Have You Been Oriented? An Analysis of New Student Orientation and E-Orientation Programs at U.S. Community Colleges

This study provides an overview and a snapshot of new student orientation (NSO) and new student e-orientation (NSEO) programs, with a focus on the content and feature analysis of the NSEOs. It offers an overview of currently available NSO programs of 100 randomly selected community colleges from a master list of nearly 900 community colleges in the United States, as well as a detailed analysis of 20 NSEO programs, a subset of these community colleges. The author takes a systematic approach to reviewing and analyzing NSO and NSEO programs currently offered at the community college level, including subject coverage, and major design features critical to student learning. Though the majority of colleges are still offering in-person NSOs, NSEOs are being implemented and developed, with varying formats, subject coverage and features. The results of this study are expected to be beneficial to faculty and administrators in higher education who are evaluating or implementing NSOs or NSEOs. It reveals the challenges and opportunities facing community colleges in an environment with rapidly changing technology, diverse student populations, financial constraints, pressure for increased accountability, and demands to improve student retention and learning outcomes.
Rapidly increasing tuition and living costs, decreasing retention and graduation rates, and domestic and global competition have all contributed to a renewed focus on accountability in higher learning by government, accrediting agencies, parents, and other funding sources (Brown 2012). The increased demand for accountability has moved the issue of underprepared entering freshmen to the forefront of all the challenges facing higher education. Rausch and Hamilton’s (2006) study reveals that conditions affecting attrition include lack of preparation, adopted commitment, unmet expectations, and lack of institutional information. According to Parsad and Lewis (2004), in fall 2000, approximately 76 percent of institutions offered freshmen at least one remedial reading, writing, or mathematics course, with 98 percent of public two-year colleges and 63 percent of private two-year colleges offering remediation.

Community colleges must address increasing demands to better prepare entering freshmen. With advances in technology, many face-to-face interactions, previously limited to the classroom setting, now take place in the virtual world. College educators and administrators responsible for implementing new student orientations (NSOs) face increasing pressure to reduce budgets. According to Oliff et al. (2013), states spent 28 percent less per student nationwide in 2013 than they did in 2008. Utilizing technology is one cost-saving strategy.

Online learning is an important aspect of community college students’ academic experience (Miller, Fishman and McCarthy 2015). As a result of curricular and pedagogical changes in higher education—including technological advances—new student orientation sessions increasingly are being offered online (Miller and Pope 2003, Stewart et al. 2013). What is the current state of new student orientation (NSO) programs? How are sessions being offered to freshmen? How are community colleges coping with gaps in the preparedness and academic skills of graduating high school seniors and entering freshmen? How are new student e-orientations (NSEO) being designed and implemented in the community college setting? This study examines the ways in which community colleges throughout the United States are answering these questions.

Existing studies and scholarly communications regarding the design and implementation of NSO and NSEO programs tend to focus on individual cases. A more systematic approach is needed to provide an overview of how U.S. community colleges’ NSO—particularly e-orientation—programs are meeting the needs of freshmen.

From a list of nearly 900 community colleges, the researcher randomly selected 100 and carefully reviewed their orientation programs on the basis of the information provided on the institutions’ websites. Ultimately, 20 colleges offering new student e-orientation sessions (NSEO) were invited to participate in the study. The study sought to determine whether a new student orientation program was offered, in what format it was delivered, and whether a link to the orientation program was publicly accessible via a Google search. Key design fea-
tures of each NSWO program—for example, navigation, ease of use, interactivity, segments or topics covered, and multimedia components, as well as the inclusion of assessment modules—were thoroughly examined.

The findings offer a synopsis of how U.S. community colleges are conducting orientation sessions for their new students. The results of this study are expected to be useful to faculty and administrators who are evaluating or implementing NSWOs and NSWOs. The findings will also help inform the development of effective strategies for increasing student retention and success.

