Douglas C. Williams
Curriculum Vitae, Spring 2001

Contact Information

Home
512 Roosevelt St.
Lafayette, LA 70503
337-264-7373

Electronic
dwilliams@louisiana.edu
http://www.ucs.louisiana.edu/~dcw0661

Office
University of Louisiana at Lafayette
PO Box 42051
Lafayette, Louisiana 70504
337-482-6412

Education

May 1999 — **Doctor of Philosophy**
University of Texas
Austin, Texas
Program: Instructional Technology

May 1990 — **Master of Science, Computer Science**
University of Southwestern Louisiana
Lafayette, Louisiana
Focus: information systems, programming languages, databases

May 1986 — **Bachelor of Science, Computer Science**
University of Southwestern Louisiana
Lafayette, Louisiana
Focus: commercial option

1994 — **Novell Certified Netware Engineer**
Novell certification in networking technologies and systems administration

Related Teaching/Research Experience

Sept 1999 – Present — **Assistant Professor on Tenure-track, Instructional Technology**
University of Louisiana at Lafayette

Teaching Assignments

Computing Tools for Educators, Design of Educational Web Sites, Instructional Design, Interactive Multimedia.

All courses are web-enhanced or are offered completely online as web-based courses. All courses utilize problem-based learning, project-based learning, and/or case-based learning to enhance the student experience. Performance-based assessment is utilized.

Technology Coordination

Released half-time to coordinate all technology efforts in the College of Education. Initiated / supervised the following:

Established 12-member technology committee, coordinate all technology-related purchases, developed technology plan, established TechGuide Initiative, designed/developed online student management system (InSite), developed Wireless

Initiative, PI on $240,000 of technology related grants (Year 2000), serve on Deans Advisory Council, led team in developing advanced programs in instructional technology.

Jan 1999 – August 1999 — **Adjunct Faculty Member, Instructional Technology**
University of Louisiana at Lafayette
Instructor of an undergraduate course on the integration of technology in the classroom. Course emphasizes the development of technology skills and skills for teaching with technology. The course is taught using a peer teaching approach where students are provided opportunities to teach with technology.

March 1998 - May 1998 — **Teaching Assistant, Educational Multimedia and Hypermedia**
University of Texas at Austin
Instructor for a course on educational multimedia and hypermedia. Taught this graduate class at the request of the department when the professor responsible for the course was unable to complete the semester. The course explored the theoretical and research foundations of multimedia and hypermedia, project planning and management, media creation, and authoring.

Sept 1997 - Dec 1998 — **Instructional Designer, The Institute for Technology and Learning**
University of Texas at Austin
Responsible for instructional design, project management, and programming of an innovative problem-based learning CD-ROM for middle school science. Tasks included clarifying of learning goals, outlining project scope, development of technical specifications for project, programming, and management of project resources.

May 1996 - Sept 1997 — **Research Assistant, The Institute for Technology and Learning**
University of Texas at Austin
Development of Internet based educational projects for K-12. Tasks included web page development, programming, technical support, and management of resources and project timeline.

Spring 1996 — **Teaching Assistant, Department of Curriculum and Instruction**
University of Texas at Austin
Lab instructor for the Computing Tools for Educators course. Assisted students in completing computer-based assignments. Tested students on competencies required for course credit.

Sept 1997 - Dec 1998 **Instructional Designer, The Institute for Technology and Learning**
University of Texas at Austin
Responsible for instructional design, project management, and programming of an innovative problem-based learning CD-ROM for middle school science. Tasks included clarifying of learning goals, outlining project scope, development of technical specifications for project, programming, and management of project resources.

May 1996 - Sept 1997 **Research Assistant, The Institute for Technology and Learning**
University of Texas at Austin
Development of Internet based educational projects for K-12. Tasks included web page development, programming, technical support, and management of resources and project timeline.

Spring 1996 **Teaching Assistant, Department of Curriculum and Instruction**
University of Texas at Austin
Lab instructor for the Computing Tools for Educators course. Assisted students in completing computer-based assignments. Tested students on competencies required for course credit.

