. Journal Finder is currently in use at ten colleges and universities in North and South Carolina.

Augusta B	1:00 - 1:45
-----------	-------------

A Primer on the Effective Use of Threaded Discussion Forums (20 minutes)

Robert Orr	Newton Smith
Computer Consultant	Western Carolina University
Public Information	-
Western Carolina University	
orr@wcu.edu	
828-227-3079	

Knowing how to make effective use of threaded discussions is critical to those teaching in the elearning arena. Active learning has at its core lively student-to-student and student-to-teacher interaction, and threaded discussion forums are tools to build this interaction and are valued assets for building community among online students. Just as with classroom instruction, it is essential that instructors properly plan for the use of threaded discussions and be realistic in the expected learning outcomes for the discussion activity. This presentation provides for instructors essential background information concerning thread discussions including their history and function. The presentation will share instructional uses of discussions, the instructor's role for utilizing threaded discussions in teaching, guidelines for appropriate use, and suggestions on how to encourage student participation. Finally, next steps and additional information resources will be made available.

Grandover East......1:00 - 1:45

Interactive Web e-Texts in General Education (20 minutes)

Michael Ruiz

Professor Physics UNC Asheville ruiz@unca.edu 828-232-2281

Three interactive web e-texts have been developed at UNC Asheville to enhance general-education science courses that meet face to face. These e-texts, covering a wide range of interdisciplinary topics in astronomy, light, and sound, were featured last fall on CNN. They contain reading material with online student assessment; homework assignments; image galleries in astronomy and art; video clips of science demonstrations produced at UNCA; and music clips. They also include interactive Java applets; student discussion forums; and laboratories in light, color mixing, and sound. Individual students are often presented with different questions based on their IDs and the time of day they attempt the assignments. Students have online access to their individual grades and grade calculators. Besides our use of this technology in general-education courses at UNCA, we have provided a distance-learning workshop in light for K-12 teachers earning CEUs throughout the state of North Carolina. We hope to expand these offerings in the future. Time permitting, samples from these e-texts will be presented.

Grandover East......1:00 - 1:45

A Faculty Center for Teaching and e-Learning—Our First Year (20 minutes)

Mark Sivy

Associate Director Faculty Center for Teaching and e-Learning UNC Charlotte mjsivy@email.uncc.edu 704-687-3959

It has been a year since activity began to successfully combine a conceptual model for instructional technology training and support with an existing Faculty Center for Teaching. This combined Center, the Faculty Center for Teaching and e-Learning, has formally existed since July 1st of last year and serves the entire campus. The greatest overall challenges have been to plan for and ultimately create an effective e-Learning component and to then functionally merge that with the pedagogical aspects of the Center. The focus of this session will be on the development of operational instructional technology training and support, our successes and setbacks, how we have overcome significant obstacles, where we are today, and what is in store for our future. Included major elements in this presentation are WebCT, website development, multimedia, faculty and student support infrastructure, training development and presentation, Centra, Distance Education support, and the Campus Pipeline Luminis portal product.

Grandover West......1:00 - 1:45

Uses of Flash MX for Developing Online Learning Materials (45 minutes)

Scott Brewster

Director of Online Learning The Division of Continual Learning UNC Greensboro msbrewst@uncg.edu 336-334-4676

Presenter will introduce Flash MX and hold a discussion the program's potential for assisting educators in providing learning materials for their classes. The presentation will include an overview of the software, kinds of learning experiences that can be created using the software, and ways to integrate these materials into both online courses and hybrid face-to-face/online courses.

Victoria B1:	0	- 1	1:4	45	,
--------------	---	-----	-----	----	---

Solutions³: Three Project-Based Models for Teaching with Technology (45 minutes)

Karin Breiwitz Consultant Center for Teaching and Learning UNC Chapel Hill breiwitz@email.unc.edu 919-966-1289

Rick Palmer UNC Chapel Hill

Todd Stabley UNC Chapel Hill

Lynne Degitz UNC Chapel Hill

In the course of responding to teaching/learning needs in three diverse instances, the Center for Teaching and Learning developed three different IT products (one in collaboration with the Center for Instructional Technology) that address the unique challenges and specific learning goals of each project. The products: 1. An online guided writing tool for use by teachers in course planning 2. A multi-media, diagnostic case study exercise with patient interview and 3. A set of multi-media science lab preparation modules. Each of these products represents a method for addressing a specific kind of teaching goal, for eliciting desired levels of thinking, and for using locally available technological development and delivery tools to create solutions. As such, these products may also represent models that can now be applied to similar teaching/learning situations and problems in disciplines other than the ones for which they were originally employed. If you'd like to use case studies, writing/thinking exercises, or demonstrations (hardware, procedures, or software) in your teaching, come and see if there might be something in our IT for you.

Victoria C.....1:00 - 1:45

First Contact: Using Technology to Prepare Students for Class (20 minutes)

Greg Simmons

Jeff Church

Appalachian State University

Instructional Technology Consultant Instructional Computing Services Appalachian State University simmonsgc@appstate.edu 828-262-6991

A challenge facing teachers in the 21st century is finding effective ways to move the first point of contact with a given concept out of the normal lecture/class time. Technology allows us to create online activities to both prepare students for upcoming material, and also provide prompt feedback to the students as to their understanding of the topic to be covered. Our presentation will discuss how we as educators can use existing online course tools in a more pedagogically effective way. Threaded discussion, content pages, and online quizzing are nothing new, . . .but utilizing these tools to create an empowering learning environment is a challenge many course designers have yet to conquer. Using actual online WebCT courses as examples, we will demonstrate suggested practices for attaining this elusive goal. The presentation will emphasize sound pedagogical practice, as well as the associated online tools for achieving it. Specifically, we will discuss the strategic use of self-tests, threaded discussion, and structuring online content in such a way as to allow students to maximize their preparation before attending class.

Victoria C.....1:00 - 1:45

The Relationship Between Text Display Method and Knowledge Retention (20 minutes)

Jeff Church

Instructional Technology Consultant Instructional Computing Services Appalachian State University churchjw@appstate.edu 828-262-7095

One of the persisting problems with assessing the effects of computer-based instructional design is the lack of available experimental data. During the Fall 2002 semester, 267 incoming Appalachian State University freshmen took part in an experimental study looking at the relationship between text-display method and short-term knowledge retention during self study. The three text display methods used were traditional printed text, computer-based linear text, and computer-based hypertext. Using the Analysis of variance (ANOVA) statistical technique, significant differences in post-test scores for each of the display methods, gender, and student self-reported effort during the study were explored. The results of this study will be of interest to anyone involved in the process of placing materials in an online environment.