Literature Review

It is common practice for U.S. universities and colleges to offer orientation sessions to newly admitted freshmen (Koch and Gardner 2014). The findings of a national survey of first-year practices revealed that 96 percent of all U.S. postsecondary institutions offer some form of orientation program (Barefoot 2005). According to a study of 1,373 chief academic officers at four-year colleges and universities, of the 442 responses to the question regarding pre-term orientations, “No one checked that their institution did not have orientation” (Barefoot, Griffin and Koch 2012, 6). The history of higher learning institutions’ offering of dedicated programs (for example, tutoring services) dates back to the 1600s. Harvard University offered the earliest informal orientation sessions by employing tutors to help younger students transition successfully to college life. Particularly over the past 25 years, orientation programs have flourished (Mayo 2013).

Orientation sessions have been adopted widely by institutions of higher learning as part of a concerted effort to improve student retention and academic performance. According to Ramist (1981), the orientation program is considered a necessary good start and “takes on an especially important role” to “retain students by helping them make the most of their college experience” (16). Pascarella, Terenzini, and Wolfe’s (1986) study suggested that “the orientation experience impacted on freshman persistence largely by facilitating a student’s initial ability to cope with a new set of social challenges in an unfamiliar environment” (170). Chickering and Hannah (1969) suggested that student orientations be expanded to include parents so they could better support their children throughout their academic journey. Coburn and Woodward (2001) also discussed the inclusion of a parent orientation in new student orientation programs.

Orientation programs have been considered essential to student retention and academic success (Tinto 1987) as they facilitate student learning in the areas of the transitioning process, academic integration, and personal and social integration (Robinson, Burns and Gw 1996). According to Tinto (2006), the first month of college enrollment is critical to the retention rate as “the first year is the critical year in which decisions to stay or leave are most often made” (8). Increasing retention and graduation rates remains at the top of the list of institutional challenges. Government and other funding sources subject college educators and administrators to an ever-increasing number of questions regarding the effectiveness of the educational enterprise and the reality of budgetary challenges (Wild and Ebbets 2002).

The focus on accountability in higher education started in the 1980s and intensified in the 1990s so as to include productivity and measures of institutional effectiveness (Leveille 2006). Discussions of accountability also included the business or market models that centered on meeting financial goals (Leveille 2006). In 2006, the Commission on the Future of Higher Education issued a report that called for “the creation of a robust culture of accountability and transparency throughout higher education” (U.S. Department of Education 2006, 21). The emphasis on accountability and student learning outcomes attracted more attention as President Obama put higher education on notice because of its high cost and stressed in his 2012 and 2013 State of the Union addresses that he would hold colleges accountable for cost, value, and quality (The White House 2012, 2013). Carey (2007) stated that higher education “needs accountability that is real” (24).

Internal and external pressures, which include demands for greater accountability as well as increased retention and graduation rates, require faculty and administrators to join forces and collaborate more closely to utilize institutional services such as orientation sessions to support overall curriculum needs. In fact, using orientation sessions intentionally to help build a community of learners has been a primary goal of most NSWO programs (Poirier, Santanello and Gutchup 2007). It is common for professional schools to offer discipline-specific orientation sessions. Poirier, Santanello and Gutchup (2007) stated that the weeklong orientation,
focused on nurturing the “three Cs” of community—communication, cooperation, and collaboration—“helped to build a foundation for the development of a community of learners” (9). In describing their retention initiatives, fourteen of 49 institutions in the Illinois Community College System created or revised student orientation processes in an effort to improve retention. The development of a three-phase orientation program customized for different segments of the student population; the provision of more in-depth information about support services; and the integration of academic advisors into the orientation team were some examples of changes the colleges implemented (Illinois Community College Board 1995).

