

# AN INVESTIGATION INTO WEB-BASED PRESENTATIONS OF INSTITUTIONAL ONLINE LEARNING ORIENTATIONS

Veronica F. McGowan, Southwestern Oklahoma State University

---

## ABSTRACT

*Online learning orientation may be particularly important in a virtual setting where students are unfamiliar with the learning platform, unsure if their available computer hardware and software will meet requirements, and hesitant that they have the learning orientation to progress. Given that virtual students are at risk for receiving less advisement than their on-ground counterparts, proactive institutional provision of tips and resources for experiencing success in an online setting may foster greater achievement for this vulnerable population. This research studies a sample of online learning orientations provided by American higher educational institutions in order to determine content, delivery, and feature prominence in current implementations. Hopefully this study will help inform campus implementations in the consideration of various factors and the adoption of practices that benefit student audiences.*

*Keywords: Online Learning Orientation, Student Success*

## INTRODUCTION

Orientation is a key process in all good learning communities to establish policies, communication procedures, and provision of information. Given that online course retention (Allen & Seaman, 2013) and engagement (Helms, 2014) still lags behind face-to-face course offerings, interventions, such as new student orientations, have the potential for improving the retention rates of online courses. In fact, orientation to college life was considered the eighth most important finding for improving attendance in a study of college interventions conducted by the Minnesota Office for Higher Education (Walters & Ayodele, 2011). Research shows that new student orientation programs can reduce anxiety (Hullinger & Hogan, 2014); improve awareness of class, social, or racial issues (Estrada, Poulsen, Cannon, & Wiggins, 2013); and develop student autonomy that impacts educational planning (Vlamiš, Bell, & Gass, 2011).

This study explores the current state of online

learning orientations in order to determine content, delivery, and feature prominence in implementations. The generic term “online orientation” may refer to two content areas typically offered together: 1) orientation to the school, campus, resources, people, and offices, and 2) orientation to the online Learning Management System (LMS) and other online resources. This article focuses on the later, although the presence of the former is a prevalent theme. A common naming convention found in the study was “Online Learning Orientation,” or some derivative or similar name that indicated resource materials serving an online student population.

## DEFINITIONS

The focus of this article is online learning orientations, typically consisting of an introduction to the LMS and addressing good student practices in distance education settings. The use of the singular word orientation is not interchangeable with “online learning orientation,” but it conveys

a generic sense that covers any program or site introduction.

## LITERATURE REVIEW

Virtual help systems can be classified into proactive and reactive offerings. While an online learning orientation clearly falls into the proactive category, when provided to students as a persistent resource it can also serve as a reactive resource, such as a reference library. This literature review will examine studies and field discussion related to: 1) the use and development of online orientations; 2) audience effectiveness; and 3) orientation attendance. As the literature review did not reveal any robust studies comparing online learning orientation content, delivery, and features related to the focus of this study, related citations addressed in the discussion section argue for online orientation component prominence.

Orientation geared towards remedying issues in online instruction seems to offer promising rewards in the mitigation of withdraw rates (Gilmore & Lyons, 2012; Jones, 2013; Taylor, Dunn, & Winn, 2015) although results may be mixed concerning students enrolled exclusively in online programs with older online students retaining at higher rates (James, Swan, & Daston, 2015). Other perceived benefits of online orientations include increasing the sense of community (Byrd, 2016) and improving student comfort level (Goldman, Turnbow, Roth, Friedman, & Heskett, 2016). Shen (2016) found that regardless of format, both online and face-to-face library orientations were effective for improving information literacy learning goals. However, the mere presence of an online orientation offering does not guarantee success. Experiences of online orientation developers indicate that the orientation must be easy-to-use, with details specific to the setting and LMS, and it must reflect the student's point of view (Dixon et al., 2012). Herx (n.d.) expanded on this point by noting that an orientation design of short tasks countered student frustration factors. Criticism of online learning orientations include a focus group study that noted that students aren't retaining information because the orientation implementations often fail to engage students (Johnson, Meija, & Cook, 2015), perhaps because it is often offered as a one-way broadcast instead of in a more interactive way. Presutti (2016) would seem to agree with an explicit citation of Garrison et

al.'s (1999) advocacy of the importance of building an online community as grounding literature to support the inclusion of a chat feature in an online orientation. In addition, an emerging trend as part of the orientation process is the inclusion of student goal setting or achievement plan activities. Some institutions counter this criticism by making expectations clear in orientation information (Wake & Bunn, 2015) or by offering such activities in a just-in-time framework, such as pretesting to counter anxiety (Yan, Taylor, & Cao, 2016). Herx (n.d.) embraced expectation clarity by requiring students to use a checklist to mark completed items before obtaining the next module of information.

