The digital-divide is the gulf between those who have access to computer technology and the necessary skills to use it effectively and those who do not. Often inexperience with technology presents a barrier that keeps those living in poverty from accessing jobs that provide a living wage. It does so in a number of ways. First, it prevents them from accessing a variety of information sources which may lead to self-sufficiency including information on financial services, health care, jobs, education, and business ownership opportunities. Second, lack of computer literacy may disqualify them from semi-skilled or skilled employment that offers a higher hourly wage.

The past ten years has seen a rapid growth in the implementation of distance learning and online education. Information technologies have been developed allowing interactive distance learning that can provide learning interactivity to match or exceed a traditional classroom. However, one population and area that has not been widely served and studied for effectiveness is the welfare-to-work, low literacy and skills population.

Critical Choices (www.criticalchoices.org) is a program developed in partnership with Northern Illinois University, the YMCA Alliance of Metropolitan Chicago, and Training, Inc. National Association to provide low-income and welfare recipients with essential workplace skills. This project was funded in part by a Department of Education grant, Fund for the Improvement of Post-Secondary Education (FIPSI), Learning Anytime Anywhere Partnerships. It is based on an effective classroom-delivered face-to-face course, “The First Step”, that teaches self-knowledge, education and occupational exploration, career planning and life plan assessment.

Critical Choices uses a “blended” learning model that combines the advantages of anytime-anywhere access afforded by an online course with face-to-face counseling. By using a web-based delivery system, the partners intent is to also help participants begin to bridge the digital-divide and develop technical skills that can aid them in their quest for better paying jobs.

The target population for Critical Choices possesses several characteristics that make them less than ideal candidates for a program predominantly web-based. Therefore, one of the important issues faced by the instructional design team was how to design the course in such a way that this audience could achieve success. This paper defines these learner characteristics and provides the pedagogical and technological strategies utilized to meet this challenge.

Learner Characteristics

Critical Choices was designed to meet the needs of persons receiving TANF (Temporary Assistance to Needy Families). As reported by The EnterTech Project (University of Texas at Austin), data and research profiling done by the Urban Institute in Washington D.C. shows that the majority of welfare recipients (90%) are single mothers in their 20s and 30s with one or two children. They seem to be fairly...
distributed among the different ethnic groups and over two-thirds of them have some recent work experience. In regards to education, 58% of TANF recipients have high school diplomas or something equivalent while the remaining 42% have not completed high school. Reports from the National Institute for Literacy show that the average welfare recipient reads on a sixth grade level.

Typically, this population does not do well in a traditional school setting. Many of them have had bad or unpleasant experiences when it comes to learning and carry this history with them. Interviews done with instructors of TANF learners found that learners reported experiencing enormous amounts of failure and frustration in academic settings. Many could share specific stories about impatient, belittling teachers and the expectations of failure conveyed to them by not only teachers but also family members (EnterTech, 1999).

On the plus side, these learners are highly motivated when they see value in what they are learning. They have a strong desire to succeed in programs that offer them the chance to improve and develop skills that will get them better jobs. They respond positively to learning opportunities where they can be part of a supportive, positive group and communicate with peers who are dealing with problems similar to their own situation. Research also shows that they tend to have a strong auditory learning style (EnterTech, 1999).

Computer literacy skills for this population are often weak or non-existent. Many have had limited or no access to computers, and while organizations such as libraries and community centers offer open computer labs, finding reliable, affordable childcare and transportation can be a problem. Another obstacle is the lack of support available to assist them when they encounter technical difficulties. More likely than not, they do not have mentors to help them develop their skills.

Pedagogical Strategies

The Critical Choices instructional design team was given the task of taking the face-to-face curriculum and converting it into an online course. Important issues faced by them included how to reach an audience that (1) reads on average at a sixth grade reading level and does not learn best by reading, (2) has a poor attitude towards formal instruction and has had few successful experiences in this type of arena, and (3) possess limited PC skills.

Poor Reading Skills

To address this challenge, all of the course information was critically evaluated and limited to factual information that was crucial to the successful completion of the program. Content was rewritten to the sixth grade reading level and the material was chunked into chapters that could be completed in less than an hour. An online dictionary tool was also added to the course so learners could easily look up words they did not know without having to ask for assistance. Once the new curriculum was written, the majority of it was converted into Flash slideshows that require little or no reading. Each slideshow uses audio and visuals to present new information and while scripts of all the audio is included, this is simply for accessibility purposes and to accommodate learners who have a more visual learning style. The multimedia is also chunked into short segments that take no more than 2-3 minutes to view.

Poor Attitude Toward Formal Instruction

Since these learners typically do not respond well to instruction provided in a lecture format, this was used as little as possible and more interactive, learner-centered, instructional strategies were incorporated. Surveys, drag-drop exercises, journal entries, and activities requiring learners to look up information on other websites are all key elements of the Critical Choices course. To simulate classroom discussions
where there are no clear correct and incorrect answers, Flash was used to develop learning objects that ask questions, require the learner to type in their answers, and then display the student’s answers next to other possible answers for comparison.