Concurrent Session 7

Friday

Augusta B.....2:00 - 2:45

We Are Many, We Are One: The New South Voices Community Partnership (20 minutes)

Pat Ryckman

Reference Archivist Special Collections UNC Charlotte plryckma@email.uncc.edu 704-687-3408

The New South Voices project, launched in the spring of 2001, is a multidisciplinary, communitywide partnership to collect, preserve, and provide access to the rich tapestry of voices representing the Carolina Piedmont at the end of the twentieth century. Technology has been the thread weaving together an eclectic group of oral history projects and collections comprising New South Voices. Audio and video interviews collected by community groups and institutions ranging from the local history museum to an inner-city neighborhood association have joined interviews collected by the university over the past thirty years to become part of a digital archive, accessible via the web, of our community's many voices. The Special Collections unit at J. Murrey Atkins Library, UNC-Charlotte, has partnered with these outside organizations to provide access and assure the long-term preservation of this unique teaching and learning resource. The presentation will address technology-based partnership issues, the unique opportunities the digital format represents for enhancing teaching and learning across disciplines and the involvement of students in building the resource from start to finish. New South Voices is an NC Echo project, funded in part with LSTA funds administered by the State Library of North Carolina.

Augusta B2:00 - 2	:45
-------------------	-----

Partnership: A Key to Successful University Distance Education (20 minutes)

John Sherlock

Debra Randleman

Western Carolina University

Assistant Professor of Human Resources Human Services Western Carolina University sherlock@email.wcu.edu 828-227-3380

This session discusses how one university developed and has begun implementing a partnership program involving faculty, instructional design consultants, and computer technology specialists to deliver quality distance education for students. Western Carolina University is a regional comprehensive university with enrollment of 7,000 located about one hour west of Asheville, NC. Four degree or certification programs are currently offered 100 percent online, and the and university is moving toward web-enhanced education delivery for all undergraduate and graduate programs. Presenters (a university faculty member and a university instructional design consultant) will describe the roles of each of the people involved in its distance education partnership program and discuss each of the program's elements, including: 1. Ensuring professor has pre-requisite knowledge of distance learning, 2. Orientation to distance learning tools (Instructional web pages and course management software: WebCT used at WCU), 3. Instructional design: Dialogue b/w instructional designers and faculty about course content and learning objectives and how to translate faculty's effective inperson teaching strategies to distance education environment, 4. Implementation and ongoing monitoring/evaluation. The presenters will incorporate into their discussion of the program's elements an actual case study of the process put into action. Presentation concludes with discussion of recommendations for establishing distance education partnership programs at other colleges and universities.

Blue Ash......2:00 - 2:45

Blackboard Interest Group (45 minutes)

Chris Weaver Lead Instructional Technology Consultant DEAIT East Carolina University weaverch@mail.ecu.edu 252-328-1627

This interest group session will facilitate discussion of issues associated with the Blackboard course management system. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Grandover East......2:00 - 2:45

Streaming on a Budget: Inexpensive Solutions for Media-Rich Courses (45 minutes)

Greg Simmons

Instructional Technology Consultant Instructional Computing Services Appalachian State University simmonsgc@appstate.edu 828-262-6991 Jeff Church Appalachian State University

Mary Beth McKee Appalachian State University

Streaming media has been a buzzword at every conference for the last four years or so, yet the creation and effective use of this content in online courses still seems to elude many course designers and faculty members. Content creators often have a misconception of the expense and complexity involved in the creation and use of this technology. This session will seek to demystify the issue by providing a thorough review of the two leading streaming platforms—RealMedia (Helix) and Quicktime (Darwin). Depending upon the specific needs/suggestions of the attendees, the presenters will create/encode content during the session using freely-available and simple-to-use tools, covering the process from conception to delivery. Free versions of available streaming server software will also be discussed, as well as required hardware (which is NOT free). Examples of the effective use of this technology in actual online courses will be presented. Copyright issues surrounding streaming media will also be briefly addressed.

Grandover West......2:00 - 2:45

TLT Assessment and Evaulation (45 minutes)

Laura Rogers

Program Coordinator UNC TLT Collaborative Irogers@northcarolina.edu 919-218-0282

This session will provide overview and discussion of current practices in TLT assessment and evaluation. Discussion will address collaborative development of assessment resources.

Victoria B	2:00 - 2:45
------------	-------------

Intellectual Property Rights (45 minutes)

David Drooz

Associate General Counsel Office of Legal Affairs North Carolina State University david_drooz@ncsu.edu 919-515-1006

The use of technology in teaching presents new intellectual property issues. This is especially true for copyright, as the Internet has been described as one big infringement machine. This presentation will briefly define intellectual property and review some of the new laws have been enacted to control the sharing of digitized information. Then there will be a review of the UNC system's Patent and Copyright Policies, focusing on the copyright policy that was revised in November 2000. Key issues include; how to determine ownership of intellectual property created in the scope of employment, how to commercialize intellectual property, how to use copyrighted works without permission (fair use, face-to-face teaching; TEACH Act), and how to get permission when necessary.

Victoria C......2:00 - 2:45

Using Technology to Remove Barriers to Student Success in Introductory Chemistry (45 minutes)

Steven Breiner

Associate Director of IT Services IT Services / Chemistry Appalachian State University breiner@appstate.edu 828-262-6731

Chemistry is frequently thought, by students, at least, to be one of the hardest subjects encountered during their college careers. We instructors know, however, that the problem is not so much the difficulty of the material, but rather, that students (a) don't read the textbooks, (b) don't do the homework, (c) wait until the last minute to do anything, and (d) don't seek help when they get into trouble. This presentation presents some concrete and, at least preliminarily, successful examples of how to systematically surmount these barriers using Course Management System technology. Using a number of features in the WebCT course management system, preliminary results seem to support the hypothesis that eliminating the aforementioned student habits can substantially increase the amount of chemistry students can learn in an introductory class, at least as measured by nationally standardized tests. The specific methods used for breaking those barriers, the failed and successful components of the project, and the bottom-line results will be discussed and critiqued.

Poster Sessions

Friday

Victoria Prefunction Area.....2:45 - 3:30

The Impact of a WebQuest on a Humanities Class

Jeanne	McGlinn

James McGlinn UNC Asheville

Associate Professor Education UNC Asheville jmcglinn@unca.edu 828-251-6963

In this session, we will discuss the use of a WebQuest in a Humanities class. In an effort to increase student motivation and performance on a research project in a college-level humanities class, students were given a choice of three assignments. They could choose either a WebQuest on the Holocaust, a creative narrative modeled on the novel *Girl with a Pearl Earring*, or a traditional research paper. We compared the quality of student work on the different assignments and surveyed student attitudes about their work. We will discuss our findings in the context of research on intrinsic motivation.