Advances in instructional and learning technologies, particularly with an increasing number of courses being offered online—coupled with challenges such as budget cuts, staffing shortages, diverse student populations, and outcomes assessment demands—mean that faculty and administrators continue to explore ways to utilize technology to enhance the student experience and outcomes of orientation programs. Miller and Pope's (2003) research on community colleges’ new student orientation programs found that the most effective ways to integrate technology were to include the provision of “email accounts to new students when they arrive at campus,” to emphasize “the importance of technology,” to use “virtual tours of campus online,” and to have “an activity such as an online treasure hunt on the college website” (19). Researchers also explored ways to utilize social media to build and broaden students’ social and academic connections, to distribute information about campus, and to provide support while students are away from campus (Hottell, Martinez-Aleman and Rowan-Kenny 2014).

Cho (2012), Jones (2013), and Garza Mitchell (2014) focused their research on orientation programs for students taking online courses, but their findings were relevant to the overall development of new student orientations delivered in an online format. Jones (2013) described the process that a rural community used to develop a mandatory NSEO that met students’ needs. Students provided positive feedback and were retained at a higher rate. According to Cho (2012), little informa-
tion existed in the literature regarding how to develop an online student orientation; his research described the process of developing an online student orientation in higher education, including the analysis, design, development, and evaluation phases.

A study of more than 1,400 students in Canada revealed factors that students considered most important in helping them reach their goals: a future orientation, persistence, and executive functioning skills such as time management and organization. In contrast, “stress, inadequate academic skills, and distractions are detrimental to student success in university” (Stehnicki, Nordstokke and Saklofske 2015, 214). Hollins (2009) discussed the benefits of offering students more than one form of orientation to college. The study found a positive correlation between a combination of interventions aimed at targeted populations, grouped by pre-enrollment characteristics, and student success (Hollins 2009). In addition, Mahlberg’s (2015) study of 186 first- and second-year community college students enrolled in ten formative self-assessment courses and six traditional assessment courses found a positive correlation between formative assessment and retention. Alnawas (2015) advocated a formative assessment over a reflective measure—a higher-order construct—for student orientation.

In terms of design features, the following components were included: modules or segments, interactive activities, and multimedia components utilizing video clips (Cho 2012; Garza Mitchell 2014; Jones 2013; Wozniak, Pizzica and Mahony 2012); information on a Course Management System (CMS) or Learning Management System (LMS) (Cho 2012; Garza Mitchell 2014; Jones 2013); self-paced learning environments (Cho 2012; Jones 2013); assessment (Garza Mitchell 2014; Jones 2013; Wozniak, Pizzica and Mahony 2012); and multiple attempts at assessment questions (Garza Mitchell 2014; Jones 2013). With regard to online orientation program goals, the following themes emerged: improving preparedness and easing students’ transition into an academic world (Jones 2013; Wozniak, Pizzica and Mahony 2012); helping students understand the nature of college life and develop self-awareness about learning skills (Cho 2012); improving retention (Jones 2013); and familiarizing students with the LMS environment for learning (Cho 2012).

As faculty and administrators at institutions of higher learning worked to improve student orientation programs, including the development and implementation of online orientation programs, valuable lessons were learned. Student participation and feedback in the design process proved critical (Wozniak et al. 2009).

Community colleges now admit more students from diverse backgrounds. Some of these students are technology-savvy, but others may find online orientation sessions challenging. Transfer and non-traditional students may also find it difficult to adjust if their orientation programs are designed for traditional students.

Budget cuts, the combined result of decreased federal, state, and other funding, have contributed to reductions in faculty and staff as well as in student services (Mitchell, Leachman and Masterson 2016). It is critical that faculty and administrators continue to improve the effectiveness of NSOs and at the same time explore ways to serve students through new online or blended orientation formats.

Methodology

A listing of community colleges by state, available from the Community College Finder tool (American Association of Community Colleges 2016), was added to an Excel spreadsheet and then sorted alphabetically to create a master list of 891 community colleges. The goals of the current study were two: (1) to randomly select community colleges so their orientation programs could inform an overview of the current state of NSOs; and (2) to identify a subset of at least 20 percent of community colleges, each one of which would have an NSEO openly accessible via the Internet.

