

**DIVISION OF INSTRUCTIONAL INNOVATION AND ASSESSMENT
ITAC VISION PLAN
2008–2009**

SUMMARY OF REQUESTS

DIIA is requesting \$1,417,000 in the 2008–2009 ITAC Vision Plan. A total of \$1,120,000 will be used to fund the recurring costs for DIIA’s IT programs and infrastructure, and \$297,000 will be used to support new projects that support innovative student learning.

TOTAL REQUEST FOR 2008–2009 **\$1,417,000**

IT Programs and Infrastructure ***\$1,120,000***

Provide students employment opportunities to work with individual faculty members across campus to create faculty-requested online teaching projects that support student learning. **\$242,000**

Provide students from all colleges and schools opportunities for growth and training in the use of various technologies that include editing video, programming, using multimedia, and accessing lab resources. **\$295,000**

Provide graduate students and faculty with training and consultation in incorporating the assessment and effective use of technology into their curricula to enhance the teaching and learning experience. **\$583,000**

Innovative Support of Student Learning ***\$297,000***

Provide faculty-driven pilots to research and assess emerging technologies, including Second Life, social networking, and geospatial software. **\$102,000**

Provide students seeking local and national credit-by examination with appropriate technologies, including audio, video, and special needs accommodations. **\$75,000**

Provide faculty and students with leadership in selecting ePortfolio options that support student learning outcomes. **\$120,000**

DIIA is supporting these collaborative proposals:

Liberal Arts/Libraries Digital Archive Services (DASE)

Provide new ways to incorporate digital media into the classroom environment.

College of Communications Video and Podcasting

Provide infrastructure to support the use of video and podcasting.

Cockrell College of Engineering/ITS Synergy Of Academic Resources (SOAR)

Provide infrastructure and documentation to allow better management of IT services and programs, to help the university better support the colleges and schools and avoid duplication of efforts.

ITS/DIIA ~FAST TEX

Provide a secure and stable environment to preserve faculty-created IT projects.

OVERVIEW OF CURRENT IT PROGRAMS AND INFRASTRUCTURE

VISION/MISSION/GOALS

DIIA's vision is to provide instructional services that improve teaching to transform learning. DIIA's mission is to integrate pedagogy, instructional technology, and assessment to promote effective and innovative instructional and evaluation practices in support of the university's core purpose and values. As a central division, DIIA's collaborative programs and services are designed to support all colleges and schools and thus impact all students and faculty. All ongoing, new innovative proposed projects align with DIIA's mission.

IT PROGRAMS AND SERVICES SUPPORTED BY ITAC FUNDS

~FAST Tex—Administer and monitor faculty IT projects and employ 40-50 students annually. Twenty-six projects are in progress, impacting more than 59 courses.

Multimedia lab—Provide the only high-end production facility open to all UT Austin faculty and students for class projects. The lab is open 64 hours per week, staffed by a manager, technicians, and part-time proctors.

Digital Media Services—Prepare students to be 21st Century professionals by assisting faculty in incorporating digital media in their courses and by providing students with training, consulting, and access to high-quality digital media equipment, software, and facilities.

Courseware—Provide training, second-tier expert consulting, programming support and integration, and administration for Blackboard and other Web courseware tools.

Technical evaluation—Conduct exploration, development, and assessment of new and emerging technologies.

Database production and support—Develop and maintain systems that support student learning, such as the Ongoing Course Assessment system, Blackboard building blocks, eGradebook, and other in-house databases and systems.

Resource development—Create, develop, and support Web site resources, tutorials, lab guides, journal submissions, and conference presentations for students, graduate research assistants, and faculty.

Training—Conduct individual and class workshops as well as on-site and lab-based training sessions for faculty, graduate student instructors, and undergraduates

Ongoing Course Assessment system—Allow faculty to solicit anonymous, secure student feedback online throughout the semester.

eGradebook—Enable faculty to maintain course assignments with related grades and to calculate final grades in a secure online environment.

CIS/eCIS—Allow students at the end of each semester to give feedback to faculty about instructors' courses and teaching.

