When we published the 3rd edition of Designing Successful Transitions in 2010, slightly more than one quarter of entering college students had smart phones. The technologies supporting college student success and our use of them have changed dramatically in the last decade. What hasn’t changed are factors that influence how we select and use technology to facilitate a successful entry into college. Here, we excerpt advice from Brown and Hernandez that remains especially relevant today.

Cite the full version of this chapter:

Considerations and Recommendations

As technological systems continue to evolve and the technological proficiency of our students increases, Moneta (2005) offers several considerations for student affairs professionals as we attempt to understand the value of technology in enhancing our practice and engaging students.

Access

New technologies emerge daily. As professionals we have an obligation to be prudent in our choices of implementing new technologies and consideration must be shown to populations whose access to information about our programs may be impacted. The U.S. Department of Commerce’s National Telecommunications and Information Administration (NTIA) found that “people with lower incomes have lower rates of Internet use and broadband access” (qtd. in Junco & Mastrodicasa, 2007, pp. 45-46). In addition, the report concluded that access to the Internet is directly related to level of education attained. Prior to eliminating paper versions of orientation materials, careful review of the university’s student population must occur. One indicator of accessibility to the Internet can be derived from reviewing the percentages of students who submitted their admissions applications online versus traditional mail.

In addition, consideration must be given to the accessibility of new technologies for students with disabilities. Inaccessible designs of web sites put students with disabilities at a disadvantage in terms of accessing information. Poorly designed web sites can affect the ability of assistive technologies such as screen reader and screen magnification software to accurately
convey the content being presented. Video and audio content (e.g., podcasts and voiced-over PowerPoints) should also be properly captioned or include written transcripts for the hearing impaired. Web forms and down-loadable documents should be properly tagged so that they are readable by assistive technology.

Orientation professionals should consult and partner with information technology (IT) and disability services staff to create accessible web sites for this important population. There are a number of resources available to assist web site authors in developing accessible web content such as WebAIM (http://webaim.org) and the Web Accessibility Initiative through the World Wide Web (W3C) Consortium (http://www.w3.org/WAI).

**Staffing**

Moneta (2005) and Blimling and Whitt (1999) emphasize that professionals working with students must acquire and maintain the technical skills relevant to their roles and responsibilities, understand the milieu of available product and technology solutions applicable to their work, and balance this technical competency on a solid conceptual foundation of knowledge about students. Moneta also suggests the primary competency needed by practitioners is “mastering the skills necessary to analyze student affairs needs and work processes along with increased education to understand better how students perceive and use technology” (p. 5). When considering the implementation of new technologies, orientation practitioners should be able to identify current challenges in the administration and delivery of programs. For example, the creation of online orientation reservation systems arose out of the identification of a workflow issue that could be resolved by automating various processes.

Once a need has been established, staff should consult with IT professionals to recommend the best technology to respond to that need. The necessity of employing or forming strong partnerships with staff who have the technological expertise is critical. Working closely with IT staff from the point of conception can streamline processes for determining which technologies to employ. In addition, these professionals may assist in the application development or identification of off-the-shelf applications best suited for the institution’s budget and current IT environment. Information technology staff members are essential as the need for web applications continues to expand. The University of Minnesota employs a part-time IT staff member to develop and maintain technological systems to support first-year programs. Whether housed in the orientation office or contracted through the university’s information technology department, these members are important in advancing the mission of the orientation office.

**Budget**

Organizational alignment and funding for orientation and first-year offices vary from institution to institution. Some offices are stand-alone departments with large staffs within a larger division of student affairs or enrollment management while others are smaller program areas with minimal staff, housed within another office. While most programs are fee-based, some programs receive additional revenue from other sources such as student services fees, tuition revenue, or development monies. In any case, the decision to use funds on new technology should be conducted in a prudent manner. Many new technologies are very expensive and extremely complicated; therefore, thorough assessment of the need for the technology will prevent wasteful spending on unneeded applications.