A randomizer program was used to generate multiple lists of community colleges—20 per drawing—for inclusion in this study. Selected colleges were reviewed on the basis of information gathered from Google searches of their websites to identify those with openly accessible NSEO programs.

Unsorted sampling without replacement was deployed so that the same college would not be randomly selected twice and ordering would not matter. The randomizing process was then repeated to identify a total of 100 community colleges, from which 20 with accessible NSOs were generated as the sampling NSEO population. If the online NSOs provided guest or public access allowing the author to review and examine their features, they were included in this study.
Results

The author analyzed information obtained from 100 institutions randomly selected from the master list of 891 community colleges as well as from a subset of 20 institutions offering an openly accessible NSEO program.

A Glance at New Student Orientation Programs

Demographics

The 100 randomly selected community colleges were located in 38 states; 50 were located in the following states: California (13), Ohio (7), New York (7), Michigan (6), Texas (5), and Washington, North Carolina, and Illinois (4 each).

The public, independent, or tribal status of the 100 community colleges was verified by referring to AACC’s Community College Finder tool. Seven of the 100 randomly selected community colleges did not provide information regarding type or demographic data; the remaining 93 were public.

The community colleges in this study varied by size and population served. Enrollment at 93 of the 100 community colleges ranged from 463 to 29,999 (see Figure 1).

Enrollment and student demographic data for the 93 community colleges were obtained from AACC (see Table 1, on page 18).

Each college’s orientation program was reviewed according to what information about its student orientation program was available via Google and the format in which the program was offered. If the information was available, the length of the NSO, whether it included an assessment segment, and other notable characteristics of the NSO were analyzed.

Google Search

When searching “[college name] student orientation” as the keywords via Google, the author was able to identify 78 institutions (78%) that had links that directed to web pages containing information about new student orientation on their respective institutional websites. Fourteen institutions (14%) shared no information about their NSOs on their websites. The websites of the remaining eight colleges (8%) presented partial infor-
Table 1. Enrollment and Student Characteristics of the 93 Community Colleges*

<table>
<thead>
<tr>
<th>Enrollment (93 of 100 Community Colleges)</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>37.36</td>
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<tr>
<td>Part-Time</td>
<td>62.64</td>
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<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Male</td>
<td>39.92</td>
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<tr>
<td>Female</td>
<td>60.08</td>
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<tr>
<td><strong>Race/Ethnicity</strong></td>
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<tr>
<td>White</td>
<td>68.30</td>
</tr>
<tr>
<td>Minority (e.g., Hispanic, Black, Asian/Pacific Islander and Native American)</td>
<td>31.70</td>
</tr>
</tbody>
</table>

* Based on the AACC data

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information—e.g., event announcements, press releases, or links to outdated web pages or error messages—about their NSOs.

**In-Person, Online, or Both**

Of the 100 community colleges, 46 (46%) offered only in-person NSOs, 21 (21%) offered online-only NSOs, 18 (18%) offered both in-person and online NSOs, and 15 (15%) offered limited or no information about their NSOs on their websites.

**Overview of In-Person NSOs**

Most websites listed dates and times of the NSO sessions but offered limited information about the topics covered or the length of the sessions. Several colleges’ websites indicated that the in-person NSO would last between 90 minutes and three hours, though some specified six hours or a one-day class. One college required that new students stay overnight to attend its two-day NSO. A small portion of the colleges (fewer than 10 percent) stated specifically that the NSO was required. For the limited number of colleges that provided such information, the duration of their online NSOs was typically between 30 minutes and one hour. It was common for the college to require students to have an official student ID or account number prior to registering to attend the orientation session. Only two colleges provided tests or surveys for assessment purposes for the in-person orientation sessions.

**New Student e-Orientation Programs (NSEO)**

These twenty programs were carefully examined. In addition to information about orientation gleaned from Google searches, elements such as format, requirement, length, and assessment were verified.