May 1996 - May 1997 **Research Assistant, The Texas Statewide Systemic Initiative**
University of Texas at Austin
Web page development to support statewide systemic initiatives for the State of Texas. Also responsible for documenting major technology initiatives in Texas. Provided ongoing technical support for center staff.

Aug. 1990 - Dec. 1990 **Web Designer, Young Americans on America**
Virgin Islands Institute for Teaching and Learning
Developed web site for the Young Americans on America project. Facilitated discussion forums. Generated statistics for analysis of student access and provided technical support to teachers and students involved in the project.

Jan. 1992 - Sept. 1992 **High School Teacher, Sistema Urbano de Educación**
Buena Vista, Bolivia
Taught high school mathematics and English as a second language. Designed and administered an after school tutoring program. Instituted and coordinated a youth group for extracurricular activities.

Aug. 1990 - Dec. 1990 **Teaching Assistant, Center for Advanced Computer Studies**
University of Southwestern Louisiana
Instructor of record for a computer literacy course for humanities students. Course consisted of hands-on instruction of DOS, WordPerfect, Lotus 1-2-3, and DbaseIV.

Additional Experience

May 1999 - Present
Chief Technology Officer, ePuck.com
Lafayette, Louisiana
Co-developed an e-commerce retail web site. Served on design team and continue to provide ongoing technical support and long range planning. Visit site at: http://epuck.com

Aug. 1991 - Feb. 1992
Mission Volunteer, The Servants of the Poor of the Third World
Cusco, Peru
Organized youth activities for children ages 2 - 13. Tutored English, mathematics, and science. Staffed soup kitchen.

July 1995 - Aug. 1995
Web Designer/Programmer, Computer Consulting
Austin, Texas
Contracted to develop a commercial web site. Created multimedia application in Macromedia Director. Developed a CGI script to access database of calculus problems.

July 1995 - Aug. 1995
Networking Consultant, John E. Chance and Associates
Lafayette, Louisiana
Applied system software updates to Netware 3.12 servers. Installed Palindrome Backup software, BindView, and other Netware software packages.

Dec. 1992 - June 1995
Network Administrator, Lafayette General Medical Center
Lafayette, Louisiana
Responsible for day to day operations of the local area network consisting of four Netware 3.11 file servers and one IBM AIX system. Installed and maintained the hardware and software for 400 networked Pcs. Developed a network-based patient tracking system using Visual Basic, Netware SQL, and pen-based computer technology. Applied system software updates to Netware 3.11 & 3.12 file servers.

June 1989 - June 1991
Programmer I, Office of Information Systems
University of Southwestern Louisiana
Coded COBOL programs on the IBM-3090 in the Cullinet DL/1 environment. Designed load, extract, and report programs in COBOL

Oct. 1987 - Aug. 1988
Systems Programmer, Broken Hill Proprietary
Melbourne, Australia
Involved in the day to day maintenance of two Data General MV systems. Designed and coded a system to transfer files between the Data General and IBM systems.

Aug. 1986 - Aug. 1987
Programmer, IBM Svenska AB (Nordiska Laboratorier)
Stockholm, Sweden
Involved in functional verification testing of a new DL/1 data base query engine. Upgraded the department's test tools using REXX programming

Professional Affiliations

- American Educational Research Association, Member
- Association for the Advancement of Computing in Education, Member

Awards and Honors

- Appointed by the UL Lafayette President to serve on the UL Lafayette Student Technology Enhancement Program (STEP) Advisory Committee, Spring 2000, Ongoing
- Recipient of the Virginia C. Patterson Endowed Graduate Scholarship, University of Texas at Austin, 1998 ($780)

Refereed Publications

Lyman, S., Williams, D., & Begnaud, L. (December 2000). *Using the Internet to Enhance the Study of Human Sexuality.* Compute-Ed. An electronic journal of learning and teaching with and about technology. Volume 6.