Victoria Prefunction Area.....2:45 - 3:30

Assessment of Probeware-Based Laboratory Curricula for Introductory Physics

Judy Beck	Chuck Bennett
Lecturer	UNC Asheville
Physics	
UNC Asheville	
jbeck@unca.edu	
828-232-5036	

Custom laboratory curricula have been developed that integrate laboratory probeware into both calculus and algebra-based introductory physics courses. These materials have been carefully designed to emphasize conceptual understanding. In particular, we pay special attention to those concepts that, according to findings in Physics Education Research, are most likely to be misunder-stood even after instruction. We utilize assessment instruments published in the open literature to evaluate learning outcomes specifically targeted by the laboratory curricula. The results will be compared to those from previous semesters in which laboratory probeware was not used. We will also discuss results from in-house instruments designed to survey student perspectives of the laboratory curricula.

Victoria Prefunction Area.....2:45 - 3:30

The iLumina Digital Library: An Educational Resource

Barbara Heath

Assistant Research Professor Chemistry UNC Wilmington heathb@uncw.edu 910-962-7285

This presentation will describe the history, development, and functionality of the iLumina Digital Library. iLumina is a digital library of sharable undergraduate teaching materials for chemistry, biology, physics, mathematics, and computer science. It is a NSF Digital Library Initiative – Phase 2 grant funded the project. Project goals focused on building a functioning library that would be used as a testbed to address important research issues related to the evolution and use of digital libraries. The library is designed to quickly and accurately connect users with digital educational resources. These resources range in type from highly granular objects such as individual images and video clips to entire courses. Resources in iLumina are cataloged with IMS-compliant metadata, which captures both technical and education-specific information about each resource. An advanced search engine, a quick search feature, and a browse utility provide multiple methods for accessing resources in the library. Any registered user can make contributions to the iLumina digital library. Contributed resources can either be stored on iLumina servers or accessed through links to remote sites. Contributions undergo a peer review where they are checked for the accuracy and completeness of their metadata, the accuracy of their scientific and mathematical content, and to ensure that they are technically sound.

Victoria Prefunction Area.....2:45 - 3:30

Using Laboratory Probeware in Introductory Physics

Chuck Bennett Professor Physics UNC Asheville bennett@unca.edu 828-251-6047 Judy Beck UNC Asheville

Laboratory probeware is a term used to describe sensor-based laboratory hardware that may be used along with data acquisition software for real-time data collection and analysis. Such an approach releases the student from the drudgery of manual data collection, and facilitates understanding by presenting graphical and statistical data analysis in real time. Experiments can be run and re-run quickly to allow parameter space surveys and to better enable conceptual understanding. Motion graphs are generated in real-time, so students can correlate plot features with specific motion details. A set of custom laboratories for first-semester calculus-based and algebra-based introductory physics have been designed that illustrate key course concepts, with specific emphasis on common misconceptions. Laboratory materials are distributed via the Web, and seamlessly integrate data collection, data analysis, and pedagogy. A paperless lab manual strategy allows us to devote as much space as needed within the laboratory materials for effective pedagogy and concept reinforcement.

Victoria Prefunction	Area	2:45	- 3:3	30
				~ ~

Online Lab for Network Security Courses Delivered via Distance Learning

Biwu Yang

Professor Industrial Technology East Carolina University yangb@mail.ecu.edu 252-328-4079

Network security has evidenced its important role during the serious network security and computer virus attacks over recent years. Educational institutions have recognized the need for gualified professionals and Network Security (or Information Security) curricula have been developed. A key to the success of such a curriculum is to provide lab activities for students to learn and practice the various technologies to identify and to take pro-active actions toward attacks. Due to the nature of these exercises, the lab activities must be carefully designed so that they will not cause any harm to the normal operation of data communication networks on the campus. This requirement can be easily addressed for an on-campus lab with an isolated network design. However, it is a challenge in designing an online lab for distance learning courses because the Internet connectivity through campus network infrastructure is necessary for students to access the online lab. All factors must be considered in order to provide effective lab activities while protecting the campus network infrastructure from disturbance, either intentionally or unintentionally. This presentation describes an online lab in teaching network security courses via distance learning. Various aspects for the online lab will be discussed, including network infrastructure design, means to provide secure access to the online lab, lab activity design, and measures to protect campus network infrastructure. This online lab has been used for several network security-related courses.

VICTORIA PREFUNCTION AREA	Victoria Prefunction	Area	2:45	- 3:3	0
---------------------------	----------------------	------	------	-------	---

Teaching 3D Modeling and Design

Wayne Godwin

Associate Professor Art East Carolina University godwinw@mail.ecu.edu 252-328-2358

Samples of student work from Art 3442 will be shared at the poster session. Form•Z is the primary software package for Art 3442 Products and Environments. The class is structured to include the study of three-dimensional modeling and virtual reality as a design tool. The class has worked in the reconfigurable advanced visualization environment (RAVE) for the past two years. Students in the class create three-dimensional models in Form•Z that are translated with NuGraph software and viewed in the RAVE virtual reality (VR) system. This system provides an environment in which the students can see the models they create in 3D stereo with interactivity and real time animation. Projects in Art 3442 are developed to allow for personal growth and development through self-exploration and discovery. Four problems are presented in the 14-week class with each project focusing on a different design process. In addition to individual development, social dynamics are developed through group projects. A multidisciplinary approach to digital media and industrial design are developed through a balance of process, product, and professional development. The class is the students' first exposure to Industrial Design within the curriculum.

Victoria Prefunction Area.....2:45 - 3:30

Impact of Technology on the Mathematics Curriculum and Assessment

Jenny Washington

Genevieve Jones-Wilson Fayetteville State University

Mathematics Education Coordinator Mathematics and Computer Science Fayetteville State University jwashington@uncfsu.edu 910-672-2054

Fayetteville State University's Department of Mathematics and Computer Science has implemented the use of a course management system which contains powerful Blackboard features for teaching and learning. The system has other features that enhance our classroom teaching time. I will also be displaying other teaching supplements used by our faculty members to promote effective teaching in higher education.

Victoria Prefunction Area	2:45 - 3:3	0
		-

Using Threaded Discussions to Create Critical Thinking

Nancy Ruppert

Assistant Professor Education **UNC** Asheville nruppert@unca.edu 828-232-5025

Threaded discussions can be used in courses to allow students to develop metacognitive skills. They can also be used to allow students to problem-solve and to create higher levels of thinking. I have used them as part of case study talks, small group problem solving, support groups and as a source for troubleshooting throughout courses. This presentation will provide an overview of how to get started, how to group students, how to manage the feedback, and how to grade this portion of the course.