**Demographics**

The 20 randomly selected community colleges with openly accessible NSEO were located in eleven states: California (7); Michigan, Texas, and Washington (2 each); and Arizona, Georgia, Kentucky, Louisiana, Minnesota, North Carolina, and Wisconsin (1 each).

The community colleges in this study varied in size and population served: enrollments ranged from 1,968 to 29,999 (see Figure 2, on page 19).

Enrollment and student demographic data for the twenty community colleges were obtained from AACC (see Table 2, on page 19).

**Google Search**

For all 20 colleges in this study that offer online NSOs that allow open or guest access, 100 percent of the Google searches with “[college name] student orientation” as the search term yielded results that led to the respective colleges’ orientation web pages. Only one contained an error page.

**In Person, Online, or Both**

Of the 20 colleges that offer online NSOs, nine (45%) offered only NSEO, and eleven (55%) offered both online and in-person NSOs. Ten (50%) presented information on their websites indicating that the respective NSO was required.

**Length**

Most colleges did not specify the length of their online NSOs. For the four that did, the NSO ranged between 30
minutes and four hours. Two colleges stated specifically that students could revisit the online NSEO at any time and as often as they liked.

Assessment

Of the colleges that offered an NSEO, ten (50%) included an assessment tool such as a quiz or embedded questions.

Categories

The NSEO programs were of two types: traditional and non-traditional. Traditional online programs include those that utilize text, links, pictures, and multimedia components. Non-traditional e-orientation programs utilize PDFs, PowerPoint presentations, and video. The PDF was 32 pages addressing 25 topics. Each of the two PowerPoint presentations contained more than 30 slides. The video orientation was nearly six minutes long. Because the current study sought information regarding the design of dedicated, comprehensive online orientation programs, these four NSEOs were excluded from further examination.

Table 2. Enrollment and Student Characteristics of the Twenty Community Colleges *

<table>
<thead>
<tr>
<th></th>
<th>%</th>
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<tbody>
<tr>
<td><strong>Enrollment (20 of 20 Community Colleges)</strong></td>
<td></td>
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<tr>
<td>Full-Time</td>
<td>31.34</td>
</tr>
<tr>
<td>Part-Time</td>
<td>68.66</td>
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<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Female</td>
<td>55.38</td>
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<tr>
<td>White</td>
<td>47.01</td>
</tr>
<tr>
<td>Minority (e.g. Hispanic, Black, Asian/Pacific Islander and Native American)</td>
<td>52.99</td>
</tr>
</tbody>
</table>

* Based on the AACC data
Table 3. Average Number of Screens Included in the Sixteen NSEO

<table>
<thead>
<tr>
<th>Average Number of Screens</th>
<th>Number of NSEOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 Screens</td>
<td>6</td>
</tr>
<tr>
<td>5-7 Screens</td>
<td>4</td>
</tr>
<tr>
<td>9-10 Screens</td>
<td>3</td>
</tr>
<tr>
<td>13-14 Screens</td>
<td>3</td>
</tr>
</tbody>
</table>

to a high of fifteen; the combined total number of topics addressed was 147. Among
the sixteen NSEO, seven (43.75%) included eight segments, four (25%) included
nine segments, two (12.50%) had seven segments, two (12.50%) had thirteen segments, and one (6.25%) had fifteen seg-
ments. All 147 segments of these sixteen NSEO were coded and tallied. Each
topic was carefully examined to generate the unique num-
ber of modules or categories.

Screens

Among the sixteen NSEO, the total number of screens
was 854; the number of screens per NSEO ranged
from eight to 125, with an average of 5.81 per segment
or topic and an average of 53.38 per online orientation
program. (See Table 3 for the average number of screens
included in the NSEO pro-
gams.)

