The Internet is a critical tool for higher education institutions as they rely upon their web presence for interaction with multiple stakeholders, including current and prospective students, parents, faculty and staff, and the community (Hong & Kiousis, 2007). As colleges count upon their websites to serve as the primary medium for presenting information and communicating with these stakeholders, the design and organization of their websites has become increasingly important to all users (Erickson et al., 2013). Poock and Bishop (2006) suggest that website users consistently prefer sites that are intuitive and easy to use, and that sites with these characteristics are more likely to be effective and exhibit good usability.

As defined by Churm (2012), usability is how easy an object is to use. In the case of websites and software applications, usability is concerned with whether or not users can achieve specified goals with effectiveness, efficiency, and satisfaction when visiting a website (Churm, 2012). Erickson et al. (2013) argues that if a college’s website is viewed as usable, then it is likely that users will achieve their goals for using the site. Further, usability is the most important attribute that determines the ability of individuals to easily interact with a website and to help establish if a website is successful (Zhu, Vu, & Proctor, 2005).

Even though the importance of website usability has been established, some colleges have struggled to exhibit a user-centered approach when designing their sites (Erickson et al., 2013). Adelman’s (2006) survey of community college websites found many basic usability problems, such as unintuitive navigation, unfamiliar terminology and headings, and unorganized information and design elements. These types of usability issues char-

---

**Marcie Dishman**  
Marcie Dishman is the Executive Director of Marketing and Public Affairs at Central Carolina Community College

---

Technology Review: Website Usability Testing Software—Improving User Experience and Satisfaction with Community College Websites

The Internet is a critical tool for higher education institutions as they rely upon their web presence for interaction with multiple stakeholders, including current and prospective students, parents, faculty and staff, and the community (Hong & Kiousis, 2007). As colleges count upon their websites to serve as the primary medium for presenting information and communicating with these stakeholders, the design and organization of their websites has become increasingly important to all users (Erickson et al., 2013). Poock and Bishop (2006) suggest that website users consistently prefer sites that are intuitive and easy to use, and that sites with these characteristics are more likely to be effective and exhibit good usability.

As defined by Churm (2012), usability is how easy an object is to use. In the case of websites and software applications, usability is concerned with whether or not users can achieve specified goals with effectiveness, efficiency, and satisfaction when visiting a website (Churm, 2012). Erickson et al. (2013) argues that if a college’s website is viewed as usable, then it is likely that users will achieve their goals for using the site. Further, usability is the most important attribute that determines the ability of individuals to easily interact with a website and to help establish if a website is successful (Zhu, Vu, & Proctor, 2005).

Even though the importance of website usability has been established, some colleges have struggled to exhibit a user-centered approach when designing their sites (Erickson et al., 2013). Adelman’s (2006) survey of community college websites found many basic usability problems, such as unintuitive navigation, unfamiliar terminology and headings, and unorganized information and design elements. These types of usability issues char-
acterize a systemic problem with community college website design and indicate a clear need for addressing and improving upon the user experience (Adelman, 2006; Mentz & Whiteside, 2003).

One approach for improving the user experience and satisfaction is by investigating how users interact with a website. Usability testing refers to a technique used to evaluate a website by testing it on a representative sample of the user population for the purpose of identifying issues that may decrease usability (Margolin, Miller, & Rosenbaum, 2012). Participants are asked to perform a list of tasks that an individual using the website would be likely to perform, and his or her actions on the website and audio are recorded through usability software (Margolin et al., 2012). This method allows users to evaluate if a website is user-friendly by gathering data on whether tasks were successfully completed and with ease. Usability testing is a “critical first step in creating websites from a user perspective” (Erickson et al., 2013, p. 875), and it plays an important role in the evaluation process of websites.

In recent years, the number of low-cost or free usability testing tools has increased, leading to new opportunities for colleges to evaluate their websites. Usability testing can now be conducted quickly, easily, and efficiently; and because of the variety and availability of tools, colleges can internally analyze and improve their sites. During a website redesign project at Central Carolina Community College in 2014, this two-year institution transitioned from a website that reflected the administrative and organizational structure of the institution to one focused on a user-centered design approach. As part of that process, a website usability testing tool known as Silverback was utilized.

Silverback is a Mac-based software tool that enables the recording, analysis, editing, and playback of usability testing sessions (Clearleft Ltd., 2015). The downloadable software comes with a 30-day free trial and is $69.95 for the full license after 30 days. Due to the easy ability to use the software and the low cost, Silverback is an excellent testing tool that can replace more traditional and expensive usability testing options. The user recording utilizes the Mac’s built-in webcam and microphone and captures the image and audio of participants, as well as computer screen activity. The initial setup for Silverback is straightforward: create a new project, start a session, start recording, and either export the session after recording or view within Silverback. The simplicity of this software makes it simple for anyone to initiate and administer.

The current version of Silverback 2.0 includes the ability to mark multiple sections of a session for exporting and offers assistance for using more advanced features in the help area of the software. The soon-to-be released Silverback 3.0 will have additional features beyond 2.0, including the capability of setting specific user tasks to record, review, and export; control through an Apple iPhone application; a redesigned interface; and more ways to export (Clearleft Ltd., 2015). The only hardware that is needed to operate this software is a Mac computer equipped with an internal or external camera and a microphone.
While Silverback offers colleges an easy-to-use method for website user testing, there are drawbacks to the software. The length of time to export video can be considerable depending on file size and the software is only available on a Mac. However, a variety of free and low-cost tools are available for use with other systems and operate in a similar manner to Silverback. For instance, Morae is a suite of usability testing tools that can be used to capture user interactions on a website, and ClickTale tracks user keystrokes, mouse movements, and provides click heat maps. Premium testing tools are also available and can provide videos of participants interacting on a college’s website with both local and remote testing.

At Central Carolina Community College, Silverback exceeded performance expectations, and the software provided the opportunity to compile actual user feedback on the website, analyze common problems encountered by participants, and helped determine how to enhance functionality and improve the user experience. Nielsen and Tahir (2002) state that usability testing should be an ongoing process in order to develop a site that meets user needs and preferences. Once adjustments are made to a website, testing should be repeated, and usability software should be used until identified issues are addressed and ease of use is achieved (Cockrell & Jayne, 2002).

For community colleges seeking to redesign a website or improve an existing one, user testing software is one of the most efficient ways to uncover usability issues and better meet user expectations. By pairing good usability testing and good web design, the result is a website that incorporates feedback from real users and increases user satisfaction. Regardless of the specific usability software that may be used, Silverback or another option, these tools offer a high-quality and low-cost method for community colleges to improve their virtual face and create a successful website that meets user needs.

References


Copyright of The Community College Enterprise is the property of Schoolcraft College, and its content may not be copied or emailed to multiple sites or posted on a listserv without the copyright holder’s express written permission. However, users may print, download, or email articles for individual use.