Williams, D., Pedersen, S., & Liu, M. (1998). An evaluation of the use of problem-based learning software by middle school students. Journal of Universal Computer Science. Available: http://www.iicm.edu/jucs_4_4/an_evaluation_of_the.

International/National Professional Presentations

Williams, D. (2001, June 25-30). The impact of epistemological beliefs on middle school student's knowledge acquisition and problem solving while working in a hypermedia-supported problem-based learning environment. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Williams, D., Liu, M., Benton, D. (2001, June 25-30). Analysis of navigation in a problem-based learning environment. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Williams, D., Lyman, S., Ford, M.J., Dobyns, S. (2001, June 25-30). Streaming video cases for the support of pre-service teacher education. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Lyman, S., Williams, D., Begnaud, L. (2001, June 25-30). Training, support, practices, and needs of the distance educator. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Lyman, S., Williams, D., Begnaud, L. (2001, June 25-30). Workload, advantages, and disadvantages of a newly developed online course. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Shaw, S., Begnaud, L., Lyman, S., Williams, D. (2001, June 25-30). Children and computers: Too much too soon?. Paper to be presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Tampere, Finland.

Williams, D., Lyman, S. (2001, April 22-24). LaunchPad: A web portal for the support of professional development schools. Paper to be presented at the National Teaching in Higher Education (THE) Forum, Baton Rouge, Louisiana.

Lyman, S. & Williams, D. (2000, May 12-14). A web-based sexuality course: Development and delivery. Paper presented at the Annual Meeting of the American Association of Sex Educators, Counselors, and Therapists (AASECT), Atlanta, Georgia, USA.

Williams, D. (1999, June 19-24). The effects of expert stories on sixth grade students' achievement and problem solving in hypermedia-supported authentic learning environments (HALE). Paper presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Seattle, Washington USA.

Pedersen, S., Williams, D., & Liu, M. (1999, June 19-24). The effect of hypermedia delivered modeling on learners' self-directed study during problem-based learning. Paper presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Seattle, Washington USA.

Liu, M., Williams, D., & Pedersen, S. (1999, June 19-24). The Design and Development of a hypermedia-supported problem-based learning environment. Paper presented at the World Conference on Educational Multimedia, Hypermedia & Educational Telecommunications, Seattle, Washington USA.

Williams, D., Pedersen, S., & Liu, M. (1999, March 1-4). A hypermedia-supported problem-based learning environment: Alien Rescue. Paper presented at the International Conference on Mathematics/Science Education and Technology, San Antonio, TX USA.

Williams, D. (1998, June). Situated learning environments: Theories and perspectives. Paper presented at the 1998 International Conference on Educational Multimedia and Hypermedia, Freiberg, Germany.

Williams, D., Pedersen, S., Liu, M., & Dunley-Smith, V. (1998, June). Examining how middle school students use problem-based learning software. Paper presented at the 1998 International Conference on Educational Multimedia and Hypermedia, Freiberg, Germany.

Sweany, N., & Williams, D. (1997, June). Effect of students' learning on use of cognitive strategies in a hypermedia environment. Paper presented at the 1997 International Conference on Educational Multimedia and Hypermedia, Calgary, Canada.

Sweany, N., & Williams, D. (1997, June). Effect of students' learning on use of cognitive strategies in a hypermedia environment. Paper presented at the 1997 International Conference on Educational Multimedia and Hypermedia, Calgary, Canada.

Williams, D. (1997, June). Concept mapping: Foundations, research, and implications for design of hypermedia/multimedia. Paper presented at the 1997 International Conference on Educational Multimedia and Hypermedia, Calgary, Canada.

Hazard, G., Platt, P., Sweany, N., Williams, D. (1997, June). Internet-based student discussions: implications for design. Paper presented at the 1997 International Conference on Educational Multimedia and Hypermedia, Calgary, Canada.

Williams, D. (1996, January). The relationship between concept mapping and achievement in a hypermedia environment: A pilot study. Paper presented at the 1997 Annual Meeting of the Southwest Educational Research Association, Austin, TX.