Table 4. Five Most Commonly Used Segments by the Sixteen NSEO

<table>
<thead>
<tr>
<th>Five Most Commonly Used Segment Headings or Topics</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome; Welcome Message; Instructions</td>
<td>12</td>
</tr>
<tr>
<td>Student Life; Campus Life; Student Organizations;</td>
<td></td>
</tr>
<tr>
<td>Events; Student Activities</td>
<td>11</td>
</tr>
<tr>
<td>Student Conduct; Safety; Rights and Responsibilities; Policies</td>
<td>11</td>
</tr>
<tr>
<td>Student Services; Resources; Student Support Serv</td>
<td>10</td>
</tr>
<tr>
<td>College Success</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 5. Categories Based on Contents Covered by the Sixteen NSEO

<table>
<thead>
<tr>
<th>Content Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs; Enrollment; Registration; Financial Aid</td>
<td>51</td>
</tr>
<tr>
<td>Resources; Services</td>
<td>29</td>
</tr>
<tr>
<td>Quizzes; Conclusions; Certificates; Next Steps</td>
<td>14</td>
</tr>
<tr>
<td>Welcome and/or Instructions</td>
<td>12</td>
</tr>
<tr>
<td>Student Life; Campus Life; Student Activities</td>
<td>11</td>
</tr>
<tr>
<td>Student Conduct; Safety and/or Rights and Responsibilities; Policies</td>
<td>11</td>
</tr>
<tr>
<td>Technology; Student Portal; ePortfolio; Blackboard</td>
<td>7</td>
</tr>
<tr>
<td>College Essentials; Glossary; Tips</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>147</td>
</tr>
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</table>

NSEO Specifics

The sixteen NSEO programs that were determined to be
“traditional” were analyzed further.

Table 4. Five Most Commonly Used Segments by the Sixteen NSEO

Segments, Topics, and Content

The sixteen traditional NSEO addressed an average of
9.19 segments or topics, ranging from a low of seven

Categories of Content Covered

Segments or topics of the sixteen NSEO were reviewed
and categorized according to their content. Similar seg-

20
ments were merged. (See Table 5 for the categories of content as well as their respective numbers of occurrences.)

Other Topics

Beyond the top categories of content, “college success” was cited often by the e-orientation programs. Resources, tips for college success, glossaries, and basic academic information were offered. With regard to the 51 occurrences of topics related to programs, enrollment, registration, and financial aid, the phrase “first steps” was used four times; the phrase “getting connected” was used once. Other common phrases were “financial aid,” “payment,” and “payment for your education.”

Key Design Features

The sixteen traditional NSEO’s were examined in terms of their design, layout, segments or modules, and key features such as interactivity, ease of use, navigation, language options, and technology used. These features were selected on the basis of literature regarding user-interface design as well as analysis of web-based tutorials, including multimedia tutorials (Cho, Cheng and Lai 2009; Mackey and Ho 2008; Somoza-Fernandez and Abadal 2009). Table 6 presents a comparison of the programs’ key features. (To compare the NSEO’s, each category was assigned one point, and the total number of points was tallied.)

◆ Navigation and ease of use: Online orientation programs with “back/next,” “backward/forward,” and/or “menu” buttons were the most user friendly as the buttons tended to make it easier for students to navigate the various segments and screens. Thirteen (81.25%) of the sixteen traditional NSEO’s provided such navigation tools.

◆ Language options and ADA-assisted learning considerations: Five (31.25%) of the NSEO’s offered their content in two to four languages from which students could choose. In addition to English, NSEO’s were offered in Spanish, Armenian, Chinese, and Korean. Four (25%) of the programs took into account ADA considerations such as

<table>
<thead>
<tr>
<th>Navigation</th>
<th>Multimedia</th>
<th>Language Options</th>
<th>ADA / Closed Caption / Scripts</th>
<th>Quiz / Questions</th>
<th>Category</th>
<th>Total Score</th>
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<tbody>
<tr>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>W</td>
<td>3</td>
</tr>
</tbody>
</table>

* D: Dedicated  W: Web-based  C: CMS/LMS Embedded
as inclusion of an accessible version. Other design elements included the provision of audio, closed caption, and transcript files.