To also improve motivation, several strategies were utilized to help learners see how the course applies to them and their needs. A short video that includes specific information about how the chapter will help them achieve their goals is provided at the beginning and end of each chapter. Many of the slideshows reinforce new concepts with real-life, culturally diverse, examples and case scenarios that include people the audience can readily identify with. The course also gives students some choices so they can tailor their learning experience to what they need. Some of the slideshows are designed so students can pick and choose only the specific elements that they want to watch. Each chapter also contains optional activities that provide more in-depth information and additional opportunities for learners to write in their journal.

The learner analysis showed that like most adult learners, this population likes to interact with peers and be part of a learning community. To begin developing this feeling of community, the Critical Choices program recommends that each course offering begin with a face-to-face component where students can meet each other and engage in several “ice breaking” activities. During this time, they also get their picture taken by their facilitator. This picture is uploaded to the course and becomes part of the student’s personal biography page. This page also contains their email address and a place where they can add other information they want to share about themselves such as their family, where they are from, and things they enjoy doing. Students have access to their classmates’ biography pages and can review them any time they want during the course. To provide opportunities for online communication, there is a Discussion Board and Chat tool. Throughout the course, Discussion Board activities are provided that give learners the chance to share their opinions and personal experiences and learn from their classmates. When a student posts anything to the Discussion Board, a small picture of them is included with their name to help classmates identify the person who has done the posting. The Chat tool was provided as an informal way for students to talk and support each other as they are working through the course.

**Limited PC Skills**

The Critical Choices course interface was made very simple with clear navigation that changes minimally as learners work through the course. Standard navigation cues like underlining links are utilized and each course page looks the same with some introductory text and a link to one activity. While seven different types of activities are used in the course (slideshows, drag-drop activities, surveys…), a specific template was derived for each one so that once a student masters one, it works the same throughout the course. Pop-up windows were used in the course, but they are limited to one being opened at any time so students do not need to be concerned with navigating between windows.

A variety of training programs are offered before students begin the course to ensure they have the skills they need to experience immediate success and alleviate any anxiety they may have about taking an online course. First, students who are not comfortable with computers and/or the Internet are provided with an online basic PC skills training course that they can take in a computer lab where instructors are also available to answer questions. Second, training covering how to navigate the Critical Choices course and do the activities is provided during the face-to-face session that students attend before they begin the course. Instruction is predominately provided through interactive multimedia presentations and followed-up with practice exercises. Finally, multimedia presentations that explain and demonstrate how to use each type of activity are provided within the course itself. Each page in the course that has a link to an activity also has a link to one of these presentations so students have access to immediate assistance if they experience problems or forget how an activity works.
Even with training, ongoing support is crucial if this audience is to achieve success. Siegel (1996) found that one of the key components to successful online education for at-risk populations seems to be the program’s willingness to monitor student progress closely. She also found that this population tends to drop out of the program, especially if they feel they are not being watched. Each learner taking the Critical Choices course is paired with a course facilitator whose role is to develop a relationship with them, monitor their progress, provide timely feedback and encouragement, and assist in finding resources if technical issues arise. In addition to the facilitator, most students will be taking the Critical Choices course in a computer lab where a lab support staff member will be available. A third option for technical assistance is available in the course itself. The Critical Choices course provides a HelpDesk that has a simple Help Form they can fill out and a Frequently Asked Questions database that they can use to find their own answers. Because most problems occur the first few times a student accesses an online course, a phone number is also provided for those who are not yet comfortable with the online environment and prefer this mode of communication.

Conclusion

It is too soon to tell how effective the Critical Choices program will be. Preliminary pilot testing has been very favorable. Students have found the course easy to use, enjoyed the variety of activities, and seen value in the course content. However, offerings of the course are not due to begin until the Summer of 2004. In the meantime, a follow-up component is also being developed to support students who complete the Critical Choices course. This “Community Center” will provide students with a place to continue communication with their classmates and facilitator and provide resources they can use as they begin the challenging task of finding a satisfying job and successfully staying with it over an extended period of time.

References


Biographical Sketches

Aline Click has been a member of eLearning Services at Northern Illinois University for six years. As Assistant Director, her position requires writing proposals for design and development of web-based instruction for University grants as well as to partner with professional organizations. Aline was an integral member of the team that wrote the FIPSE/LAAP (Fund for the Improvement of Postsecondary Education/Learning Anytime Anywhere Partnership) grant that is funding the Critical Choices project. She leads the Critical Choices Technology Team which is responsible for designing and developing the Critical Choices course and website.

Address: eLearning Services
Northern Illinois University
155 North Third St, Suite 408
DeKalb, IL 60115

E-mail: aclick@niu.edu
URL: http://www.learn.niu.edu
Diane Alberts has worked for eLearning Services at Northern Illinois University for five years as an instructional designer. During this time, she has worked with a number of professional organizations and NIU faculty to design and develop web-based courses. As the lead instructional designer on the Critical Choices project, her responsibilities have included: converting face-to-face curriculum to online instruction, curriculum and script writing, and coordinating multimedia development and programming.

Address: eLearning Services  
Northern Illinois University  
155 North Third St, Suite 408  
DeKalb, IL 60115

E-mail: dalberts@niu.edu  
Phone: 815.753.6874  
Fax: 815.753.8021