Sweany, N., McManus, T., Williams, D., & Tothero, K. (1996, June). The Use of Cognitive Strategies in a Hypermedia Environment. Poster presented at the 1996 International Conference on Educational Multimedia and Hypermedia, Boston, MA.

Grants Funded

Williams, D. (2000, Summer). Summer Research Award for Young Faculty. A University of Louisiana at Lafayette Initiative. **Funded amount: ~$1,500.**

Williams, D., Lyman, S., Ford, M.J. (2000, September). College of Education Undergraduate Student Computer Lab Upgrade. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). **Funded amount: ~$80,000.**

Lyman, S., Williams, D. (2000, October). Bourgeois Hall Internet Connectivity Project. A University of Louisiana at Lafayette Instructional Improvement Mini-grant. **Funded amount: $565.**

Williams, D., Lyman, S., (2000, November). Professional Development School Distance Education Initiative. Louisiana Board of Regents Distance Learning Initiative Grant. **Funded amount: ~$49,000.**

Williams, D., Lyman, S., Ford, M.J. (2000, November). Online Courses to Support Teacher Certification in Technology. Louisiana Board of Regents Distance Learning Initiative Grant. A collaboration between University of Louisiana at Lafayette, Northwestern State University, and Nichols State University. **Funded amount: ~$120,000.**

Grants Submitted - In Pipeline

Glass, G., Williams, D. Lyman, S. (2000, Summer). National Science Foundation Center for Particle and Photon Beam Applications in Materials Research. Submitted to the National Science Foundation. – Awaiting notification.

Williams, D., Blanchard, L., Fulwiler, J., Guerin, J. (2001, February). PASS-PORT: An Electronic Professional Accountability System for Teacher Education. Submitted to the Governor's Office, State of Louisiana. - Awaiting Notification. **Requested ~$365,000.**

Williams, D., Lyman, S. (2001, January). Information Kiosks for Student Access. A University

of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$20,000.**

Williams, D., Lyman, S., Ford, M.J. (2001, January). Electronic Classroom Initiative. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$85,000.**

Williams, D., Ford, M.J., Grimsley, D. (2001, January). Instructional Materials Center Technology Enhancement Initiative. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$66,000.**

Williams, D., Lyman, S., Ford, M.J. (2001, January). Palm Handheld Computer Initiative. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$8,000.**

Williams, D., Lyman, S., Ford, M.J. (2001, January). Wireless Notebook Computer Lab: Mobile, Flexible, Connected. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$50,000.**

Lyman, S., Williams, D. (2001, January). Kinesiology Lab Enhancement Grant. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$10,000.**

LaVergne-Pinkett, E., Webre, E., Williams, D. (2001, January). Reading Lab Technology Enhancement. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). - Awaiting Notification. **Requested amount: ~$66,000.**

Grants Not Funded

Williams, D., & Lyman, S. (2000, Fall) Streaming Media to Enhance Undergraduate and Graduate Education. A University of Louisiana at Lafayette Instructional Improvement Mini-grant. Requested amount: $744 – not funded.

Williams, D., Ford, M.J., & Lyman, S. (2000, Summer). Streaming Media to Enhance Undergraduate and Graduate Education. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). Requested amount: $8,861.00 – not funded

Williams, D., Ford, M.J., & Lyman, S. (2000, Summer). College of Education Testing Lab/Open Access Lab. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). Requested amount: $111,220 – not funded

Williams, D., Lyman, S. (2000, October). Teacher Education Distance Learning Initiative. Louisiana Board of Regents Distance Learning Initiative Grant. Requested amount: $49,582 – not funded.

Lyman, S. & Williams, D. (2000, Summer). Bourgeois Hall Student Computer Lab. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). Requested amount: $50,188.00 – not funded.

Williams, D. & Lyman, S. (2000, Summer). Information Kiosks: Bourgeois, Doucet, & Girard. A University of Louisiana at Lafayette Student Technology Enhancement Program (STEP). Requested amount: $26,590.00 - not funded.