Some student audiences may be particularly receptive to online learning orientations. Gains in student retention, socialization, and specific learning outcomes were found in studies of online learning orientations provided to graduate students (Benavides & Keyes, 2016). Graduate students are well-suited to online learning because of their increased self-regulatory strategies, such as their use of always available orientation materials, coupled with their increased experience with formal learning and maturity (Koc & Liu, 2016). In addition, high-performing students access the full range of course materials more frequently and have a higher on-time assignment submission rate than students at the lower end of the spectrum (Lawanto, Santosi, Lawanto, & Goodridge, 2014). Lesser findings of the Lawanto et al. study indicated that technical problems or limitations may have been a factor in underperformance, so additional measures related to orientation might include passing a technical assessment as well as an online learning assessment to ensure greater student preparation prior to coursework. Finally, developers of an online orientation aimed at Generation Z students, i.e., students born in the mid-1990s with whom social media usage is a defining feature, found that greater student interaction was a key factor in overcoming a negative experience regarding content and delivery method (Swett, 2016).

In addition, research has shown that some student characteristics may help adjustment to or performance in distance education. Hung, Chou, Chen, & Own's (2010) findings may have several implications for online orientations; in particular, findings of low learner self-direction suggest that imposing a firm structure, such as automated task

completion mechanisms, may foster a supportive environment for learners. Other Hung et al. findings, including high self-efficacy, imply that there is less of a need for motivational information and drivers in an orientation program. In addition, due to Wang, Shannon, and Ross's (2013) findings that students with previous online learning experience had better-developed learning strategies, orientation implementations may consider removing requirements for repeated orientation completion for students who have previously enrolled in a course, unless some significant change has occurred, such as the adoption of a new learning management system platform.

Despite the effectiveness of orientation programs, some studies have found poor participation for prospective online students in orientation programs. While Miller and Erisman (2011) studied effective orientation practices, when low participation rates occurred, they attributed those findings to the students' perception that they already knew the content. A related study by the Center for Community College Student Engagement found that only 38% of reporting institutions required mandatory orientation (McClenney, 2011). Field discussion has noted coursework underperformance by millennial students due to assumptions of competency based on past learning experiences (ECDL Foundation, 2015). Southerland and Dodd (2012) found that lack of consequences for attending an optional orientation may have contributed to a decline in attendance despite success rates attributed to the experience. In addition, a paper by Forsyth Technical Community College (n.d) found a significantly lower attendance in student participation for mandatory online orientations versus face-to-face sessions, although the online orientation did itself represent a significant improvement. Taken together, these studies suggest that institutional participation targets for online orientations are not well-established.

While the pool of grounding literature on online learning orientation effectiveness is small, some insights from the literature review were influential in this study design. A coding category was included to determine the extent that the online learning orientation is a persistent presence within the program or institution. In addition, notation of the sponsorship of the orientation will determine

themes about audience focus. Finally, this study's data aggregation of content innovations will determine a theme on how type of content engages the orientation participant.

## METHOD

Website content analysis continues to be field-validated as an authentic and systematic method for identifying characteristics and making inferences (Jose & Lee, 2007; Kwon & Jeong, 2015). We collected qualitative and quantitative data about 234 distinct web pages of a stratified, strategic sample consisting of 65 institutions. In order to identify concepts devoted to online orientations, we used an a priori approach, such as that recommended by Weare and Lin (2000), and deployed a developed coded instrument of a master list of online learning orientation characteristics in both a pilot study and then, with minor revisions, in the full research study. Institutions selected for analysis equally represent regional areas of the United States and institutional characteristics of three Carnegie-class institutional categories: doctoral universities, master's colleges and universities, associates colleges, and one non-Carnegie classification of private institutions.