Victoria Prefunction Area.....2:45 - 3:30

Collaborating with Students to Develop Online Courses

Beverly Vagnerini

Dana Little **UNC Wilmington**

Director Client Services Information Tech Sys Division **UNC Wilmington** vagnerinib@uncw.edu 910-962-7422

Due to current budget issues preventing most campuses from hiring new employees, we must seek creative solutions to meet current TLT issues at the University of North Carolina, Wilmington. At UNCW, our staffing resources for supporting such issues are limited, at best. In a collaborative effort with the Watson School of Education, the Information Technology Systems Division has made great strides in making up for the lack of professional instructional technology personnel on campus. Currently, students enrolled in UNCW's Masters in Instructional Technology program must complete a Web Development Course. During this course each student is given access to a WebCT online course shell. Rather than develop a fictitious course these students are paired with faculty who want to develop and deliver online courses and the two work together in a team effort. Each receives technical training from the department of Client Services; the students then offer pedagogical assistance to the faculty member in creating the course. These students also attend any technical training sessions offered to the campus at large to provide pedagogical answers that session attendees may have. This collaborative effort has been a win/win for all involved.
Concurrent Session 8

Friday

Teaching and Learning with Virtual Teams (20 minutes)

Lisa Gueldenzoph

Assistant Professor Business Education North Carolina A&T State University Iguelden@ncat.edu 336-334-7657

Collaborative skill is a prerequisite for many employment opportunities after college graduation. Accordingly, most college and university courses include collaborative group projects in their course requirements. However, in today's Digital Age workforce, many collaborative projects are completed across great distances and with a variety of disciplines. To be effective in the workplace, our students not only have to work well with others, they must work well with people from very different educational backgrounds whom they may never meet face to face ... hence the significance of integrating inter-disciplinary virtual teams in the teaching and learning environment. As a work in progress, this 20-minute short presentation will outline learning activities and their respective technologies that can be integrated as virtual team projects. In addition, suggestions for effective group management and peer evaluation rubrics will be provided. At the conclusion of the workshop, participants will be encouraged to network with each other to create a foundation for multi-geographical, cross-disciplinary virtual teams.

Use of the Internet Environment to Standardize Curriculum Implementation and Evaluation For Community-Based Health Sciences Students (20 minutes)

Annette Greer

Asst. Director For Recruitment EAHEC/BSOM Dept of Family Med East Carolina University greera@mail.ecu.edu 252-744-1263 Maria Clay East Carolina University

Doyle Cummings East Carolina University

Kristen Springer-Dreyfus

East Carolina University

Eastern Area Health Education and East Carolina University have utilized internet based curriculum and evaluation techniques to standardize delivery of community based education of health care professionals since 1998. Modules based on disease processes were developed to provide the multiple disciplines a common base of knowledge for improved communication in health care planning. Case conferences are placed on the Internet site to allow for interactive team development of Interdisciplinary Care Plans. Community projects are posted to allow sharing of resources between geographical areas which could benefit from the development of educational materials and processes. Evaluation tools are posted for immediate feedback to program faculty and later analysis on group basis by discipline. The experience has been beneficial in meeting student, faculty, and program objectives. Future technological advances are planned for broadening student skills to interact with "teaching patients."

Augusta B	3:30 - 4:15
ragasta B	

Using Weblogs to Facilitate Collaboration (20 minutes)

Dale Pike
Director of Instructional Technology
College of Arts & Sciences
UNC Charlotte
dpike@email.uncc.edu
704-687-3333

Jason Edgecombe UNC Charlotte

Ceily Hamilton UNC Charlotte

Weblogs are gaining acceptance in many industries as a flexible and robust method of communication. Particularly influential in their rapid adoption are two factors: ease of use and transparent output to multiple formats (HTML, XML, etc.) Members of the Technology Solutions Team in the College of Arts & Sciences at UNC Charlotte will present an overview of the technology and give multiple examples of their uses of weblogs to facilitate information sharing and knowledge building within the team.

How Do We Get There From Here? Campus Collaboration to Achieve Information Literacy (20 minutes)

Stacy Baggett	
Electronic Resources Cataloger	
Joyner Library	
East Carolina University	
bowerss@mail.ecu.edu	
252-328-2199	

Stefanie DuBose East Carolina University

Jessica Fischer East Carolina University

The information needs of distance education students and faculty have transformed the way libraries provide resources and services to not just the distance education community but also all library users. The advent of new technologies in higher education, particularly distance education, has reinforced the development of information literacy skills. These skills can only be achieved through collaboration between teaching faculty and librarians. In an effort to address these needs, Joyner Library at East Carolina University is: 1.Assessing how we acquire new resources 2.Implementing technologies that will streamline access to resources and services to make library research more efficient and effective 3.Working with teaching faculty to integrate information literacy skills at the course level. This presentation will draw from current practices and illustrate future directions for improving collaboration across the curriculum and graduate information literate students.

NC BioGrid—Towards Grid Services in North Carolina (45 minutes)

Phillip Emer High Performance Computing and Communications MCNC phil@ncren.net 919-248-4191

The NC BioGrid testbed became live in May 2002. The testbed includes four nodes, three operating systems, and a combination of open source and commercial middleware products that tie the distributed set of heterogenous resources into a cooperating system—A Grid. In this talk we present the details of the testbed, and how our findings are driving a utility-based computing and data management model.

PDA Applications in Education: Time for Renewed Consideration (20 minutes)

David Swanzy Adjunct Professor Music North Carolina School of the Arts swan678@bellsouth.net 504-738-1998

PDA software, hardware, and various peripheries have multiplied and improved exponentially during the last two years. Among the promising developments are PocketPC 2002, extended wireless capabilities, greatly increased processing speed and storage, enhanced multimedia functions, the mobile Flash player, and a growing number of specialized applications. Still, few usable learning objects are being produced, and education continues to lag behind the business and news updates. The presentation will emphasize multimedia uses rather than the standard organizational functions, but those basic tools that have a direct application in education, such as data storage/organization and reading/writing text material, will not be neglected. Also reviewed will be the continuing problems that remain and are created by such rapidly developing technology. Notably, standardization is not a product of the present commercial environment, wirelessness is still in its infant stage, and costs are substantial. Examples, commercially available and self produced, will explore basic techniques of html editors such as Dreamweaver; converted PowerPoint presentations, Flash learning objects that synchronize sound with a slide show, video in both the Windows and Real players, and specialized authoring tools. It is hoped that an outcome of the presentation will be a realization by potential producers for the PDA that the challenges to be faced are not overwhelming.

Is It There Yet: Streaming Video Past the Stage of Hype—An Introduction to MPEG-4 (20 minutes)

Hal Meeks

Multimedia/Instructional Technology Consultant Information Technologies North Carolina State University hgm@unity.ncsu.edu 919-515-1525

The belief was that with more bandwidth, everyone would be using streaming media. And that is happening, but much more slowly that many people anticipated. Part of the problem is the myriad of formats . . . all incompatible. There hasn't been a standard for digital media that is akin to HTML, an open standard that anyone can write content for. MPEG-4 is emerging as a potential candidate for that role. It is a open file specification standard, intermixed with commercially licensed components. It can potentially run on many different platforms. Sun, Apple, Philips, RealNetworks, Nokia and others have pledged support for it. So . . . how does it stack up? What does it deliver that Windows Media or Real Media can not? Attend and find out.

