

IT/TLT FUNDED GRANTS 1993-2003

1993

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
Improving Undergraduate Physical Geography	Burt, James Brinkmann, Watraud Knox, James Holliday, Vance Sack, Dorothy Vale, Tom Zimmerer, Karl	Geography	Using technology to: Improve access to instructors; Introduce modern analytical methods earlier in the curriculum; Introduce such methods to more students, especially those who may never take an advanced methods course; provide access to important sources of digital data; and make fuller use of existing computer-based instructional tools
Proposal for the development of a botanical library of digitized images	Allen, Timothy Kowal, Robert Clayton, Mike	Botany	Create a library of digitalized images to be stored using CD-ROM and aquire computers to make it available for instruction
Instructional Technology Grant	Dunlavy, Colleen	History	Set up a three-tiered advising system that integrates online information and electronic advising with a traditional one-on-one system.
Proposal to DoIT for an "Electronic Newsroom"	Friedland, Lewis	Journalism & Mass Communication	Create an interactive multimedia demonstration project called "The Electronic Newsroom" that will bring students face-to-face with a converged medium (print, audio, video) of mass communication.

Instructional Technology Grant for Biblical Hebrew Instruction	Moragh, Gilead Schoville, Keith Roth, Norman Troxel, Ron McCarthy, David	Hebrew and Semitic Studies	Establish a departmental instructional resource library (especially of CD-ROMs) for the use of both faculty and students.
Proposal to create a multimedia learning sequence for the undergraduate core curriculum	Dipert, Denise Scheibel, Pamela	Nursing	Use an established interactive multimedia computer software and authoring system (Animated Dissection of Anatomy for Medicine) to develop a coordinated anatomy program for core undergraduate courses.
Instructional Technology Grant	Smart, Rod Nagel, Yvonne	Mathematics	Purchase mobile computers and computer projection equipment to enhance instruction in both basic and advanced mathematics courses.

1994

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A Visualization Workstation to Improve Instruction in the Atmospheric and Oceanic Sciences	Ackerman, Steve Smith, William	Atmospheric and Oceanic Sciences	Develop a highly interactive instructional computer display system to teach aspects of weather that are difficult with traditional instructional tools. The system would provide classroom access to current weather from around the world and state-of-the-art display systems.

Tripoli, Gregory
Hitchman,
Matthew
Stull, Roland

A World Wide Web
Server for Art History
Visual Resources
Phillips, Quitman
E. Art History
Cahill, Nick
Gombar, Thomas

Utilize a web server to make digital images of art works and other visual materials accessible over the campus network and in students' homes, allowing more creative teaching and learning as well as solving long-standing problems in distributing limited resources among a large audience.

Writing Lab
Instruction via E-mail
Hughes, Bradley English

Make some types of writing instruction available via email to students across the university, supporting three of the University's institutional priorities (improving undergraduate education; improving students' writing abilities; and providing more information, services, and instruction via computer) and serving as a model for email instruction in other departments.

Molecular Modeling in
the Undergraduate
Chemistry
Curriculum
Moore, John Chemistry
Burke, Steven
Crim, Fleming

Incorporate desktop molecular modeling software throughout the undergraduate curriculum, serving as an example of incorporation of scientific visualization and hopefully emulated across the campus and other higher learning institutions

Ellis, Arthur
Gaines, Donald

Interactive Video
Materials for a Less
Commonly Taught
Language: Yoruba of
Nigeria

Schliecher,
Antonia
Carter, Hazel

African
Languages &
Literature

Produce a set of interactive video materials for use in teaching an African language, Yoruba, serving as a trial run for developing materials to be filmed on site in Nigeria and establishing a model of instruction for teaching less-commonly-taught languages in a manner less time-intensive for the professor and more effective than traditional methods.

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A new approach to earth science instruction using the World Wide Web	Banfield, Jill Brown, Phil Bowser, Carl	Geology and Geophysics	Pioneer the creation of an interlinked body of information for teaching Earth Science courses using the WWW.
Instructional Interactive Animation of Basic Physiological Concepts	Bavister, Barry	Animal Health and Biomedical Sciences	Provide animated, interactive computer programs that may be used not only within the classroom as a powerful and dynamic instructional tool, but also within computer labs on a self-tutorial basis.
Computerized Learning Capabilities Across the Hebrew Curriculum	Morahg, Gilead	Hebrew and Semitic Studies	Continue development of authoring software that will improve the teaching of Hebrew language and literature across the undergraduate Hebrew curriculum, serving as a potential model for teaching improvements in other languages as well.