The coding instrument was developed through an iterative approach to themes from the literature review, including the need for success strategies in orientation programs and the importance of web hierarchy and navigation, amongst others. Each coding category was refined into subcategories that reflected prevalent themes of that category; for example, subdivisions for the Success Strategies category explored websites for findings related to provision of time management, anti-plagiarism, and effective communication in an online setting. Therefore, coding took the form of quantitative findings of prevalence. At the end of the pilot study, underdeveloped coding categories became potential subjects for merging with related categories while overdeveloped categories were refined as theme indicators. In order to ensure consistency, two coding passes conducted by three separate researchers occurred; discrepancies among findings were resolved by consensus agreement and an additional pass conducted by the team (Hsieh & Shannon, 2005). While the overall methodology represents a qualitative approach, significance tests present relevant findings and tables in the Results section show corresponding descriptive

statistics computed for each observation in our data set. Therefore, presentation in corresponding tables in the Results section is significant with the most important ranking attributed to percent of occurrence followed by website hierarchy depth.

Not only were findings included as a coded item in terms of prevalence, for this study, location within the website hierarchy is another important factor in the significant finding listing. While some research has debunked the theory that user frustration is related to number of clicks, i.e., depth into the web page hierarchy (Meiss, Goncalves, Ramasco, Flammini, & Menczer, 2010; Porter, n.d.), research is increasingly adopting a low click or links standard as an indication of either content importance (Jacob, 2012) or as an indication of transparency (Rebolledo, Medina, & Virgili, 2016). In fact, the three clicks or links convention has even been used as a standard in legislation (Texas House Bill 2504, 2009) and government recommendations (Hegar, n.d.) related to content transparency. Therefore, each coding instance noted prominence as an orientation content item by using an ordinal notation concerning its location appearance (number of hierarchy clicks). This number will link the discussion section of this paper to research and web design recommendations on the importance of content location (Nehmadi, Meyer, Parmet, & Ben-Asher, 2011; Rider, 2012) and depth (Boatright-Horowitz, Langley, & Gunnip, 2009).

Excluded from the study were “Packaged” institutional information, such as admissions and registration information, which presented in a high percentage of findings for pilot institutions, because these findings are part of the web page template, not informational findings found by following a website hierarchy. Because universities provide information on a number of different orientation events, in order to limit the focus of the study, sources were limited to online orientation materials targeted to undergraduates on a main campus rather than other materials reflecting a range of interests and sponsorships. The pilot study confirmed (with 0%) that there is no need to look at a University’s Orientation page for online orientation findings as it would be related to on-campus visits only, likely due to the disparity in population sizes, the historical focus of the institution, and the age difference between residential students, who trend younger, and online students.

The institutional search engine located study findings and the search terms “Online learning orientation” and “Online orientation” were used at all studied sites. If there were no hits, then searches including LMS, a specific LMS name, and finally, the organizational online unit or “distance learning,” yielded potential findings. All terms either revealed materials or an indication of material placement. For materials located behind an access wall, if information was provided that orientation content existed, then coding occurred; typically, an overview would be outside of the wall. While the presence of a login wall may indicate an incomplete data set or view of offerings, in fact, only 12% of institutions blocked some of their orientation materials, presumably because prospective students without login credentials might wish to view the orientation to determine their suitability for the virtual learning.

Orientation sponsorship was determined through a web page heading, URL, or other page links. Finding location took two forms: page hierarchy location and within the page as an ordinal page content location (1st link, 2nd, link, etc.). When an institution presented multiple online learning orientations, we chose findings that most closely represented the institution or largest institutional college, typically arts and sciences. When equal departments presented findings, we selected the first one appearing in the institutional search engine. Orientations for a student audience were preferred over content related to nonstudent audiences such as a faculty orientation to the online setting.

## RESULTS

This study found seven relevant themes related to current online learning orientation practice; each described with percentages that indicate subarea finding presence. While some coded areas present greater findings than others, findings present in order of its average hierarchy location with the top-level of the website hierarchy weighted highest. To illustrate, some findings may appear at a high percentage but are located deeper within the website hierarchy thereby lowering their list appearance.