◆ Assessment and quizzes: One feature that the NSEO modules had in common was an assessment component. Of the sixteen NSOEs, eight (50%) had a quiz component or embedded questions, including five (31.25%) with a progress indicator. When an answer was presented, the correct answer, with an explanation, was displayed. The answers were color coded, with green and red texts indicating correct and incorrect answers, respectively. The “progress” section tracked the number of questions answered. When all the questions were answered, the student was presented with a “congratulations” message and directed to take the next steps.

◆ Multimedia components: Fourteen (87.5%) of the sixteen NSEOUs used multimedia components such as video and audio clips along with text and pictures. Often, students were featured in these videos and sound files. They also narrated quiz segments or embedded questions.

◆ Interactivity: In terms of interactivity, all sixteen NSOEs required that students click the “back/forward,” “backward/forward,” or menu buttons to navigate the orientation materials. Additional components increased interactivity. For example, some programs were designed in such a way that no “next” or “back” buttons would appear until the sound file was complete. Some programs included similar features with sequential or conditional clicks.

◆ Technology: Many NSEOUs included segments on technology—student portals, CMS or LMS systems such as Blackboard, as well as ePortfolio systems. They also required students to use their student ID to complete the orientation.

◆ Presentation styles and delivery environments: Even though all these NSOEs were delivered via the Web, their delivery environments and presentation styles varied. Of the sixteen online programs, ten (62.5%) were dedicated programs, five (31.25%) were similar to traditional websites, and one (6.25%) was designed in the Moodle Course Management System (CMS).

Additional Discussion

Overall, the twenty online orientation programs can be divided into four categories: dedicated (50 percent), web-based (25 percent), CMS/LMS embedded (5 percent), and pseudo NSOEs (20 percent). They were reviewed according to the following aspects:

Presentation Style

Dedicated NSOEs shared the following characteristics: They often were unique in their presentation style, differing from other web pages on the college’s website. The separation from regular websites might help students recognize the orientation program in a formal way. Web-based NSOEs had the benefit of including more content and easy linking to other sections and pages on the colleges’ websites even as they risked information overload and sometimes might cause distraction and lose the viewers as they browsed other parts of the websites.

Web-based NSOEs might be relatively easier to implement. Two of the five web-based NSOEs in this study were contained in a frame and were presented in a way that differed from other web pages on the websites. These orientation programs were text heavy even though they also utilized video files, sound clips, and PowerPoint presentations.

Student-Centered Design Features

The study revealed that five of ten dedicated NSOEs—those scored “5” in Table 6—were comprehensive, well-organized, and rich in terms of the information provided. They had good design features, such as a navigation system utilizing “forward” and “backward” buttons as well as menus to permit easy navigation between segments or modules and subcategories within a segment.

Of the sixteen NSOEs, five took a more comprehensive approach in terms of language options, ADA, and assisted learning considerations such as the use of closed captions and scripts. Multimedia elements incorporating text, pictures, sound files, and background music were a prominent part of these NSOEs. In an attempt to keep students focused on the orientation content, these NSOEs minimized the use of URLs and links to external web pages. Interactivity was another primary consideration. Anchors were used to bring in additional screens
within the online orientation environment. Some programs presented tiered or conditional content based on information supplied by the student.

Quizzes or questions were designed to engage students; some NSEO’s embedded questions throughout their orientation program. Students were prominently featured in the orientation programs and often narrated or asked the assessment questions. Progress bars were another feature commonly used by each of the NSEO’s that scored five points (see Table 6). The progress bar provided prompt feedback to students and indicated how well they were answering the embedded questions. Students could view the program segments in any order they wished, though they had to review all the segments in order to complete the whole program.

All of the NSEO’s that scored five points included ADA version and language options. Some community colleges are clearly ahead of their peers in their acknowledgment of the needs of the minority and part-time students who comprise a significant portion of their enrollments.

Another notable feature of the five dedicated NSEO’s was a timer for each segment. Not only did the timers provide students with information about how long each segment might take, but they also offered students a sense of control of their learning process.