Information Literacy Multi-Media Instructional Package	Loomis, Abigail Konrad, Lee	Library User Education	Develop SAIL (Student Access to Instruction about Libraries), an interactive, multi-media instructional program, to teach basic literacy skills to students enrolled in part A of the undergraduate communication requirement.
SEAIT (SouthEast Asian Images & Text)	McCoy, Alfred W. Cullinane, Michael	Center for Southeast Asian Studies	Provide significant resources for the study of Southeast Asia, which have been previously unavailable to student, through the digitization of photographs and multimedia resources.
Videodisc Training for ESL and Foreign Language Instructors	Young, Richard Sieloff Magnan, Sally	English	Transfer videotaped TA training materials to videodisc and develop computer-based interactive video programs.

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Natural Bond Orbital Animation	Weinhold, Frank	Chemistry	Produce a library of high-quality 3-D images to extend the existing VHS resources and provide images which can be retrieved as still frames, image sequences, movie clips or finished video productions.
A simulation environment for teaching evolution	Stewart, Jim	Curriculum and Instruction	Develop a problem solving environment to allow Biology 151 students to explore data as a means to learn about evolution, exploring realistic problems faced by evolutionary biologists.

	Heitz, Jean Donovan, Sam	Biology	
Developing SIMBULL V.2: An interactive herd simulator	Shook, George Hailman, Elizabeth Dentine, Margaret	Dairy Science	Update SIMBULL, a 1987 program used at nearly 70 universities worldwide, to enhance its instructional capabilities, incorporate new technologies in dairy cattle genetics, and take advantage of current computer technologies.
Distance Advising and orientation for engineering students	Woolston, Donald Morris, Ann Lucker, Kathy	Engineering-Academic Affairs	Pilot development of distance advising systems, including teleconferencing and interactive website to facilitate advising and orientation.
Folklore music archives sound recording library	Leary, James	Folklore	Establishment of a sound recording laboratory, with an emphasis on digital capabilities, to be used not only for developing course-related curriculum materials, data bases, and audio-visual products, but also for training students in archival and audio production methods.
Teaching difficult linguistics concepts with the help of interactive Web animation	Li, Yafeh Enç, Mürvet Sihler, Andrew Macken, Marlys	Linguistics	Using Java, this project aims to enhance the instruction of several introductory-level linguistics courses by presenting difficult subjects and/or concepts through interactive WWW animation.

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Interactive listening comprehension lessons based on authentic Indonesian materials	Rafferty, Ellen	South Asian Studies	Create five interactive lessons for teaching listening comprehension skills, using 5-8 minute clips from Indonesian television and films, incorporating interactive exercises and hypertexts offering background knowledge and additional explanations and examples of difficult constructions.
3D Lecture Animations for Physical Geography	Burt, Jim	Geography	Provide 3-dimensional animations for lectures in 100-level physical geography. The components are 1) develop a lecture-oriented software interface for existing animations, and 2) create new animations for topics not represented right now.
Networking Music for Course Reserves: An Instructional Technology Grant Proposal	Laudati, Geri	Music	Develop a quality digital audio distribution system to stream course related music via the campus libraries' Electronic Library and WWW.
Interactive Simulation-based Web Pages for the Chemical Sciences	Hamers, Robert	Chemistry	Develop a set of WWW pages which utilize the interactive capabilities of the web to improve student learning in the chemical sciences.

Using the WWW to Improve Instruction in the Atmospheric and Oceanic Sciences	Ackerman, Steve Pokrandt, Peter Martin, Jonathan	Atmospheric and Oceanic Sciences	Develop interactive educational activities appropriate for undergraduate courses that teach important concepts used in weather studies. Evaluation of these exercises for improvement and design of future activities is an important part of this proposal.
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Creating a CD-ROM as an Instructional Tool for Teaching Courses in Movement Analysis	Brennan, Mary A.	Dance	The goal of this project is the development of an interactive CD-ROM for use as an instructional tool in the movement analysis courses required of all majors in the Dance and Interarts and Technology undergraduate programs at UW-Madison
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1998

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
DIAGNOSIS: An interactive, multimedia experience for students in plant health protection	Stanosz, Glen	Plant Pathology	Integrate exercises utilizing the multimedia computer program "Diagnosis for Crop Protection" into courses that serve many of the undergraduate students in the curricula.
Using Technology to Enhance Instruction in Less Commonly Taught Languages	Schlecicher, Antonia	African Languages & Literature	Develop a model multimedia CD-ROM plus web-based activities for an intermediate level Yoruba language program.
Interactive 3-D Visualization of Molecules and	Barak, Philip	Soil Science	Develop research-grade 3-D visualizations of molecules and minerals important in soil science and incorporate these visualizations into HTML modules.