*Getting Started* was typically used as a starting point (55%). This thematic area had six coded subareas:



Table 1. Getting Started Coded Subareas

Subarea:	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev
Overview	either a welcome area or other description area	purpose of: provided materials 35%, distance learning 70%, sponsored organization 18%	top	1.89	.06
Access	typically consisted of instructions, tips, or troubleshooting access to the LMS	80%	1st: how to access LMS	.1103	.14
Settings	user account and/or profile information such as user name, email address, picture	20%	2nd: procedure for accessing LMS	.3158	.136
Navigation	information, assistance, and troubleshooting the LMS environment	43%	2nd	.406	.13
Features	information, assistance, and troubleshooting LMS features such as assignments, discussions, or the gradebook	80%	3rd	.091	.28
Use as a Portal	inheritance of a set of links to communication, LMS, and storing and sharing systems	20%	4th for specific features	1.2	.42

*Technical Requirements* was typically placed second in the orientation materials (42% of the time). This thematic area coded into five subareas (Table 2).

*Success Strategies* was typically located in a separate, contained content section (34% of the time). This thematic area contained six coded subareas (Table 3).

*Help*—this thematic area had eight seven coded subareas (Table 4).

*Institutional Information*—this thematic area had eight seven coded subareas (Table 5).

*Orientation support*—this thematic area had three coded subareas (Table 6).

*Meta*—Unlike the above categories, page hierarchy is not a findings factor and percentage of occurrence was not included for some areas; this thematic area had six five coded subareas:

*Sponsorship*—the department, office or institutional unit responsible for creating and maintaining the online learning orientation; 52%

was the institutional distance education unit, 17% was the institutional unit for teaching and learning or instructional support; 15% were sponsored by an “other” category such as institutional IT, general education unit, admissions, or the extension unit; 9% were unclear; and 7% were sponsored by an academic department.

*Pages*—the quantitative number of pages incorporating online orientation materials. Average for the sample was 5 pages.

*Name*—internal name of online learning orientation; 55% were named with some close variation to online orientation or online learning orientation; 25% were named with some close variation of including the LMS name and orientation or workshop; 15% were named with some close variation of Getting Started with the LMS name; and 5% employed a more generic name such as “Student Guide” or “Virtual Campus –Education Reimagined.”

*Notes*—migration to a new LMS (5%), indication

Table 2. Technical Requirements Coded Subareas

Subarea	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev
Email information	information and links to campus email resources	40%	1st: expectations that the importance of students obtaining email access and ease of conveying this information accounts for this items' higher hierarchy value	.17	.26
Hardware requirements	information and recommendations for various hardware components used in e-learning	48%; 12% for recommended non-browser software, such as virus protection	4th: this finding tended to produce a long list which was often more buried in the page hierarchy	.36	.53
Browser requirements	information regarding and download access to recommended browsers	10%	2nd	.48	.45
Plug-ins and pop-ups	information for handling these common Internet conventions	15%	3rd	.55	.19
Firewalls	information for handling this common Internet convention, a lesser finding was information about campus network security	5%	4th	.94	.4

of orientation visibility dates, orientation options for undergraduate, graduate, new, returning, prospective, and non-degree students.

*Course Requirement*—a significant number of institutions require online learning orientation either prior to enrollment in an online course or online program (28%) or in conjunction as course work (13%). The later, lower finding may be a result of required materials existing beyond a login wall.

The study design hoped to include metrics related to retention rates for online students; however, due to various factors including the lack of a dedicated category in public voluntary reporting systems and student enrollment choices regarding course delivery, this category was eliminated due to a lack of consistent, robust reporting.

For the sample, all modules were persistent resources for 85% of institutions that presented findings, although that number includes 5% of

institutions that deployed a gateway or checklist to indicate completion because it was not clear from the small sample that resources disappeared when visited. In general, research institutions and large state institutions had a higher average page count by nearly a page (.91); however, that result skewed by a larger number of private institutions offering one-page video tutorials as their orientation than other types of institutions. There were no significant differences in the offering of content categories for all institutional types except private institutions, which offered significantly fewer introductions to specific campus offices due to the LMS feature focus of video tutorials.