Assessment—Conduct classroom assessments, program evaluation, and research to support student learning.

INFRASTRUCTURE SUPPORTED BY ITAC FUNDS

DIIA works collaboratively with ITS to provide servers needed to support campus-wide IT systems provided by DIIA. In addition, DIIA maintains its own network: servers, hardware, software, computers, and lab equipment that support these programs and services. In 2006–2007, approximately \$117,900 was spent to support DIIA’s infrastructure.

| | |
|------------------------|-----------|
| Servers | \$7,100 |
| Hardware | \$2,300 |
| Software | \$6,500 |
| Computers and monitors | \$102,000 |

NOTE: The infrastructure costs do not include the personnel costs associated with running DIIA’s programs and services.

CURRENT AND PROPOSED FUNDING SOURCES FOR IT PROGRAMS AND INFRASTRUCTURE

DIIA receives student fee money and state-appropriated funds to support its charge to develop policy for technology-enhanced learning and to support eight mission-critical operations: credit-by-exam testing, credit petitioning, management of student credit-by-exam tests, test administration, computer testing labs, classroom scanning services, administration of the course instructor survey, and online services for integrating student information.

DIIA does not receive other local money or special funding for five other key operations:

- Provide students and faculty reliable instructional technology services.
- Enable direct access to online and multimedia technologies for learning and teaching.
- Support and complement departments and colleges in their endeavors to promote innovation in instruction.
- Partner with colleges in research and development of instructional technologies.
- Collaborate with other campus entities in implementing technology grants.

BEST PRACTICES

DIIA’s services and resources support best practices by streamlining existing processes, allowing better communication and collaboration between faculty and students, training faculty in the effective use of technology, allowing faculty and students to use more technology in their classrooms, and enabling DIIA to more effectively evaluate, assess, and implement emerging technologies on campus.

USE OF PREVIOUS ACADEMIC YEAR ALLOCATIONS

(See detailed information in Appendix A for use of 2006-2007 ITAC funds received.)

DIIA relies largely on the ITF allocation to fund instructional activities, support the multimedia lab, and fund a significant portion of additional recurring expenses. Listed is the ITAC funding received from 2004–2005 through 2007–2008.

- **2004–2005: \$715,621** (\$405,671 for ongoing operations and \$309,950 for one-time projects)
- **2005–2006: \$650,426** (\$360,426 for ongoing operations and \$290,000 for one-time projects)
- **2006–2007: \$597,436** (\$369,947 for ongoing operations and \$227,489 for one-time projects)
- **2007–2008: \$598, 497** (\$376,389 for ongoing operations and \$222,108 for one-time projects)

NEEDS AND PROPOSED USE OF FUNDS

Of the total of 16 requested items, 3 are for student programs (\$195,000), 8 support students and faculty (\$948,000), 4 are for faculty support (\$144,000), and 1 supports DIIA's network, servers, hardware, and lab (\$130,000).

IT PROGRAMS AND INFRASTRUCTURE

\$1,120,000

Provide students employment opportunities to work with individual faculty members from colleges and schools to create faculty-requested online teaching projects that support student learning.

\$242,000

~FAST Tex program

\$242,000

Recent ~FAST Tex projects reflect growing sophistication in faculty's use of technology in the classroom. In view of the trend from previous years to larger and more complex projects requiring longer development times, more production hours, and additional student staff, there exists a clear need for a more robust technical infrastructure as well as for better-trained and more experienced students to provide streamlined quality control and continued support of at least 45 faculty technology projects impacting 35,000 students. Attention to infrastructure should include lifecycle replacement of equipment, which includes hardware and software upgrades and replacement of failed components.

Provide students from all colleges and schools opportunities for growth and training in the use of various technologies that include editing video, programming, using multimedia, and accessing lab resources.

\$295,000

Multimedia e-space learning and teaching lab

\$130,000

The lab is the only high-end video editing and multimedia production facility available to all UT Austin faculty and students for class projects. Open 64 hours per week, its services and facilities include large-format color plotter printing and space for group work, peer-to-peer collaboration, and team projects. Continuing funds are needed for

equipment and software upgrades, lifecycle replacement, and salaries for a lab manager and part-time proctors to manage and operate the lab.

