

## **2003 SACUBO Best Practices**

### **Online Training Modules**

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## **Abstract**

*As the University's legion of software packages and administrative systems continues to grow, the need for strong user training has increased exponentially. In order to keep up with the needs of our users, the office of Business & Finance Technology (BFT) at The University of Memphis has developed a series of online training modules that utilize the robust technology available in Macromedia Flash MX®.*

*As of Fall 2002, BFT has launched modules for Netscape Calendar®, the University's online personal scheduling system; e~Print, the University's online administrative systems report repository; OptiDoc®, the University's imaging and document retention system; and, most significantly, the Financial Records System (FRS), one of the University's largest and most important administrative systems.*

*These Flash modules combine screen captures of the University's systems, combined with screen animation and the voice of a "virtual teacher." Users may skip ahead to specific topics within training modules, or they may view the training in its entirety.*

*Having Flash-based training modules available online has allowed users to access training at their convenience. Previously, instructor-led training sessions have only been offered eight times per year; this online alternative clearly offers a greater accommodation with all users' schedules.*

*Examples of these modules can be found at <http://bf.memphis.edu/bftech/training.php>*

## **Introduction of the Organization**

The University of Memphis is a comprehensive urban university committed to excellence in undergraduate, graduate, and professional education; the discovery and dissemination of knowledge; service to the metropolitan community, state, and nation; and the preparation of a diverse student population for successful careers and meaningful participation in a global society. The University offers 15 bachelor's degrees in more than 50 majors and 70 concentrations, master's degrees in 46 subjects and doctoral degrees in 21 disciplines, in addition to the Juris Doctor (law) and a specialist degree in education. The U of M campus is located on 1,160 acres with 201 buildings at more than four sites. The university enrolls more than 20,000 students each semester, and employs

more than 2,500 faculty and staff.

The Business and Finance Technology unit is responsible for the planning, implementation, and establishment of operating policy for the technology and systems activities of the Division of Business and Finance. This includes support for the Division's local area networks, hardware, software, and Web applications.

### **Statement of the Problem/Initiative**

Technology is ubiquitous on our nation's campuses and has transformed University administrative functions; thus, increasing the knowledge and skills required of the individuals that carry out those functions.

Reflecting this industry trend, as the number and complexity of software packages and administrative systems in use at The University of Memphis has grown, so has the need for effective training that is responsive to user needs. Previously, instructor-led training sessions have only been offered eight times per year. An alternative, offering a greater accommodation with all users' schedules, was clearly needed.

### **Design**

To address the need for effective training that will accommodate a variety of schedules, the Business & Finance Technology unit has developed a series of online training modules. These modules utilize the robust technology available in Macromedia Flash MX®, and combine screen captures of the University's systems with animation and the voice of a "virtual teacher."

Previously, BFT developed two of the courses mentioned using another developing software. These courses were memory intensive and required the users to download the course application to their computer before viewing. The use of

Macromedia Flash MX®, a software package made for web-based development and implementation, has shaped endless possibilities for creating user-integrated multimedia training. To more effectively address the needs of individual users, they may view most training modules in their entirety or skip ahead to specific topics within each module.

The modules are designed to effectively run on most web browsers and operating system platforms. Each module is assessed and improved through performance and usability testing, when random users access the training and provide feedback.

A significant time commitment is required for each of these modules by the designer or project team. Sophisticated graphic design and technical skills are required, and the project requires an in-depth knowledge of the system or software that is the subject of the module. On the positive side, however, once finalized, the modules require a minimum of maintenance.

## **Implementation**

The process of creating a web-based training module consists of assessing the product the training is based upon, and formulating the most effective way to teach that product to a user.

To begin, the goal of each tutorial is stated and documentation of the training is written and approved by the project team in its entirety. Next, the approved script is broken down into sections and sound files are recorded. Each recording then goes through an editing process that checks sound quality, removes background noise, and converts the file to a low bandwidth sound file. Next, the module is developed using a combination of graphics, animation techniques, and sound. The project team then tests the module's navigational controls and user interactions. After all of the elements within

the module have gone through testing, the project team requests that the University's Human Resources professional training staff review the clarity and overall flow of the training. Finally, a random selection of end-users is asked to assess the training and provide feedback. To view the training modules online, go to:

<http://bf.memphis.edu/bftech/training.php>

### **Benefits**

Web-based training courses provide learn-on-demand opportunities for staff and faculty, and meet the needs of different learning styles. Web-based training is mostly self-paced, very informative, and allows users to learn in a virtual environment.

This type of training integrates hands-on examples, animation, and the voice of a "virtual teacher" to provide an environment which keeps the user interested and involved in learning what are otherwise complex systems and software.

Finally, the online training approach reflects the organization's commitment to technology. The University of Memphis is taking aggressive steps to position itself as a leader in the integration of technology and learning.

### **Retrospect**

In retrospect, when developing a training application, there are always discoveries of issues and elements that could have been handled differently or more effectively. A significant issue we would like to stress to other developers and project teams when designing a training application is to carefully adhere to the following:

- The importance of finalizing and documenting the "script" of the training before any other production of the project is begun cannot be overemphasized;

- Next, perform audience profiling; know who will be using the training.  
This is important in how the training module is constructed.
- Finally, perform thorough testing at every stage within the production.  
Test all navigational elements, user-interactions, as well as Internet  
browser and systems compatibility and performance.