Courses Taught

Computer Literacy for Educators (IRED 320)
College of Education, Curriculum and Instruction, University of Louisiana at Lafayette.
An undergraduate course on the integration of technology in the classroom. Course emphasizes the development of technology skills and skills for integrating technology into teaching.

Web Design for Educators (IRED 420G)
College of Education, Curriculum and Instruction, University of Louisiana at Lafayette.
This undergraduate/graduate course provides an in-depth focus on the design and development of effective educational web sites. Through lecture, readings, online/face-to-face discussion, and authentic projects for the community, students develop a conceptual understanding of how to prepare effective materials for the World Wide Web. Skills in project management, web design, web development tools (Macromedia Fireworks, Dreamweaver, Flash), and computer use are developed through demonstration by the instructor, hands-on activities by students, and through working on authentic projects.

Instructional Design (IRED 540)
College of Education, Curriculum and Instruction, University of Louisiana at Lafayette.
This course is a collaboration between faculty from the University of Louisiana in Lafayette (Douglas Williams), Louisiana State University (Carol Whelan), and staff members from the Louisiana Center for Educational Technology, a division of the Louisiana Department of Education (Alita Robertson and Andrey Barashkov).

This course provides an in-depth focus on the design, development, and application of technology-based learning environments. Emphasis is placed on the design of standards-based technology rich learning environments that support meaningful learning. Discussion topics include issues related to the design of standards-based lessons, current learning theory on the design of educational materials, the integration of technology into the curriculum, the creation of web-based learning materials, and the use of technology-enhanced learning to foster creative and critical thinking.

Multimedia Design (IRED 570)
College of Education, Curriculum and Instruction, University of Louisiana at Lafayette.
This course provides an in-depth focus on the design and development of media rich learning environments. The course begins with an evaluation of current research on learning with multimedia and hypermedia, case-based learning, problem-based learning, project-based learning, situated cognition, and web-based learning. Skill in the creation of multimedia learning environments is developed through hands-on tutorials on graphics (Macromedia Fireworks), animations (Macromedia Director/Flash), digital video (iMovie), and digital audio (SoundForge). Being grounded in current research and best practices the capstone project is the development of a media rich web-based learning environment.

Workshops Taught

Chautauqua Course: Creating Course Materials for the World Wide Web
University of Texas at Austin Campus, May 17-19, 1998
Team taught this Chautauqua short course (3 days) for faculty members from universities throughout the United States on preparing course materials for the world wide web. Course emphasized HTML, preparation of graphics for the web, and interface design. Advanced topics such as integration of Java applets, Macromedia Shockwave, and video were also taught.

Lingo Basics for Macromedia Director 6.0
Center for Instructional Technologies, University of Texas at Austin Campus, August 15, 1998
Short course for University of Texas staff and faculty interested in learning the basics of writing Lingo scripts in Macromedia Director 6.0. Topics covered were user generated events, system generated events, score scripts, cast member scripts, movie scripts, overview of Lingo commands.

Technical Skills

Multimedia Development Tools/Desktop Publishing
Macromedia Director, Macromedia Flash, , Adobe Photoshop, Adobe Premiere, Movie Cleaner Pro, Apple iMovie, Adobe PageMaker, QuarkXPress, SoundForge, SoundEdit 16, HyperCard, HyperStudio

Internet Development Tools
Macromedia Dreamweaver, Macromedia Fireworks, Microsoft Active Server Pages, Microsoft SQL Server, CGI programming in Perl, CGI programming in AppleScript, Lasso CGI, Microsoft Internet Information Server, WebStar 3.0 Web Server, Analog (Web Analysis Tool), FileMaker Pro

Programming Languages
Visual Basic, RealBasic, Lingo, Perl, C, Pascal, FoxPro, Dbase, Cobol, QuickBasic, Fortran, LISP, REXX, JCL

Operating Systems
Windows 2000/NT/ME/98/95/3.1 MacOs, MacOS X Server, Netware, Linux, Unix, Aix, DOS, VM, MVS, MULTICS

Educational Software / Projects

TechGuide Initiative: Technical Support and Technology Integration Support for Faculty

The TechGuide program was developed out of a need for a technical support and integration infrastructure in the College of Education at UL Lafayette. The objectives of the TechGuide program are to: provide technical support to students, faculty, and staff in the College of Education, provide technology integration support to faculty and students, provide support to help maintain the College of Education web site, provide graduate students an opportunity to be specially trained in technology integration, networking, Macintosh troubleshooting, Windows troubleshooting, and provide graduate students an opportunity to be on the "cutting edge" in the use of technology in education. Graduate students are selected to enter the TechGuide program and or provided special training on technology integration and technical support.