Minerals in Soil
Science Instruction

Making "More Better" Visual and Literary Sense	Layoun, Mary Cohen, Keith Gumpert, Matthew Madureira, Luis Tylus, Jane	Comparative Literature	Purchase equipment for and fund an innovative multimedia course in Comparative Literature.
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Instructional Technology Grant Proposal	Brandt, Deborah	English	Develop computer-based curricula for undergraduate writing courses and train English department faculty and teaching assistants to use the instructional technology already available to them.
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The use of Computer Technology to Teach Interior Design Visualization - Three	Dong, Wei Hunt, Michael	Environ., Textiles & Design	Enhance design-related fields through the use of CAD capabilities
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1999

Project Title	Applicant	Department	Brief Description
A Proposal to Develop Instructional Resources for the Athletic Training Educatio Program Using Digital Video	Winterstien, Andrew Lazarus, Jo- Anne	Kinesiology	Enhance classroom, lab and clinical instruction through the use of a variety of still and moving images related to the recognition and care of athletic injuries.
Streaming Curriculum Performance for	Clayton, Barbara	Theater and Drama	In order to provide more experience with plays in performance, we propose to build a website that offers and extensive selection of streaming audio files.

Theater and Drama
120
Mason, David
Moy, James
Ryker, Karen

Interactive Kazak
Language
Instructional
Materials Project

Hendley,
Kathryn
Schamilogu, Uli
Mawkanuli,
Talent

Center for
Russia, East
Europe and
Central Asia;
Languages and
Cultures of Asia

Produce two interactive CD-ROMs and accompanying websites to provide an engaging medium for learning Kazak language and culture.

Three-Dimensional
Visualization in
Introductory Earth
Science Courses

Johnson, Clark
Brown, Phil

Geology and
Geophysics

Produce a variety of computer-based three dimensional visualization products for use in introductory Earth Science Courses, to address the commonly incompatible learning styles of the student who is a non-science major and a highly visual field such as geology.

Re-tooling CLUE for
Web-based Delivery

Loomis, Abigail
Kruse, Carrie

Library
Instruction
Program

Expand access to CLUE through the development of a web-based model

Interactive
Phonetics/Phonology
Learning - Listening,
Seeing, Modeling,
Analyzing, Building

Macken, Marlys

Linguistics

Create an interactive system for teaching sounds and properties of sounds, using a unique multi-learning environment that permits the students to learn the material in a variety of ways.

A Survey of Ceramic Tiles	Scheer, Elaine	Art	Provide a learning tool about ceramic tile and allow students to exhibit their art works in a digital space
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Real-Time Music Performance Feedback Systems for Voice and Piano	Welbourne, Todd Doing, James	Music	Explore the effectiveness of the application of recently developed specialized technology/software to the development of advanced real-time performance skills in pianists and singers.
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2000

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
Integrating Weather Concepts Through Weather Prediction Exercises	Ackerman, Steve	Atmospheric and Oceanic Sciences	Expand the use of Web-based tools to allow students to explore their environment through on-line collaborations using real-time weather maps and data to predict the weather.

3D Interactive Software for Teaching Cell Biology	Becker, William	Botany	Create a 3D, interactive environment for teaching cell biology and test its effectiveness.
	Glenburg, Arthur	Psychology	

Interactive Design and Optimizatn Simulations for Fluid	Farrell, Patrick	Mechanical Engineering	Development, testing refinement and implementation of an interactive engineering design/optimization problem.
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Classroom Interface for Engine Simulation	Foster, David Hoag, Kevin	Mechanical Engineering	Develop a simplifying classroom interface for a complex computer program.
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Smith, Barbara
Razman, Scott
Wright,
Christopher

Interactive Fish
Identification and
Bioenergetics Lab

Kitchell, James
Hanson, Paul
White, Elizabeth
Lyons, John
Cochran, Philip

Center for
Limnology and
the Sea Grant
Institute

Provide students in the UW system the opportunity to study fish identification, ecology, and physiology while minimizing terminal experiments, travel to remote locations, and dependence on fragile museum specimens; using an interactive software system and computerized modeling system.

A Web Based Virtual
Patient for the
Oncology
Pharmacotherapy
Lab

Kolesar, Jill
Martin, Beth
Demuth, John
Carvin, Nicholas
Schiller, Joan

Pharmacy

Refine the current virtual patient, develop a template for future virtual patients and developing a prostate cancer virtual patient.

Integrated Soil and
Environmental Lab
Course

Kung, Samuel

Soil Science

Merge and integrate material from four disciplinary areas so that students can be trained to holistically comprehend soil-related environmental issues.