Several items should be considered in terms of how the new technology will affect the institution’s budget. First, what are the identified costs? What are the application and hardware costs right out of the box? Second, what are the unidentified costs with the system? Will new hardware such as servers, laptops, and video cameras need to be purchased? Many times companies that
provide support for off-the-shelf applications charge a yearly maintenance fee. Online payment for services using a credit card can lead to an increase in credit card fees. Lastly, the question of personnel costs must be explored. Will the program have to employ more undergraduate, graduate, or professional staff to assist with the new technology? For example, will the new blog and chat feature on the orientation web site require employing an individual to conduct the chats and keep the blogs current?

**Appropriate Uses**

As new ways to use technology to improve services, instruction, and programs in higher education have been identified, a new struggle has emerged—determining the appropriate level of incorporation and application of technology. Kramer (2003) comments that “technology becomes effective only as it is integrated into, supports, and humanizes the service environments for pro-viders and students” (p. 174) That is, technology implementation should focus “on high touch as much if not more than high tech and high effect” (Kramer, p. 174). To this end, Kramer suggests creating and continuing discourse among campus faculty, staff, and administrators pertaining to using technology in humanized ways to provide a seamless learning environment.

The Net Generation of college students are highly connected to each other and the institution using technology; however, research supports that when it comes to learning students still value face-to-face interactions. An EDUCAUSE study revealed mixed responses when it asked students about their preferences regarding technology. Ninety-five percent of respondents preferred traditional face-to-face classes that were supplemented with technology, 2% preferred courses without technology, and only 3% preferred entirely online classes (Caruso & Salaway, 2007). Similarly, Fresno City Community College found that most students preferred traditional face-to-face academic advising to their online academic advising option (Kostin & Unruh, 2005). Students at the community college viewed the online option as a good way to supplement the traditional face-to-face meetings but did not like an entirely online orientation process. Orientation professionals, through meaningful assessment, must determine what new students and related constituents are seeking in terms of information and methods of delivery.

**Recommendations**

The challenge of where to begin will be specific to the institution, mission, campus culture, and students. Whether a technology staff person is in place, campus technology professionals are used, or services are outsourced, here are some recommendations:

1. **Assess what the department can support.** Orientation professionals should engage in discussions with key individuals to develop a technology plan that includes strategies to connect to students. This may include web sites, instant messaging, online orientation, cell phones or smartphones, Facebook, clicker systems, or other multimedia options.

2. **Determine a plan for staffing.** As resources are limited within higher education, the question of managing these initiatives is an important one. When determining a staffing plan for these technologies, program leaders should think long term. While there may be students (graduate or undergraduate) involved in technology initiatives, they will eventually graduate. For this reason, partnering with on-campus IT or a third-party vendor to provide support may be a more effective long-term solution.
2. **Assessing students’ needs and access.** When developing a technology plan, orientation professionals should consider how to assess the student need. Perhaps the creation of a student technology advisory group within the department will assist staying on the cutting edge in meeting the needs of students. A yearly study involving focus groups of students who were previously involved in programs can also help refine the plan to effectively meet their needs.

Access to technology is still a challenge for many students and their families. Determining level(s) of access is extremely important. As referenced earlier, many students and families may not have access to broadband Internet service. Some of the students or family members accessing the web site may have a disability. The use of various scripts and images on a web site can impact students’ or families’ use of technology. Institutional research may be an additional resource to assist in determining level(s) of access for the student population.

**Summary**

Technology, and the way students use it, is changing at a rapid pace. Colleges and universities across the country are experimenting with how to best incorporate these technologies (e.g., online orientation, Facebook, smartphones, text messaging) to assist in the orientation, transition, and retention of new students. Capitalizing on the ever-increasing accessibility of the Web, many programs are using web-based services to streamline outdated processes. For example, many programs are uploading materials to the Internet rather than printing and mailing materials to their families. Beyond streamlining administrative processes, orientation professionals are investing human and financial resources to incorporate new technology into programming aimed at enhancing the academic and social connectivity of new students to the institution. This investment can be costly; therefore, more assessment should be conducted to examine the effectiveness of these new technologies and advocate for their use in orientation programming.

**References**