Responsibilities: Conception of idea, development of program, training/management of graduate students.

Status: Fully functioning with six graduate assistants participating in the program.

InSite: A Web-based Student Information System

The College of Education at UL Lafayette has approximately 2,500 students. Many faculty members have more than 100 student advisees. InSite, a web-based student information system, was developed to provide faculty, staff, and students a tool to facilitate advising and to satisfy data reporting needs of the College. InSite provides faculty essential information on students' academic records such as courses taken, GPA, and Praxis test scores, provides the College data for generating reports to satisfy requests from accreditation organizations such as NCATE and SACS, provides students the facilities to check their progression through the degree program, and provides timely information to students, faculty, and staff in regards to information related to advising and program requirements. InSite is a key component in the College's strategy to leverage Internet technologies to reduce faculty/staff workload and enhance the undergraduate and graduate student experience. InSite fits into our larger goal of creating a web portal that provides timely information of vital interest to our students, faculty, and staff.

Responsibilities: Design of System, interface design, and management of programmers

Status: Began using system in College March 1, 2001.

PASS-PORT: An Electronic Professional Accountability System for Teacher Education

Higher education institutions must have a viable performance assessment system in place that makes teacher education programs accountable for evincing how they prepare teachers to impact K-12 student learning. The College of Education at UL Lafayette and Xavier University of New Orleans have undertaken the development of **PASS-PORT**, a **P**erformance **A**ssessment **S**tudent **S**ystem utilizing a web-based **PORT**al approach. PASS-PORT will provide colleges of education a tool to facilitate the need to gather and evaluate performance data on pre-service teachers and teachers in years 1-3. When completed, PASS-PORT will be a complete data-gathering system for purposes of "accountability", a robust storage system for a "Electronic Living Documents Room" for NCATE-specific requirements, and a complete "Electronic Portfolio" system for students and faculty permitting user friendly creation and modification of all portfolios. PASS-PORT will be an intuitive "point-and-click" web-based system which guides institutions and teacher candidates through the four stages of pre-service teacher candidate development and evaluation. At each stage, the teacher candidate and the evaluation team are provided web-based tools to create, manage, and analyze the stored information. When completed, the system will be provided to all 19 universities in Louisiana.

Responsibilities: Member of Design Team, interface design, and management of programmers

Status: Currently in the design phase with beta testing expected Fall 2001.

LaunchPAD: A Web Portal for Support of Professional Development Schools and Novice Teachers in Years 1-3

This project, a Board of Regents funded grant ($50,000) consists of the development of LaunchPAD, a web portal for the support of professional development schools (PDS) and novice teachers in Louisiana. LaunchPAD will provide news, articles relevant to individuals implementing professional development schools and novice teachers, mentoring through online discussion and real-time chat, tools for tracking professional development, and three online mini-courses for the purpose of orienting pre-service teachers, in-service teachers, and administrators to the professional development school model.

Responsibilities: Principal investigator, Member of Design Team, programmer, and management of programmers

Status: Currently in the design phase with launch expected May 2001.

Project Synergy: A Web-based Tool for the Support of Technology Integration

Project Synergy is a web-based tool that helps educators working in K-16+ determine how to leverage technology to support particular curricular goals or outcomes. The tool will act as a "wizard" or expert system in guiding the educator in connecting desired outcomes with various technology tools and research/best practices that support its use.

Responsibilities: Developed concept, Member of Design Team

Status: Currently in the design phase with launch expected May 2001.