Enhancement of
Physical Assistant
Community-Based
Education Through
Innovative Use of
Instructional

Nicholson, Jeff
Cooney, Janice
Morgan, Peri

Physician
Assistant

Develop and implement virtual diagnostic case studies and use information technology to enhance and facilitate communication among faculty, students, and preceptors.

Instructional
Technology

Cote, Honorie
Girdley, Forrest

Conveying
Quantitative
Concepts to Biology
Students using
STELLA

Rouse, Douglas Plant Pathology

Attendance at a workshop to improve skills with STELLA and funds for development of instructional material using the same.

Animations for
Teaching Physiology
335

Strang, Kevin Physiology

Develop a set of animated web-based instructional resources that will enhance student learning of dynamic and difficult concepts.

2001

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
Interactive Software Tutorials for Teaching Cell Biology	Becker, Wayne Glenberg, Arthur	Botany	Create and deploy a series of interactive tutorials for teaching cell biology
Digital Resources for a Plant Structure Class	Croxdale, Judith	Botany	Create a series of electronic folders containing learning objectives, images, text, and self-testing materials.
More Just-in-Time Writing Instruction: Helping Student Writers with User- Centered Consultations and	Hughes, Bradley Jamsen, Kirsten	Writing Center	Enhance the UW-Madison Online Writing Center through the use of text-sharing, synchronous chat, and audio technologies.

eTEACH: Because Children are Different	Scheibel, Pam	Nursing	Make critical advanced health practice knowledge from "Advanced Health Assessment - Pediatrics" available through the use of WebCT and eTEACH.
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N-CyCLES: An Interactive Agricultural Production Systems Nutrient Flow Model for Agronomy,	Wattiaux, Michel A. Barak, Phillip Albrecht, Kenneth	Dairy Science Soil Science Agronomy	Simulate flows and cycles of carbon, nitrogen and phosphorus through soil, crops, and livestock at the scale of a farm as an agricultural and environmental unit.
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2002

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
The Virtual Enterprise Network (V.NET) Lab: Teaching Network Management	Liginial, Divakaran	Business	The V.NET lab will provide a quasi-real environment for conducting enterprise networking experiments
A New Image Database for Art History Instruction	Marshall, Nancy Rose	Art History	Building on a 1994 IT grant, the art history department will update, expand, and improve its image database in response to student needs expressed in recent evaluations.
Exploring Reusable Learning Objects	McDonald, Jeanette	Nursing	Revise a course currently taught by three professors, incorporating the expertise of each into all sections through the use of reusable learning objects.
Emergency Care Simulations to Enhance	Proctor, Les	Anesthesiology	Utilize a recently constructed simulation lab to allow students to repeatedly experience emergency situations and practice their skills without endangering patients.

Anesthesiology
Clerkships

Proctoring with Industry to Bridge the Digital Divide in the Textile and	Stevens, Anna	Environment, Textiles, & Design	Purchase hardware and train faculty and staff to accelerate the learning of existing technology and maximize its impact on education.
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2003

<u>Project Title</u>	<u>Applicant</u>	<u>Department</u>	<u>Brief Description</u>
Online Integrated Weed Management Decision Tool	Luschei, Ed	Agronomy	Development of an online environment in which students can improve their systems-based understanding by experimenting with different management actions and visualizing the results of their experiments.
Team Collaboration Tool for the M.S. in Biotechnology Program	Robertson, Gail Husk, Bryan	Biotechnology	Develop and deploy an online learning tool, incorporating video conferencing and shared text workspace, to support team project collaboration and communication.
VAAS: A Video Annotation and Assessment System to Help School Leaders Evaluate Classroom Teaching Practices	Halverson, Richard	Education	Create a classroom based video annotation and assessment system to help future school leaders critique examples of teaching and point to how students can create and take advantage of tools to improve teaching practice.

Cosmos and Mandala: A 3D Knowledge Space for the Study of Buddhism	Dunne, John	Languages and Cultures of Asia	Employ a low cost 3d game engine to create and deploy a multi-user cosmological and mandalic space for the interactive study of Buddhism; enabling students to explore the imagined universe inhabited by Buddhists.
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"PrepTalk": Coaching Students to Prepare for Lectures using Narrated PowerPoint Shows	Collins, Michael	Pathobiological Sciences	Provide students narrated PowerPoint shows before class, potentially providing them with a more meaningful, rich, and interactive experience in class.
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Electronic Peer Review: A New Tool for Teaching and Learning about Writing	Alyward, William	Classics	Building on a previous grant from LSS, this project will continue the development of the existing prototype in order to enhance the interface between teachers, students, and technicians; as well as make the prototype available to a larger audience.
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