TLT Assessment Interest Group (45 minutes)

Laura Rogers

Program Coordinator UNC TLT Collaborative Irogers@northcarolina.edu 919-218-0282

This interest group session will facilitate discussion of issues associated with TLT Assessment. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Panel: Embers of the Real: Human Factors in Online Teaching and Learning (45 minutes)

Bob King

eLearning Consultant / Instructor Curriculum and Instruction UNC Greensboro bob_king@uncg.edu 336-256-0415 James Benshoff UNC Greensboro

Julia Hersberger UNC Greensboro

Our panel presentation will outline and correlate three different perspectives on human factors in online teaching and learning: a techno-ontological perspective, a group dynamics perspective, and a social networking perspective. The question our panel will address is this: how can we design the human factors side of online courses to take full advantage of the particular opportunities that online reality offers us as instructors? Our panel is drawn from three different discipline areas — Curriculum and Instruction, Counseling and Educational Development, and Library and Information Studies. Our perspectives converge in the topic area of human factors in online teaching and learning in part because we all teach courses online. Our hope is that the combination and convergence of our perspectives will be thought provoking and yield insights. Here are some of the guestions that our presentation will enjoin: — Some philosophers say that reality is in the eye of the beholder; if this is so, how can online human reality best be conceptualized or "pictured" in the eyes of instructors in order to take advantage of its strengths as a medium? How can we use the opportunities online reality provides to explore and enact generative issues of persona, theater, and selfhood for the enrichment of learning? — Group therapists routinely use groups as a therapeutic opportunity for individuals to learn about themselves, about relationships, and about social interactions. In traditional education, most formal learning is structured to take place within a group setting (classroom, supervision group, seminar). So, how do we create and use the power of group in online learning experiences? What things can we do to help group members connect to each other in various ways? — How do online communities form and develop in the context of social network analysis? How do online relationships develop and evolve (particularly in online courses), how do cliques form, who becomes an info hub and why, and how do bridges/connectors form, etc.?

TEACH Act: What Are the Institution's Technological Responsibilities? (20 minutes)

Kristin Antelman

Associate Director for Information Technology Libraries North Carolina State University kristin_antelman@ncsu.edu 919-515-2843

The recently enacted TEACH Act opens the door to "classroom equivalent" use of digital media in distance education. There are many constraints on the exercising of these rights, however. In addition to various individual responsibilities, the institution also bears significant responsibility for compliance. Probably the most challenging of the requirements is the institutional obligation to apply technological measures to prevent retention or further dissemination of the work. This session will look at what technological controls are available to comply with this requirement. Can all file types and formats be controlled? How can we critically evaluate these digital rights management tools in light of our overarching mission to support the free exchange of information between teachers and students? It there an acceptable middle ground? While successfully implementing a system of "downstream controls" will give instructors valuable new options in designing their courses, there will also be unintended consequences. The law permits institutions to retain copies of digital objects in a secure space. That provision, together with the realities of implementing a DRM system, will encourage centralization of content and control. One challenge will be to implement these measures in such a way that instructors do not feel that the costs of compliance are too great.

Internet-Based Homework Can Provide Significantly Enhanced College-Level Student Performance: A Case Study (20 minutes)

Jack Carter

Associate Professor Engineering Technology UNC Charlotte jcarter@uncc.edu 704-687-4188

The application of computing technology has provided many opportunities for educators as they seek to engage students into the educational enterprise. It is well understood that the success of students is predicated by their personal involvement and engagement in the learning process. Emerging technologies have given educators many choices, enabling them to bring their subjects to students in many engaging ways. This presentation will describe the impact of replacing handwritten and hand-graded homework with a relatively easy-to-implement Internet-based interactive format. After three years of implementation in a set of upper-division electronics courses at UNC Charlotte, student retention and grades have improved dramatically. The organization of the course, the platform used, and the results obtained will be presented. Participants will be able to query the suitability of such a format to their own courses.

Concurrent Session 9

Friday

Augusta A......4:30 - 5:15

Destination Berlin: A Multimedia Approach to Foreign Language Learning (20 minutes)

Elizabeth Snyder

Assistant Professor Foreign Languages UNC Asheville esnyder@unca.edu 828-273-4933 Edward House UNC Asheville

This presentation will discuss the development of a new computer-enhanced course to be offered in spring 2004 via Interactive Television in the UNC German Studies Consortium. The course will explore the City Berlin as an important political and cultural site for many major events of the 20th century. This project is experimental and draws heavily on current information and research regarding different learning styles, as well as multimedia-enhanced second language acquisition. Key issues in designing the course include an awareness of cognitive and socio-cognitive learning styles, whereby students' cognitive retention of new language patterns is paired with the social context and implementation of this language outside the classroom. A third element to be incorporated in these methods is what can be termed the "reward" principle. Course information will not only be presented in a variety of formats (text, audio, video), but will offer something rewarding that makes the learner want to go on. Using various multimedia software and tools, content can be designed so that the student is able to "interact" with particular modules. Since these will be experimental techniques, we ask and invite any input from participants on ways to improve this concept or on similar work and/or technology being used today.

Friday			
Augusta A4:30 - 5:15			
Teaching Literature in the Technology Classroom, and Technology in the Literature Classroom: The Case of William Blake (20 minutes)			
Gregg Hecimovich Assistant Professor English East Carolina University hecimovichg@mail.ecu.edu 252-412-2223			
My presentation examines the ways in which William Blake's artistic vision prefigures the icono- graphic construction of the world wide web. Digitization is not a notion confined to electronic de- vices, but a technological norm that operates across a spectrum of materials and processes. The organizing principle behind Blake's "Illuminated" poetry and digital technology. I maintain, hold			

organizing principle behind Blake's "Illuminated" poetry and digital technology, I maintain, hold instructive parallels. In both, complex operations are mechanized by being broken into simpler operations. More efficient divisions depend upon some binary or "digital" segment by which all things can be reduced to two bits, 0-1, on-off. Blake's process of relief printing is just such a technology, with the raised text functioning as a "1," or "on," and the relief area as a "0," or "off." Twenty-six letters in the Latin alphabet, plus ten numerals and a few "accidentals," extend the range of information stored in the two bits of "1-0," "on-off." By providing alphabetic technology as moveable type, two bits begin to hold the power of all written expression. Like typesetting, or the division of all words into a small group of uniform letters, Blake's relief etchings practice the power of digitization, only for Blake digitized content is conceived and executed as an integrated visual field. Like contemporary digital software, Blake's art consists of segmented packets of meaning arranged and processed in a fashion that looks forward to the "Composite Arts" of the digital age. By exploring the possibilities of studying current digital technology with the tools of literary analysis, and literary analysis with the tools of digital technology, my presentation offers a cross-disciplinary approach for teaching literature in the technology classroom, and for teaching technology in the literature classroom.