Online Masters Courses for the Support of Technology Certification in Louisiana

This Board of Regents funded project ($120,000) is a collaboration between the University of Louisiana of Lafayette, Northwestern State University, and Nicholls State University for the purpose of creating 7 online instructional technology courses to meet newly approved state technology certifications.

Responsibilities: Principal investigator, lead instructional designer on various courses.

Status: Currently in the design phase with courses to be offered in Fall 2001.

Space Station Paloma: Alien Rescue

An innovative learning environment designed to engage students in grades 5 and 6 in solving a complex problem. Students take on the role of scientists participating in a rescue mission. In the course of developing a solution plan, students learn specific information about both our solar system and the tools and procedures scientists use to gather that information. While the primary learning objectives of Alien Rescue focus on astronomy and space travel, the program offers ties to other areas of the curriculum, including life science, math, and history. Alien Rescue utilizes innovative educational practices which current research has shown to be effective, including problem-based learning and cooperative learning.

Responsibilities: Instructional design, programming, project management.

Young Americans on America: Bridging Ethnic and Geographic Diversity

Funded by the National Endowment for the Humanities this project provided a series of video conferences which enabled high school students and scholars from six geographically diverse areas of the United States to discuss issues related to race, ethnicity, and culture. The video conferences were enhanced with a World Wide Web site which provided a discussion area for students to engage in dialogue.

Responsibilities: Web page development, technical support, and facilitation of web discussions.

Utopian Visions

This award winning telecommunication project, created in 1995 by R.W. Burniske, helps students reflect on their place in the continuum of history. High school students from schools world wide participate by submitting reports which encourage reflection on their

communities' spanning three centuries. The Utopian Visions web site provides a location for the students to publish their reports. The web site can be viewed at: http://www.ital.utexas.edu/uv
Responsibilities: Participated as a member of the web development team providing web page development, programming, and technical support.

TX2K: Texas Two Thousand Time Capsule
This innovative telecommunications project, based on Utopian Visions, is designed to enhance high-school curricula in the social studies, language arts, and mathematics/science areas. The project enables students to understand their place in the continuum of history through the writing of reports which are submitted to the TX2K web site. As the students document their locality on various topics, they begin to see how they can contribute uniquely to history as we approach the new millennium. The web site can be viewed at: http://www.ital.utexas.edu/tx2k
Responsibilities: Participated as a member of the web development team providing web page development, programming, and technical support.

The Kinematics Web Site
A hypermedia instructional module on the topic of one dimensional motion with constant acceleration. The instructional module consisted of animations illustrating complex physics concepts and two cognitive tools aiding student comprehension.
Responsibilities: Worked as a team member primarily responsible for creating data gather tools and an electronic notebook in Macromedia Shockwave. The data gathering tool stored information on students' activities which were later analyzed. The electronic notebook was used by students as a study aid. The research study which utilized the Kinematics Web Site is currently in manuscript form.

Greek Art & History for the Traveler
An instructional system developed in Macromedia Director for prospective travelers who wish to learn more about Greek art and history. The software consists of rooms of key artifacts which learners could choose to explore. A number of interactive exercises were included in the system to engage the learner in higher order thinking skills.
Responsibilities: Curriculum development, instructional design, graphics, programming, interactive exercises, and evaluation.

Networking 101
An instructional system developed in Macromedia Director teaching the basics of local area networking. Through a series of animations and exercises, the student is able to develop a conceptual understanding of how computer networks function.
Responsibilities: Curriculum development, instructional design, graphics, programming, exercises, and evaluation.

Emerging Scholars Searchable Calculus Database
A database of calculus problems created for the teaching assistants teaching classes in the Emerging Scholars program at the University of Texas at Austin. Each calculus problem was categorized under a number of the 130 classifications available. The intent is for the teaching assistants to search the database for problems to be included in practice sheets for their students. Once the problems are located, the teaching assistant can download the problems in one of a number of electronic formats thereby providing an effective tool for worksheet creation. The database is delivered through a search page on the World Wide Web for easy access.
Responsibilities: Web page creation, graphics, and CGI programming.

