

**THE UNIVERSITY OF TEXAS AT AUSTIN
INFORMATION TECHNOLOGY ADVISORY COMMITTEE**

SCHOOL/COLLEGE/ADMINISTRATIVE UNIT VISION PLAN TEMPLATE

SUMMARY OF REQUESTS

The Accessibility Institute requests a total of \$88,386 for 2008-09, to do the following:

1. Upgrade the accessibility/usability lab to replace outdated computers, add a Braille display, and keep assistive technology up-to-date as new versions compatible with Microsoft's new Vista operating system are offered.
2. Develop scripts for the JAWS screen reader in order to overcome accessibility barriers in applications that students commonly use (such as EndNote, Excel charts, SPSS).
3. Maintain the student accessibility team to provide accessibility consulting for instructional sites, develop tutorials for using the JAWS screen reader with applications commonly needed by students, and develop curriculum and training for upcoming new accessibility guidelines and standards.

OVERVIEW OF CURRENT IT PROGRAMS AND INFRASTRUCTURE

Vision/Mission/Goals of Unit

The Accessibility Institute integrates technology, accessibility, and learning for everyone through research, education, advocacy, consulting, training, and service. The Accessibility Institute promotes all aspects of Web accessibility by providing free training and consulting to the UT community, by conducting cutting edge research, and by proactively incorporating accessibility into all education research and development activities.

Goal:

To ensure that UT Austin is the world leader in providing online instructional resources that are accessible to all students, including students with disabilities.

Methods:

- Perform assessments of online instructional resources against national and international standards for Web accessibility
- Provide accessibility training to faculty, students, and staff developing online instructional materials
- Carry out user testing to measure impact of accessibility barriers on students with and without disabilities
- Assist developers in integrating accessibility into project planning and design
- Develop online resources to support creation and successful use of accessible course materials

IT Programs (*IT programs requiring recurring funds for salaries, operations, etc.*)

- Usability lab (user testing that includes participants with and without disabilities)
- Compliance checking (evaluation of online resources against national and international standards for Web accessibility)
- Accessibility training and consulting
- Student Accessibility Team (conducts accessibility evaluations of instructional Web sites, develops tutorials for using important instructional applications with the JAWS screen reader, interacts with faculty and others developing instructional sites)

Infrastructure (*overview of IT system – facilities, CPUs, servers, networking, security, IT-equipped classrooms, etc.*)

Accessibility/Usability lab:

- Desktop PC (Windows XP)
- PC laptop
- Mac laptop
- Video cameras
- Scan converter
- Mixer board
- Session monitoring
- Video recorder
- Morae usability testing software
- JAWS and Window-eyes screen readers (for use by people who are blind)
- ZoomText screen magnifier (for low vision)

Current and proposed funding sources for IT programs and infrastructure (*describe sources of funds – ITAC allocations, income from flat-rate tuition, endowments, donations, etc.*)

Current

Annual allocation from Provost’s office, ITAC funding, subcontract project with Center for Agile Technology

Proposed

In addition to ITAC, we are collaborating with LAITS on seeking grants to build instructional materials that are accessible.

Best Practices (*identify any “best practices” that have significantly improved IT programs, infrastructure, operations, cost efficiencies, etc. since the last Vision Plan*)

Web accessibility is typically a new topic for students. We hire students with varying degrees of computer experience and from all different disciplines. We have developed a process of training these students that involves educating and training, self-study, group collaboration, and hands-on experience in order to help them understand what accessibility is, what Web accessibility standards/guidelines are, how they can be implemented on a Web site, and how screen readers and screen magnifiers behave and are used. Addressing accessibility from multiple perspectives seems to increase the pace

of learning, and including users with disabilities on the student team increases understanding of the perspective of users with disabilities. We want our students to take this knowledge into their areas of study and future work environments.

USE OF PREVIOUS ACADEMIC YEAR ALLOCATIONS

Infrastructure (describe stated purpose of funds allocated in previous Vision Plan and how they were actually used for recurring and non-recurring costs; explain funding deviations from what was proposed)

In our 2006-07 proposal, we requested funding to (1) upgrade our Accessibility/Usability lab, (2) continue the services of our Student Accessibility Team, especially with the development of online JAWS tutorials (JAWS is the most widely used screen reader in the United States) and (3) develop and test an accessibility course. The final allocation amounted to substantially less than our initial request. We therefore chose to focus on the upgrades to the usability lab as well as the development of JAWS tutorials.

Upgrade usability lab

We will continue to purchase maintenance agreements for our screen reader licenses as well as the maintenance agreement for Morae, usability software. We also have plans to update two computers to support new technology and to support the new Vista operating system.

Online JAWS tutorials

In the fall 2007 semester, the student team continued to research and identify applications that are widely used by students. The team also studied how these applications work (such as Adobe Acrobat, PowerPoint 2003, Excel 2003, Webspac) or do not work (including NoodleBib, GoogleDocs) with JAWS. Additional tutorials will be developed next semester. These include tutorials for applications that have been through major revisions, such as PowerPoint 2007 and Excel 2007.

One-time Projects (describe stated purpose of funds allocated in previous Vision Plan and how they were actually used; explain funding deviations from what was proposed)

NA

NEEDS AND PROPOSED USE OF FUNDS

Overall, there is a need for resources devoted to Web accessibility because Federal law, including the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, requires that University programs and activities be accessible to qualified students with disabilities. The US Department of Education's Office of Civil Rights has consistently held that this requirement applies to instructional materials that are provided online as well as those in print or other media such as video. In addition, Texas law requires state agencies, including institutions of higher education, to make online resources that are available to members of the public accessible to individuals with disabilities. An accessibility policy for the University of Texas at Austin is currently in effect.