Rigid Navigation and Lack of Timers

The remaining dedicated NSEO’s that earned two to three points had easy navigation buttons and multimedia components such as video and audio clips. However, their interactivity and ease of use were not as good as those programs that scored five points. Two of the NSEO’s used a linear structure that required that students move sequentially from screen to screen and segment to segment. One NSEO required students to answer all of the questions correctly in order to proceed. This linear structure made the orientation programs rigid, which in turn affected their navigation and interactivity. According to Wozniak, Pizzica and Mahony (2012), it is essential to have clear navigation, “including prompts and supports that acknowledge non-linear pathways of student access” (908). The lack of a timer, such as a sliding bar, made it more difficult for students to gauge their learning and make necessary adjustments.

Information Overflow and Links to Non-Orientation Sites

The study revealed that web-based NSEO’s were likely to incorporate too much information, though two also relied heavily on text-based content. It is important to maintain balance between the information included in the orientation and supplemental materials in the orientation environment. Designers of online orientation programs must make informed decisions about format and content, to include determining to what extent external websites should be included and resource guides or student handbooks should be added.

CMS-/LMS-Embedded NSEO’s

One NSEO was developed in a Moodle CMS environment. The guest account allowed the author to gain access to the CMS site. Students had to log in with their own accounts, so it was easier to familiarize them with the CMS system. Another benefit was that individual assessment became a real possibility. A downside of the online orientation module was that its segments only included video clips. Nevertheless, with careful consideration, it can be advantageous for students to access orientation content within the CMS environment.

Pseudo NSEO’s

The four pseudo NSEO’s included in this study included PDF, PowerPoint, and video files. They were relatively easy to implement but lacked interactivity and flexibility. Quizzes were included to assess students’ retention of information from the videos. These may represent good first steps toward more comprehensive NSEO’s.

Conclusion

This study of 100 randomly selected community colleges and of 20 colleges’ accessible e-orientation programs for new students revealed the following:

♦ Orientation sessions were available in multiple formats—in person, online, or both—but community colleges continued to rely on the traditional face-to-face format.
♦ New student orientations using the online format continued to be offered by community colleges.
♦ Presentation and delivery methods of new student e-orientations varied: Community colleges in California tended to offer the most robust NSEO
modules (defined as those with the most comprehensive design features, such as interactivity, multimedia components, language options, ADA and assisted learning considerations, navigation, and ease of use).

- Some NSEOs were delivered via CMS or LMS environment; others were hosted on the institution’s website. Web-based NSEOs may be relatively easy to develop, but consideration should be given to rendering them distinct from the rest of the institution’s website, particularly given their “flow” and the amount of information to be included.

- Video and sound clips were common elements in the NSEOs. Students often narrated and otherwise appeared in online modules, particularly when soliciting responses to quiz questions. Ease of use and contents are important factors that lead to continued usage, so those designing or revising NSEOs should be sure to include sufficient information to ensure student success without overwhelming them with information (Cho, Cheng and Lai 2009).

- The inclusion of audio and video files narrated by students and embedded images of students suggest that the designers of NSEOs agree that it is critical to understand the student population and to keep key stakeholders involved in the NSEO design and implementation process.

The current study revealed that although the majority of community colleges continue to offer in-person NSOs, NSEOs with varying formats, subject coverage, and features are being implemented and developed. Choosing one format over another is not easy. Additional data on the impact of orientation programs on learning outcomes, retention, and graduation rates need to be collected and analyzed. Future studies may include more in-depth comparisons of orientation programs’ formats, delivery methods, and content, as well as the impact of diverse student populations and learning styles on the design of NSOs and NSEOs.

Institutions of higher education recognize the necessity and urgency of utilizing technologies to positively impact core service operations, including new student orientation sessions. This study of 100 community colleges with a focus on 20 colleges offering openly accessible NSEO programs provides a snapshot and systematic analysis of NSOs and NSEOs, including content of the programs and key features pertinent to the preparation of freshmen entering community colleges.

References


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