Research Interests

- Situated learning environments, authentic learning environments
- Instructional systems design
- Case-based learning, problem-based learning
- Learning in hypermedia and multimedia environments
- Learning strategies in hypermedia and multimedia environments
- Issues of inequity and technology access in education

References

Cindi Chance, Dean
College of Education
University of Louisiana at Lafayette
PO Box 42051
Lafayette, LA 70504
337-482-1074
lchance@louisiana.edu

Juanita Guerin, Director
T.H.E. | QUEST
University of Louisiana at Lafayette
PO Box 42051
Lafayette, LA 70504
337-482-1119
jguerin@louisiana.edu

Carol Whelan, Assistant Superintendent
Louisiana State Department of Education
Office of Quality Educators
Baton Rouge LA 70802
225-342-3283
cwhelan@mail.doe.state.la.us

Dissertation Abstract

Reformers have long urged educators to make schooling relevant to students through emphasis on learning through experience and provide connections to the world outside of the school walls. Hypermedia-supported authentic learning environments (HALE) seek to attain these goals by providing a rich context for students to engage in authentic tasks such as problem solving. This study examines whether expert stories can support student learning in a computer-based authentic learning environment. The participants in the study were students enrolled in sixth grade science at a suburban middle school located in the southwestern part of the United States. Two intact classes (N=29, N=30) participated in which 66.1% identified themselves as white, 18.6% as Hispanic American, 13.6% as African American, and 1.7% as Asian American. Two versions of the learning environment were used corresponding to the two treatment conditions: stories and non-stories. All versions of the program contained the same content and tools differing only in the implementation of the information in the expert tool. The *stories* version contained support which was in the format of short narratives from an expert. The *non-stories* version provided the same information, expect the support was presented as simple factual information. Measures of factual knowledge recall, near and far transfer, attitude toward science, and attitude toward the learning environment were administered. In addition, students' epistemological beliefs were measured to determine if they are effective predictors of academic performance in HALEs.

On the measure of factual knowledge recall, no significant difference was found between the story and non-story conditions. Likewise, no significant differences were found between the story and non-story conditions on measures of attitude toward science and attitude toward the learning environment. The measure of students' epistemological beliefs was found to not be a significant predictor of student performance. However, when asked to solve near transfer and far transfer problems, students in the story treatment did significantly better than students in the non-story condition. This finding suggests that expert stories can scaffold student learning. In particular, it appears that expert stories may help students transfer learning to novel situations.

Course Work

Instructional Technology

Fall 1995	EDC 385G	Interactive Multimedia Design & Production
Fall 1995	EDC 385G	Analysis of Research in IT
Fall 1995	EDC 384P	Instructional Systems Design
Spr 1996	EDC 384P	Advanced Instructional Systems Design
Spr 1996	EDC 385G	Interactive Multimedia Research
Sum 1997	EDC s396V	Independent Study: Hypermedia Development

Curriculum and Instruction

Fall 1996	EDC 383N	Curriculum Theory
Spr 1997	EDC 385G	Race & Ethnic Relations in Schools
Fall 1997	EDC 385G	Constructivism & Instructional Design
Fall 1996	EDC 396T	Directed Research
Spr 1997	EDC 396T	Directed Research
Spr 1997	EDC 396V	Doctoral Seminar
Sum 1997	EDC w396T	Directed Research
Fall 1998	EDC 699	Dissertation

Educational Psychology

Spr 1996	EDC 398T	Supv. Teaching in Curriculum & Instruction
Sum 1996	EDP f382L	Psychology of Learning
Spr 1997	EDC 382L	Instructional Psychology
Sum 1997	EDP 398T	College Teaching Methodology

Research Design/Statistics

Spr 1996	EDP 371	Introduction to Statistics
Sum 1996	EDC 684PA	Research Design & Analysis I
Sum 1996	EDC 684PB	Research Design & Analysis II
Fall 1996	EDP 482K	Experimental Design