As a working definition, online resources may be considered accessible when people with disabilities can use them as effectively as people without disabilities. From the technical standpoint, accessibility is defined by two related sets of standards:

- Section 508 (federal standards established by the US Access Board). These standards apply directly to federal government resources, and have been adopted by many other organizations, including state and local governments, universities, and corporations. In 2005 UT Austin adopted Section 508 as the basis for its official accessibility policy.
- Web Content Accessibility guidelines (WCAG), international standards published by the World Wide Web Consortium. Adopted by many nations, including the European Union and member states, Canada, Australia, New Zealand, and others. WCAG 1.0 is the basis for the US Section 508 standards and others. WCAG has also been adopted by the UT System.

Both WCAG and Section 508 are undergoing significant revision. An entirely new version of the Web Content Accessibility Guidelines is under development by the World Wide Web Consortium; completion is expected in 2008. Review of the US Section 508 requirements began in September 2006, with final publication slated for 2009.

Infrastructure (identify high priority needs and high impact, short-term projects, how they fit with the Vision/Mission/Goals of the Unit, the funding requested, and how it will be used)

The accessibility/usability lab needs to stay up to date in terms of current versions of assistive technology (AT) and computer equipment that will support new AT and software in order to be useful to the students who use the lab for class (for example, students in Professor Clay Spinuzzi's class), to our team members who evaluate Web sites, and for user testing projects. We would also like to begin offering the opportunity to use and test with Braille displays as these become more portable and students with visual impairments increasingly begin to use them for note taking in educational settings.

Upgrade our Usability Lab

Replace PC computer that is more than 3 years old	\$3000
1 license for JAWS screen reader with SMA (supports Vista)	\$1295
1 license for ZoomText screen magnifier (supports Vista)	\$595
3 JAWS Service Maintenance Agreements	\$780
Morae Service Maintenance Agreement	\$280
PacMate Braille display (with PMA)	\$3970
Total allocated for equipment and software	\$9920

One-time Projects (identify high priority needs, how they fit with the Vision/Mission/Goals of the Unit, the funding requested, and how it will be used)

As we have been working with various software applications, we have discovered some that were not accessible or had significant barriers for students with disabilities. One such program that is very useful for research is EndNote. Some of its primary functions, such as interacting with library databases, were simply not available when using JAWS. This presents serious problems for graduate students, undergraduates, and faculty with visual disabilities. Although ideally the developers of EndNote would address this issue in future versions, we will provide a way to work around this problem by developing JAWS scripts that help JAWS over those areas that are not accessible. Other programs where JAWS scripts are potentially useful are SPSS and charts in Excel.

JAWS Script development

GRA, 20 hrs/wk (Sept 08-Dec 08) – script development	
Base \$39,182/12 month	\$5,877
Fringe	\$1,528
GRA, 20 hrs/wk (Sept 08-Dec 08) –availability on Web site	
Base \$39,182/12 month	\$5,877
Fringe	\$1,528
Total allocated for JAWS script development	\$14,810

Innovative Support of Student Learning (identify cutting-edge uses of IT, how they fit with the Vision/Mission/Goals of the Unit, the funding requested, and how it will be used)

The Student Accessibility team will continue to offer evaluations for those who are developing instructional sites. The process of developing instructional sites versus administrative sites poses particular difficulties regarding accessibility. Instructional sites tend to be developed by staff and faculty who have no knowledge of accessible techniques and tend to change from semester to semester and have tight timelines. By offering consulting services, we can help instructional site developers learn to incorporate accessibility into the sites they develop that hopefully carries over to future sites as developers learn more about accessibility.

The team will also continue development of the online tutorials that address the use of JAWS with common applications. Development of these tutorials has allowed us to take advantage of the experience the student team had gained (two of the students have worked with us since 2004-05) while at the same time expanding the team’s knowledge and experience and increasing our ability to support successful participation in instructional activities by students with disabilities.

The online tutorials are driven by the experience of student employees with disabilities and informed by observations made during user testing with students with disabilities, which showed that students with visual impairments are not always expert users of assistive technologies that are crucial to their ability to work on an equal basis with their peers. Students in the course of their studies are commonly expected to learn how to use

new software in order to complete research or class assignments. Different units, such as the General libraries, offer tutorials training on Endnote or NoodleBib. Students who use JAWS not only may need to learn to use new software, but they have the added task of learning to use it with JAWS. Dialogue with Web developers revealed that they are also eager for information about how JAWS interacts with applications frequently used by students. Research showed that existing training materials are inadequate for use in university settings.

The team is also needed to explore the accessibility of major new technology that has come out over the last year. The new Vista operating system offers some new accessibility challenges. Our student team will need to explore how screen readers interact with this new operating system and how newer versions of screen readers and magnifiers perform as they start to support Vista. We will make results of our testing available on our Web site either to update our tutorials or as hints for using Vista with JAWS as appropriate.

The new versions of Web Content Accessibility Guidelines and the Section 508 standards are currently under development, and the UT community will need training and tutorials to help learn how to interpret and apply them. Our student team will research the upcoming changes and develop a training curriculum for those involved in the development of UT Web sites.

Online tutorials, evaluation of instructional Web sites, and new standards/guidelines training

2 Graduate Research Assistants, 20 hours/wk	
Salaries (Sept. 08 – Aug. 09) - \$19,591 * 2	\$39,182
(Base \$39,182/12 month)	
Fringe (\$5,093*2)	\$10,187
3 Student Technical Assistants, 10 hours/week each	
Rate: \$9.92/hr for 48 weeks (4762*3)	\$14,286
Total	\$63,655

Please observe the following guidelines:

- The main body of the Plan be no longer than 20 pages, be in electronic form, and be in MS Word format.
- Material presented in the appendices is not included in the 20 page limit and should be in electronic form to the extent feasible.