Augusta B......4:30 - 5:15

PA Distance Learning—Gross Anatomy, 1998-Present (20 minutes)

Ronald Dudek

Anatomy and Cell Biology/Physician Assistant Studies East Carolina University dudekr@mail.ecu.edu 252-744-2863

The Department of Physician Assistant Studies (PA) at East Carolina University (ECU) has had a Distance Learning (DL) PA degree program since 1998. The program has been accredited through the Accreditation Review Commission on Education of the Physician Assistant, Inc. (ARC-PA) and is equivalent in outcomes to the on-campus PA program. The program has recently been approved to grant a master's degree starting with the class entering in May, 2003. This presentation will consist of strategies that have been tried with the three cohorts of DL students matriculated by the Department of PA studies at ECU. Successes, problems encountered, potential pitfalls, and how the course has improved both from a teaching and learning aspect, including the changes being made in preparation for the fourth cohort starting in May will be presented. The DL PA is frequently a non-traditional student that is or has been in the military. Many of these learners present unique challenges. Teaching strategies include: full video of the cadaver dissection, Anatomy TV, Gold standard Multimedia Gross Anatomy, and the use of a high yield gross anatomy presentations that are set up in an asynchronous module. Plans and methods to assess the course will also be discussed.

Friday	
Augusta B	4:30 - 5:15

Characteristics and Performance of Students in an Online Section of Business Statistics (20 minutes)

John Dutton

Associate Professor Business Management North Carolina State University john_dutton@ncsu.edu 919-515-6948

Courses taught completely via the internet have become increasingly common over the last several years. There has been a great deal of speculation about the motives and characteristics of the students who take such courses, as well as about the success of the courses as vehicles of instruction. In this paper we compare students in online and lecture sections of a business statistics class both taught by the same instructor. With regard to course content, assignments and exams, the two sections were virtually identical except that students in the online section did not attend the regular lectures. Online students came to campus for an initial organization session and took the three intra-semester exams and the final exam together with the lecture students. The data are based on class grades for approximately 40 online and 140 lecture students during the fall semester of 2001. We also have collected demographic data and students' responses to two surveys, one distributed at the beginning and the other at the end of the semester. The first survey asked students for information regarding their level of preparedness and reasons for preferring the online or the lecture section. In the second survey students were asked to evaluate their experience and degree of satisfaction with the course. We employ comparative descriptive statistics, regression analysis and standard hypothesis tests to identify significant differences between the online and lecture sections with regard to performance and satisfaction with the course as well as motivation and preparedness for taking an online course. The comparison of performance levels is a continuation of similar work we did with a computer science course.

Blue Ash......4:30 - 5:15

Web Accessibility Interest Group (45 minutes)

Susan Peck

Instructional Technology Specialist Academic Computing Elizabeth City State University sjpeck@mail.ecsu.edu 252-335-3592

This interest group session will facilitate discussion of issues associated with Web Accessibility. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf.

Panel: What's the 411? (45 minutes)

Carolyn Anderson

Associate Director of CITTLE/ Director of Instructional System CITTLE Winston Salem State University andersonc@wssu.edu 336-750-3041 Robert Herring Winston-Salem State University

Rebecca Wall Winston-Salem State University

Michael Brookshaw Winston-Salem State University

Valerie Saddler Winston-Salem State University

In an effort to improve communication skills, allow for student participation and to handle classes when the instructor is out of town the Discussion Board in Blackboard was used effectively in several classes at WSSU. This panel discussion will involve four faculty members in various disciplines and the unique ways they are using discussions. Learn of an exercise that reduced class-room time on a difficult concept in a foreign language class by using a never ending story, how to handle case studies and much more.

Grandover West	4:30	- 5:	15
----------------	------	------	----

SMIL . . . The Lab Comes to You! (20 minutes)

Rick Palmer	Todd Stabley
Consultant	UNC Chapel Hill
Center for Teaching and Learning	-
	<u> </u>
UNC Chapel Hill	Celia Hooper
rip@unc.edu	UNC Chapel Hill

As a component of her Allied Health Sciences course at UNC, Dr. Celia Hooper needed to prepare her students, both residential and distant, to perform a number of tasks using a Computerized Speech Lab. The CSL, and its complement of PC hardware and software components, is used to administer a number of diagnostic tests and therapeutic procedures for speech therapy patients. Developed as lab preparatory components for a number of "hands-on" activities (or labs) that will teach students how to use the CSL, the final products incorporate still images, graphics, text captions, video footage and screen capture clips into a multi-screen aural/visual environment that thoroughly prepares a student for a learning lab engagement with the CSL. The products are accessible as on-line multimedia streams, launched from a home web page, or can be provided to students on CD-ROM. Visual and text material from the products can also be provided in hardcopy form to facilitate on-site recollection of media content and procedures during the actual lab experiences. The project was designed for and created in SMIL as a collaboration between the Center for Teaching and Learning and the Center for Instructional Technology at UNC-CH, using multi media tools such as Premiere, Camtasia, GRiNS, Photoshop, Realtext, Dreamweaver, GoldWave. Replication of this project model for other lab, software-tutorial, or demonstration types of teaching goals is being actively pursued.

Grandover West......4:30 - 5:15

Secure Digital Mobile Classroom (20 minutes)

Mary S. Jackson Professor Criminal Justice Studies East Carolina University jacksonmar@mail.ecu.edu 252-328-1448 Nathan C. Stevens East Carolina University

Work in Progress: This project is testing the feasibility of using handheld computers (PDA's with Secure Digital Cards or e-cards) with criminal justice students. We are testing the PDA's with students who are in the military, law enforcement officers, probation officers and students who do not have frequent access to a home or work station computer. Currently ten students are using the instruments. Three of the students are in the military (just been deployed) and one sent to Quantico for training. These students are able to continue their classwork even though there has been an interruption in their personal lives. The PDA's have been programmed with the class work and the e-cards function like a text book for the students. This project was funded by the NC Governor's Crime Commission. The project started October 1, 2002 and we are still in the testing phase as more students are being deployed because of the impending war. We feel that these tools will become extremely teaching tools for educators in the future. East Carolina University is the only University in the Country, to our knowledge, that is testing mobile classroom teaching for military and law enforcement officers. We currently have 10 units that are being used by military and or law enforcement officers. Three of the military students are being deployed and one law enforcement officer is on "special assignment." These students do not have regular access to a computer work station. Therefore the handheld computers with the e-cards are a good tool to utilize so that these students can continue their education. We are currently testing the feasibility of their use to determine if this is a reasonable academic tool for military and police officers who are committed to not only to "serve and protect" citizens, but also committed to education as well.