Table 3. Success Strategies Coded Subareas

Subarea	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev
Time management, motivation, and test-taking strategies	information, links, and recommendations for working online.	40%	2nd	.49	.33
Communication tips and strategies	information, links, and recommendations for communicating effectively and with various audiences	48%	3rd	1.1	.05
Advising	information, links, and recommendations for types of campus advising and appointment setting	16%	4th: While this finding may seem surprisingly low, links to institutional and departmental advising typically appeared in the separate thematic category of institutional advising	1.67	.42
Attendance	information, links, and recommendations for managing online presence	18%	2nd	3.2	.19
Integrity and plagiarism resources	information, links, and recommendations for ensuring academic integrity	5%	3rd	3.55	.05
Data backups	information, links, and recommendations for maintain work at various points in time		4th	.288	.43

Table 4. Help Coded Subareas

Subarea	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev.
Frequently Asked Questions (FAQs)	range of topics, significant findings of technical support topics (52% of the time), online learning topics (47% of the time)	30%	4th: not always located with other help materials	.0026	.87
Technical support	contact information, procedures, and forms for obtaining assistance with technical problems	15%	1st	.59	.43
Accessibility information and Discrimination information	information and resources for individuals with disabilities and resources for protecting individuals or letting them know of their rights	15%	2nd	1.02	3.1
Textbook information	information, policies, procedures, and links to current textbook information	23%	3rd	2.2	.24
Help feature	separate from a FAQs section; information and resources for obtaining help within the LMS or working with the distance learning support office	20%	4th	.98	.55
Alert system	information and links about text and email alerts	4%	1st	3.4	.98
New student\ logging in	information and resources for students new to the institution and/or online learning. It should be noted that this category could be considered a duplication of the Access category of the Getting Started thematic area; items coded in the category were only included if there was a Help link that addressed this problem.	5%	2nd	2.8	.9

Table 5. Institutional Information Coded Subareas

Subarea	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev.
Contact information	information regarding the sponsoring office and support individuals	83%	Top, after Overview, this was the item most frequently found on the orientation home page.	.241	.428
Campus support and resources	information such as tutoring, writing center, library information, counseling, disability support, etc.	75%	1st	.599	.49
On-campus information	other information for on-campus interests such as parking, dining locations, etc. This category coded narrowly to prevent competition with the previous category.	20%	1st	.87	.33
Institutional information, policies, handbooks, and complaints	handbooks and policies appropriate for a student audience and institutional information such as history. Complaints coded if related to distance education	43%	4th: While this category had a relatively high number of findings, the linked materials were often located deep within a page hierarchy, often within other institutional subunits.	.006	1.2
Partner information	information and links for third party resources such as TurnItIn or tutoring services.	10%	1st	1.23	.54
Testing	in general, findings related to issues with testing in online settings, including proctoring, monitoring, and browser lockdown information	7%	2nd	2.4	.67
Costs and fees	in general, findings were related to costs and fees specific to the distance or online learning setting	7%	3rd	3.2	1.16

Table 6. Orientation Support Coded Subareas

Subarea	Description	Percentage of occurrence	Typical location in hierarchy	Mean	Std. Dev
Tutorials	generally, video materials that either served as an orientation material or presented related information	39%	1st	.221	.947
Guides and blogs	generally, printable materials that either served as an orientation material or presented related information	25%	2nd	.352	.47
Orientation quiz, assessment, or survey	material meant to assess the learning readiness of the student for a distance learning setting	28%	3rd: It is expected that some potential findings could be located beyond a login wall.	.12	.41



## DISCUSSION

This paper investigated websites and embedded video, PDFs, documents, and links to gauge important trends in providing higher education institutional online learning orientation content, format, delivery, and features. First, we discuss the seven themes with arguments prompting their elevation to best practices. Next, we discuss and compare the format of content modules as they apply to applications in literature. Third, we discuss the delivery of the overall orientation and content subcomponents into various media. Expected user interest or anticipated student needs were the driving choice for delivery channel selections. The underperformance of some findings may be significant as an indication of an emerging practice, so a section of this discussion will relate findings linked to future trends. Finally, we discuss differences between the studied implementations and the theoretical literature for implications regarding what the field has learned as implementations develop.

Regarding the importance of the “getting started” module, increasingly, instructional designers are advocating for attention to content presentation for effective e-learning course navigation (Schreurs, Vanhoe, & Al-Zoubi, 2009). Cho’s (2012) design of a four-part online orientation serves as a precursor to this study due to the similar content areas of an overview of online learning, technical requirements or assessment, success strategies, and the prevalence of tutorials or guides for LMS features. Gullixson (2010) cites a 2008 report by the City Colleges of Chicago’s Center for Distance Learning that noted the importance of a getting started module, hence the popularity of related findings that elevate the importance of having a “Getting Started” module to a best practice in online orientations.

