Library instruction tutorials have become standard in delivering information literacy (IL) skills to patrons over the Internet. If you explore the library’s homepage at most universities, you will find a collection of tutorials teaching students a variety of skills, such as how to evaluate resources and how to access information from aggregate databases. Building a creative, interactive, entertaining and informational tutorial can be a time-consuming, resource-draining project. However, if your library is in the market for an information literacy tutorial and is not interested in reinventing the wheel, do what the University of Evansville Libraries (UEL) did – download TILT (Texas Information Literacy Tutorial, http://tilt.lib.utsystem.edu/).

This article describes TILT, how UEL modified the tutorial and its evolution to I*Trail. Technology considerations necessary to implement the adapted tutorial are discussed. Resources for those interested in modifying TILT are also included.

**TILT TO I*TRAIL**

The University of Texas System Digital Library launched TILT in 1999, although planning and production had begun three years earlier. TILT has three fundamental goals: “to ensure that first-year students grasp basic research concepts; to best use librarians’ expertise when in the classroom; and to provide basic information literacy skills accessible anytime and anywhere.”1 TILT is composed of an introduction to the Internet and three separate modules. Each module highlights a key step in the search for information: selecting appropriate resources, effectively searching the sources, evaluating the results and properly citing information. A quiz concludes each module with the option of e-mailing or printing the results. Interactive and engaging games within each module help reinforce the IL skills being taught. The modules are meant to be viewed sequentially, but they can also stand-alone.

Spring 2001 saw an important milestone in TILT’s development. YourTILT became freely available for distribution through an Open Publication License (OPL). OPL allows institutions to download the entire tutorial content (images, text, sound files, quizzes, shockwave interactions, etc.) and modify the tutorial to suit their needs, provided that the original authors and creators are acknowledged and any modifications are also made available for free. UEL took advantage of this excellent opportunity to modify yourTILT to reflect the information needs and technologies locally available.

**MODIFYING TILT**

Overall, it took approximately 100 hours to modify the tutorial’s content. The first step in this process was mapping out the introduction and each module. This gives you a thorough idea of how the tutorial’s pages are linked together and where changes to the text should be made. Next, the yourTILT documentation of important files and mandatory edits were reviewed.2 This Web page explains how the tutorial is framed, how users get registered, how quizzes process information and other important aspects of the tutorial. The page also lists the essential changes that must be made to particular files, even if you change nothing else. Finally, you need to make some major decisions: Do you change the name of TILT? Do you continue to support the Flash and non-Flash (NF) versions? Do you leave the tutorial in its frameset? Answering these questions will take some serious thought, as the implications of each question are deliberated.

### Name Game

UEL decided to change the name to I*Trail, which is short for the Information Trail, to reflect the ongoing journey towards improving and refining the IL skills that are conveyed in TILT. This name change necessitated a close scrutiny of the text for all instances where the word TILT appeared. If TILT was incorporated into an image, the image had to be either edited to remove TILT, a new one created, or the image was deleted. New I*Trail logo images were created using Adobe Photoshop 6.0.

### Supporting Flash and non-Flash

TILT makes use of Flash animations to reinforce IL concepts within each module. The bandwidth, plugin availability and computer security features at your institution will determine if you can offer the Flash version. The NF version has the exact content, but the
games are eliminated. Cookies that store selected tutorial information are not used in the NF version. This leaves you with two nearly identical tutorials. Changes made to a single page in any module must be made to both versions (flash, NF). Most edited pages can be copied into the NF files and directories. UEL supports both Full I*Trail (Flash) and I*Trail Lite (NF).

To Frame or not to Frame?
TILT was written in frames to provide a uniform look from module to module. Top and bottom frames help navigate the user through the module, while text appears in the middle or content frame. Frames only display the top level URL in the address box, so users do not know the exact place they are in the tutorial. The quizzes in each module are also created using frames.

Some people hate Web sites that use frames. The decision to keep the TILT frameset will ultimately depend on the modifications you make or a hatred of frames. UEL has kept I*Trail in the original framed environment. Other adaptations of TILT have removed the frames entirely or use only a top frame. UEL is evaluating the need to eliminate one or both navigational frames to improve performance and streamline the tutorial.

SCRIPTING LANGUAGES & TILT

Beside Flash interactions, TILT also utilizes JavaScript and PHP. JavaScript is a client-side scripting language (code is embedded in the HTML) that is supported by recent versions of Internet Explorer and Netscape Navigator. This language is used to read the cookie.js file that gets set when users pick the Internet issue that interests them. Later pages query the cookie and generate examples based on the set value. JavaScript is also used by the quizzes to verify correct answers and tally the patron’s score. UEL modified the JavaScript where necessary and made some optional changes based on other universities’ adaptations of TILT.

PHP is a server-side scripting language that generates dynamic HTML pages based on commands embedded in the HTML code. PHP is the open source alternative to Microsoft’s Active Server Pages (ASP). (For more information on PHP, see http://www.php.net/) In TILT, PHP registers users to a LDAP database, displays the quiz results and builds the You Make the Call page (a poll in module 3). The LDAP database creates records for users when they register and tracks their quiz scores as they complete each module. (For more information on LDAP, see http://www.openldap.org/) UEL does not support PHP so some modifications of TILT were necessary. I*Trail eliminated the registration and You Make the Call components. The quizzes had to be restructured, removing the ninth question (which was really a comment/feedback page) and rewriting the quiz results page to work without PHP. Again, help from the TILT development community came in very handy.

HTML & OTHER HANDY SKILLS

Having a solid grounding in HTML makes modifying TILT comparatively easy. Should your institution be interested in using TILT straight out of the package, basic HTML skills and the your TILT documentation is all you will need.

More sophisticated adaptations will require greater skills. Creating and editing images is necessary if you decide to change the tutorial’s name or add content. Software like Photoshop and Paint Shop Pro are popular image manipulation programs that can help. Also, specific Flash animations that are part of TILT will need to be edited in Macromedia Flash, should you decide to change the tutorial’s name or structure.

Currently, I*Trail does not register or track quiz results for users the way TILT does. Managing that aspect of the tutorial is an area that will be considered in the future. Skills in creating, building and maintaining databases are helpful in administering these functions.

HELP

While UT does not officially support institutions working on adapting yourTILT, a community of like-minded individuals exists who are very knowledgeable about yourTILT and the technologies that can make the experience successful. A mailing list called TILTTALK is the main avenue of communication (http://tilt.lib.utsystem.edu/resources/tilttalk.html). Help may also be residing at your institution in information technology departments, graphic design departments, and computer departments. Also, don’t overlook the students who populate your campus. Many have developed the skills you will need. If available, institutional grants can help pay for their help to optimize TILT.

An information literate population is incredibly important for a democracy to thrive. TILT lays the groundwork by explaining the concepts surrounding the quest for information in an entertaining, compelling manner. Modifications to I*Trail continue to be ongoing, but the major investment of time and technology upfront will be beneficial to UEL for years to come. UEL is pleased with the conversion of I*Trail and hopes that it will contribute to the students’ future success.

REFERENCES


ABOUT THE AUTHOR

Margaret Atwater-Singer is the reference/instruction librarian at the University of Evansville, Evansville, IN.