Friday	
Victoria B	4:30 - 5:15

Using Just-in-Time Teaching in the Principles of Economics Course: Blending Active Learning with Web Technology (20 minutes)

Scott Simkins Associate Professor Economics North Carolina A&T State University simkinss@ncat.edu 336-334-7744

In this National Science Foundation-funded project, we are adapting Just-in-Time-Teaching (JiTT) techniques originally developed for physics education for use in introductory economics courses. JiTT techniques combine the use of Web-based exercises with active-learning pedagogy to provide a dynamic learning environment that makes students collaborators in the learning process. Students complete exercises on the Web and turn them in a few hours before class; faculty then organize the classroom session around students' responses just prior to class. Excerpts from students' submissions are presented during the class as the basis for lecture topics and are also used to develop collaborative exercises that teams of students work on during classroom sessions. This two-pronged approach leads to better student preparation for class, greater participation in classroom discussion, instantaneous feedback for instructors, and improved student study habits. The objectives of this workshop are to: (1) introduce participants to the JiTT pedagogical strategy, (2) model the use of JiTT in courses through hands-on practice with web-based course management tools (Blackboard), (3) actively involve participants in the creation of web-based JiTT questions, and (4) review the results obtained from economics classes that have implemented the JiTT pedagogy. Participants should leave the workshop with a working knowledge of the JiTT pedagogy and the ability to begin implementing JiTT techniques in their own classrooms.

Victoria B......4:30 - 5:15

Effectiveness of Computer-Assisted Instruction of Pediatric Heart Sounds (20 minutes)

Alan Branigan

919-843-2310

Instructional Technology Consultant Center for Health Sciences Communication East Carolina University branigana@mail.ecu.edu 252-744-2938

An educational application has been developed at the Brody School of Medicine at East Carolina University to improve students' and health professionals' identification of pediatric heart sounds and murmurs. The application, initially developed as a CD-ROM for classroom presentation, self-paced learning, and continuing education, has been ported to the Web. It incorporates a user-friendly interface with high fidelity digitally recorded heart sounds, supporting didactic text, illustrations, and a self-assessment. The learner can listen to heart sounds that correspond to the four chest locations commonly auscultated, more closely simulating an actual examination. The application was evaluated by 32 neonatal and pediatric nurse practitioner students at the UNC School of Nursing. Students accessed the application over a high bandwidth link of 155 kilometers (96 miles) between UNC and the Web server at ECU. Using pre- and post-testing, there was significant improvement following four weeks of use. Students with relatively less years of experience improved more than those with relatively more years. The more time students invested in using the tutorial, the greater their improvement in accurately identifying heart sounds. Development was funded by the Children's Miracle Network and the National Library of Medicine. The CD-ROM is marketed by Concept Media of Irvine, California.

Victoria C......4:30 - 5:15

Best Library TLT Practices (45 minutes)

Lisa StimatzScott WatkinsVirginia BranchCoordinator of Instructional ServicesNorth Carolina State UniversityAppalachian State UniversityAcademic Affairs LibraryLisa RobertsLisa RobertsUNC Chapel HillUNC GreensboroUNC Greensboro

UNC libraries are on the forefront of teaching and learning with technology. This session showcases a handful of the "best practices" underway at academic libraries across the state. Scott Watkins of North Carolina State University will discuss how N.C. State is integrating library resources into the campus learning management system (LMS) to help students and faculty gain access to the scholarly materials they need. Lisa Roberts of the University of North Carolina at Greensboro will present a definition of digital reference, describe how it's being used in UNC libraries, and explain what makes digital reference a "best practice" for today's library. Finally, Virginia Branch of Appalachia State University and Lisa Stimatz of the University of North Carolina at Chapel Hill will describe how their libraries are using usability testing and other assessment methods to improve access to digital library content.

Hands-On Workshops and Seminars

Saturday

Designing Usable Learning Web Sites: From Text to Task (3 hours)

Deborah S. Bosley Director UNC Charlotte dsbosley@email.uncc.edu 704-687-3502

Did you know that * students read 30% slower on screen than from hardcopy? * 90% of all information conveyed on distance learning websites is text? * few faculty understand the web text design issues critical to distance or on-screen learning? This presentation provides faculty with the information they need to design more "user-friendly," readable screens for student learning. During this workshop, we will examine what's wrong with many teaching websites; learn how content writers should respond to users' needs; understand what makes a teaching website; learn the differences in writing for the screen than for the page; and practice the organizing principles, writing strategies, and formatting techniques that are critical to the success of any distance or online learning website.

3D Models—For the Love of Making (3 hours)

Wayne Godwin

Associate Professor East Carolina University godwinw@mail.ecu.edu 252-328-2358

Come to this workshop and share in the love of making. Challenge your visual self and amaze your friends with your technical creative ability. Expand your horizons through experiencing the exciting world of 3D computer graphics. Using FormZ 3D modeling software a workshop will be conducted in which the participants create a 3D model of a work stool of the type that is found in Art Studios and Science Labs. Distribution methods for 3D content on the web and for printed media will be discussed. Graphic available upon request.

Creating Digital Portfolios and Multimedia Content Using Lectora (3 hours)

Madu Ireh

Carolyn Anderson Winston Salem State University

Director of Technology Winston Salem State University irehm@wssu.edu 336-750-2691

Edwin Bell Winston Salem State University

Learn how to use Lectora Publisher (with the easiest-to-use, extremely low learning curve, vast features and functionality, and comprehensive authoring and publishing environment) to create digital portfolios, generate e-learning courses, and author media-enhanced presentations. Lectora Publisher provides single-click publishing to web-ready dynamic HTML, CD- ROM, or DVD without the need for programming knowledge. Its intuitive user-friendly interface and internal content management system makes course creation simple and easy for the average computer user. Participants will use Lectora's comprehensive authoring environment to create an interactive, media-enhanced digital portfolio that includes review tests. The content will be published to CD-ROM and/or HTML.

UNCG	9:00 -	12:00
------	--------	-------

Educational Uses of Computational Science (3 hours)

Shawn Sendlinger Associate Professor North Carolina Central University ssendlin@wpo.nccu.edu 919-530-6297 Jose D'Arruda UNC Pembroke

The Shodor Foundation is a non-profit research and education organization dedicated to the advancement of science and math education, specifically through the use of modeling and simulation technologies. Special emphasis is placed on enabling authentic science and mathematics explorations at all educational levels, developing numerical models and simulations integrated with the curriculum, professional development, and network access to support their use in learner-centered environments. With support from the National Science Foundation and others, Shodor has established the National Computational Science Institute (NCSI). After a brief presentation that defines computational science, describes the NCSI program, and gives some examples of how computational science can be used in the classroom, a hands-on workshop using STELLA software will give the participants an opportunity to build and experiment with their own computational models.