Student technology training summer institute **\$45,000**

Across campus the demand continues to grow to hire skilled student workers for computing facilities and for faculty instructional technology support programs. In response to this demand, DIIA will design workshops for recruiting and training undergraduate students to work as IT developers and peer mentors. Students will learn and practice soft skills, teamwork, and project development, focusing on using emerging, interactive, and innovative technologies to build and support tools that enhance teaching and student learning. Funds are needed for developing training curricula, acquiring external training resources, using equipment and software, securing industry mentors, and supporting a student staff instructional coordinator for up to 20 students.

Digital Media Services **\$120,000**

The DMS pilot has presented 173 workshops and developed 16 online tutorials in support of 370 students in 18 courses, producing 230 video projects from nine colleges in 2006-2007. To continue to expand services targeted to increase digital media fluency and enhance learning outcomes among students and faculty, highly skilled graduate student assistants must be hired to assist in developing additional workshops, tutorials, and online learning resources. Student assistants will provide training, consulting, and guidance to support students learning to use digital media tools to complete class assignments, to support faculty in designing and implementing media projects, and to support development of Web-based systems for archiving, showcasing, and facilitating submission of student assignments. Additional network-based storage and servers must be purchased to provide capacity sufficient for student projects and to host Web-based systems dedicated to online training resources and archiving of student projects. DIIA will also organize and host events providing opportunities for students and faculty to practice emerging technologies and techniques.

Provide graduate students and faculty with training and consultation in incorporating the assessment and effective use of technology into their curricula to enhance the teaching and learning experience. **\$583,000**

Blackboard support, development, and training **\$200,000**

With the significant rise in Blackboard use (50,074 in fall 2006 with a record-breaking 27,519 people accessing the system on one day), continuing funds are needed to hire two training specialists to support faculty using Blackboard and to hire one Java/JSP-skilled programmer to support the integration and creation of new features and functions in Blackboard. One additional training specialist is needed for support of the expanding interest in using Blackboard to facilitate student learning.

Assessment of effectiveness of teaching with technology **\$100,000**

Continuing funds are needed for an evaluation specialist to provide assessment-specific support for faculty who integrate technology in their teaching and for two graduate students with expertise in qualitative and quantitative data collection and analysis. Their duties will include evaluating the effectiveness of several technologies: online courses and lectures, new and existing online resources, new multimedia instructional materials, technological innovations such as Second Life, webcasting, blogs/wikis,

plagiarism software, and tablet PCs. They will also evaluate ~FAST Tex projects and provide consulting on preparing IITAP entries. The outcomes of these evaluations will be published in research studies to inform the effective use of technological resources to enhance teaching and student learning. Staff services and their related evaluations will help faculty across all colleges who use these technologies in their teaching, and they will assist students with access to these tools as a part of their classroom instruction.

Course development for eLearning and technology-integrated classes \$140,000

DIIA will hire an instructional designer and media specialist to work directly with faculty and graduate student instructors to develop online modules and learning objects that incorporate multimedia, providing interactive elements to enhance the effectiveness of the instructional process and improve learning environments.

Course-Instructor Survey development and support \$45,000

Continuing funds are needed for one systems analyst to support the CIS process, from distribution of paper forms to data-gathering and generation of results. In addition, new features and functions are needed to support the new eCIS version of the CIS. This system will continue to enable automatic creation of results on the Web by deans, chairs, and faculty. This effort will impact student learning by allowing faculty to use students' feedback to make meaningful and prompt adjustments to their courses before the beginning of the next semester.

Centralized Courseware Grouping Software \$23,000

Funding is needed for one-half of a systems analyst salary to effect enhancement of all centrally supported courseware systems at UT Austin, which allow faculty to group their classes in more efficient, effective, and meaningful ways by providing a central virtual location. Services such as Blackboard, Ongoing Course Assessment, eGradebook, CLIPS, eCIS, and other systems will be able to use this software solution.