Creating A WebQuest

Valorie Nybo

Assistant Professor of Health Education Health and Human Performance Western Carolina University nybo@email.wcu.edu 828-227-3548 **Debra Randleman** Western Carolina University

Web assignments can be very attractive to students, but can also be more time consuming than they may be worth. For students whose skills at surfing the Web are minimal, Web assignments can be very frustrating and/or counter-productive. While the Worldwide Web provides vast information sources for virtually all subjects, it also provides a great deal of misinformation. In a WebQuest the teacher identifies websites appropriate for the assignment, states an objective, defines tasks to be completed, and develops an evaluation rubric for students. The WebQuest is a method of independent, guided study encouraging student use of the Web and maximizing student learning while using perhaps the best and worst information source ever made available to humankind – the World Wide Web. The presentation will include a description of the components of a WebQuest, Web resources to help in development and sample WebQuests designed by students for students. Bring your topic, objective, tasks you would want students to complete during their WebQuest, your favorite URLs for that topic and you will go home with a WebQuest of your own. A basic knowledge of PowerPoint will be an asset in this workshop.

Augusta B9	:00) - 1	12:	:0	0
------------	-----	-------	-----	----	---

Using Handheld Computers to Apply Principles of Effective Instruction (3 hours)

Mahnaz Moallem	Hengameh Kermani
Associate Professor of Instructional Technology	UNC Wilmington
UNC Wilmington	-
moallemm@uncw.edu	Chen Sue-Jen
910-962-4183	UNC Wilmington

Jeff Jolly UNC Wilmington

The workshop will be divided into two sections. The first section will explain and demonstrate how handheld, wireless computers can be used to improve face-to-face instruction. It will show how for the first time new technology makes it possible to fully apply principles of effective instruction (old technology) in practice. It will demonstrate the process of applying principles of instructional design (effective, research based instruction) in the design and development of a unit of instruction using handheld wireless computers. Some evidence of the effects of such design particularly continuous assessment and immediate and delayed feedback on the quality of instruction and student learning in a higher educational institution will be presented to convince the participants of the effects of applying such principles in the design of a face-to-face instruction. The second section of the workshop will focus on providing hands-on experiences for participants. In this sections participants will collaborate and will be guided to design and develop a unit of instruction incorporating handheld, wireless computers using their own selected topics and goals. During this process participants will be provided with a handheld computer and learn how to use course management system to develop proper lessons and assessment systems and learn how to use Student Response System to develop interactive instruction. It is expected that at the end of this workshop participants will be able to describe and apply the principles of instructional design or effective instruction in the design of a unit of instruction using handheld computers. They will also be able to demonstrate how to use handheld computers and develop online assessment tools using an internet-based course management system and how to use Student Response System to make their instruction interactive. The participants will be provided with a handheld computer at the beginning of the workshop and will be able to actively participate in both sections of the workshop using their handheld computers. In other words, for the first section of the workshop participants will play the role of a learner and in the second section of the workshop the participants will play the role of a teacher/instructional designer.

2 + 2 = 5: Collaborating to Meet TLT Support Needs (3 hours)

Sallie Ives Director Faculty Center for Teaching and e-Learning UNC Charlotte smives@email.uncc.edu 704-687-3021

Even in budget-challenged times, service units involved in providing support for the integration of tlt can survive and even thrive by using strategies based on collaboration and creativity. For example, the AAHE TLT Group is promoting the use of Low Threshold Applications (LTAs), teaching/learning applications of information technology that are reliable, accessible, easy to learn, non-intimidating and inexpensive to introduce mainstream faculty to tlt. Other organizations are promoting collaborations of librarians, instructional technology and Help Center staffs to develop online student technology support at institutions without formal organizations to serve that need. This seminar provides an opportunity for participants to share examples of practices that may help us all to meet increasing demands for support that are a part of tlt in higher education. The goals of this session are:1) to develop a brief inventory of some of the low-cost and/or collaborative strategies that are being used on UNC campuses to meet support needs for tlt; 2) to "brainstorm" collaboratively to provide suggestions on ways to approach participant-introduced issues in the support of tlt, and 3) to determine how and where we may want to share what we have learned in this session to a broader audience.

For Librarians: Discussion of Current TLT and Distance Education Issues (3 hours)

Terry Brandsma Information Technology Librarian Jackson Library UNC Greensboro twbrands@uncg.edu 336-256-1218 Cindy Saylor UNC Pembroke

Pam Burton East Carolina University

This session will be a discussion of current library TLT and distance education issues, including the new "Libraries" focus area of the UNC Professional Development Portal (PDP). Establishment of procedures by which appropriate content of interest to librarians can be regularly identified and entered into the PDP will be considered. Participants will also be asked whether or not they would like to form a Librarians Interest Group to facilitate an ongoing discussion of library TLT issues. To learn more about the purpose of UNC TLT Collaborative Interest Groups, visit http://www.unctlt.org/tlt/about/o_plan_02.pdf

Notes

Map of Koury Conference Center Rooms





Conference Schedule Overview

Thursday, March 27

8:30 - 5:30	Registration Desk Open
9:00 - 10:45	Preconference Seminar: Accessible, ADA-Compliant Web Design
	Lisa Fiedor, North Carolina State University (Blue Ash)
10:45 - 11:00	Break
11:00 - 1:30	Opening Session with Lunch (Victoria A)
	Deeper Learning—Stepping Back 500 Years
	Dr. Jeremy A. Haefner, University of Colorado at Colorado Springs
1:30-2:00	Break
2:00 - 2:45	Session 1
2:45 - 3:00	Break
3:00 - 3:45	Session 2
3:45 - 4:00	Break
4:00 - 4:45	Session 3
4:45 - 5:30	Poster Sessions
5:30 - 7:00	Reception (Victoria Prefunction Area)

Friday, March 28

8:30-5:30	Registration Desk Open
9:00 - 9:45	Session 4
9:45 - 10:00	Break
10:00 - 10:45	Session 5
10:45 - 11:00	Break
11:00-12:30	Plenary Session with Lunch (Victoria A)
	Predicting the Future—Stepping Forward Five Years
	Dr. Carl F. Berger, University of Michigan-Ann Arbor
12:30-1:00	Break
1:00 - 1:45	Session 6
1:45 - 2:00	Break
2:00 - 2:45	Session 7
2:45 - 3:30	Poster Sessions
3:30 - 4:15	Session 8
4:15-4:30	Break
4:30-5:15	Session 9
5:15 - 7:00	Reception (Victoria Prefunction Area)

Saturday, March 29