TA/GSI Teaching with Technology certification \$75,000

DIIA, in collaboration with the Office of the Provost, the Office of Graduate Studies, and the International Office, has developed a series of workshops focused on teaching with instructional technologies. The series, which will lead to a certificate in technology-enhanced teaching methods, will create a pool of qualified graduate student instructors for large classes, and it will produce faculty skilled in using technological innovations in teaching and student learning. Two graduate student instructional designers will be hired to provide development and training.

***INNOVATIVE SUPPORT OF STUDENT LEARNING* \$297,000**

Provide faculty-driven pilots to research and assess emerging technologies, including Second Life, social networking, and geospatial software. \$102,000

Assessment and Research \$48,000

Funds are needed for equipment and licenses to research and evaluate horizon technologies for instructional uses. A task force will be charged with investigating several emerging technologies, resulting in documentation of each technology and its educational applications and dissemination of annual reports to UT Austin faculty and staff. Examples of emerging technologies are referenced in the Horizon annual report of the Educause Learning Initiative program and the New Media Consortium program:

language platforms, social networking tools to integrate various media (blogs, flickr, etc.), and video clips for instructional use. Piloting such emerging technologies on a small scale will allow exploring their feasibility for university-wide adoption by faculty and students, helping ensure that UT Austin remains on the cutting edge of instructional technology tools and resources.

Gaming and simulation technology **\$33,000**

Funds are needed for two high-end computers to support gaming technologies and to enable bandwidth and processor exploration for research in this frontier area. This will also create the capability to better collaborate and participate in events focused on gaming. In addition, continuing funding is needed for one GRA to research, evaluate, and assess the use of gaming technologies for instructional uses, including our ongoing efforts with Second Life, enabling UT Austin to remain in the forefront of this research.

Geospatial technologies **\$5,000**

Geospatial technologies such as Google Earth and Google Maps are rapidly gaining mainstream acceptance, providing powerful visualizations of spatial data to enhance communication and student learning in a variety of disciplines. UC Berkeley hosts an annual conference and symposium, and Stanford University has developed a course using such tools:

<http://news-service.stanford.edu/news/2007/august22/google-082207.html>

Funds are needed for software licenses to explore the potential instructional applications of tools that merge the power of spatial analysis with various geo-tagged multimedia (audio, video, photos, text, photos, and 3D models) to show concepts, trends, and data in new, engaging and innovative ways for mainstream teaching and learning.

Immersive media research **\$16,000**

New technologies—such as immersive imagery, 3D imaging, and mobile computing—are being adopted to help transform teaching and instruction by increasing flexibility and providing new methods for visualizing content in a variety of disciplines. Funds are needed to purchase hardware and software for research to provide the basis for recommendations concerning which software, hardware, and techniques work best for making this type of media accessible and flexible enough for educational purposes.

Provide students seeking local and national credit-by examination with appropriate technologies, including audio, video, and special needs accommodations. \$75,000

Computer-based Testing Software **\$75,000**

Computer-based testing software is needed to properly serve students who take local and national tests in pursuit of credit-by-examination. This software will support cutting-edge testing practices such as the use of audio and video in exams; it will allow accommodation for special needs testing; and it will enable DIIA to meet the demands of national standardized exams, such as TOEFL and GRE, which are now being administered by means of the Internet. In addition, this software will be piloted for future use in providing computer-based classroom exams, addressing three key features: benchmarking systems already used at other universities for innovative computer-based classroom exams, computer-based testing software that can be used to provide feedback to improve student learning, and critical technical components such as security. Improved computer-based testing software will impact every first-year student who requires placement or credit-by-examination services. Results of the pilot

research will inform development of a larger testing facility to serve the entire UT Austin campus community.

Provide faculty and students with leadership in selecting ePortfolio options that support student learning outcomes. *\$120,000*

ePortfolio **\$120,000**

Funding is needed to research, test, and recommend a viable ePortfolio solution for the broader UT Austin community, one with features that allow for integration with existing student data and applications. The ePortfolio solution should include various features and functions that highlight student learning outcomes, achievements, and reflection.