While some LMSs have made gains in streamlining their interfaces, with field literature noting their increasing complexity with partnerships and bridges to a variety of supported technologies (Fathema, Shannon, & Ross, 2015), the inclusion of a “Technical Requirements” section should be considered a best practice in online orientations due to both the variety of technical topics that need support and the importance of developing a sustainable learning environment where students can move past technical limitations and frustrations

to experience learning success. Given the outsize influence that technical support has on online learning success (Root Kustritz, 2014), perception of the learning environment (Asiri, Mahmud, Bakar, & Ayub, 2012; Sánchez, Hueros, & Ordaz, 2013), and student attendance (Buxton, Burns, & De Muth, 2012), proactive informational measures may go a long way to mitigating student technical concerns. In fact, Farrell et al. (2016) recommends the provision of early technical support as one of the eight most effective measures to improve learner-interface interaction. Fletcher (2012) would seem to agree, listing the provision of adequate technical support as the fourth most important key to success in a hybrid delivery program. This study’s findings of the delivery of a high number of technical support materials and supports seems to reflect field findings that student frustration with online programs tends to stem from technical problems rather than the use of the online format or content (West, Jones, & Semon, 2012).

While the provision of Help information echoes similar arguments for its promotion as a best practice, the multifaceted nature and delivery of LMS help systems means that online orientation programs need to move beyond the mindset of providing phone and email contact information to the provision of a more robust help service. In fact, the division of content into eight subareas indicates the increasing complexity with which higher education institutions need to comply with information provision practices. In addition, this study’s significant percentage of institutions deploying tutorial content gives credence to Taylor, Dunn, and Winn’s (2015) findings that the use of video tutorials to explain common LMS navigational items greatly enhanced the effectiveness of the orientation experience resulting in lower course withdrawal rates and greater student comfort levels. Interestingly, the results of this study confirm a greater percentage of text-and-image guides over video materials, which aligned with Turner, Fuchs, and Todman’s (2015) findings indicating greater effectiveness of these materials. While the deficit of materials linked to problems and issues with accessibility captioning, the rates are consistent. Finally, the depth and breadth of materials related to best practices in disseminating technical information with short, manageable delivery in a just-in time framework will better

facilitate knowledge absorption by users (Singh, 2012).

The overwhelming availability, depth, and breadth of online orientation materials related to student success argues for the promotion of this category to a best practice; Cho (2012) would also seem to argue for the student success module as a best practice as he includes it as one of four model elements. Increasingly, investigations into the content of orientation programs look at quality (Mayhew, Vanderlinden, & Kim, 2010) and delivery (Soria, Lingren-Clark, & Coffin-Koch, 2013) factors, with an aim of providing a linkage to retention, academic performance, or student satisfaction rates. With external pressures and student stress a considerable factor in adjusting to collegiate life (James, Krause, & Jennings, 2010), this study's high findings for provision of materials related to time management and motivation seems well-justified. In addition, the positive impacts that anxiety, such as that related to preparing and taking examinations, has on advice-seeking behavior (Gino, Brooks, & Schweitzer, 2012) indicates that investing in orientation materials may serve students needing a sustainable set of just-in-time resources. One of the strongest arguments for inclusion of student success materials as a best practice is Wenzel and Rowley's (2010) argument that for special needs populations, teaching academic strategies and social skills is critically important for a seamless transition to collegiate life and can efficiently engage a large population of students with similar orientation needs.

The inclusion of institutional information may be the most underdeveloped of all implementation areas; however, a thoughtful approach may offer the greater potential for assisting students. Karp, Gara, and Hughes (2008) found that the lack of awareness about institutional student support programs was a significant factor resulting in lower participation rates. Hudek and Stouder (2014) would seem to agree, as institutional policies, procedures, guidance, and practical information can form a core of constantly delivered information.

Despite recommendations by online orientation developers Dixon et al. (2012) that an online orientation be self-contained, this study found that while 39% had video or tutorial resources, the average amount of five pages devoted to the orientation indicates that multiple formats deploy in

this study. Even sites that offered a single resource typically deployed at least one additional page to introduce the resource and offer other information such as help or contact information. The implication of devoted pages and the use of introduction pages is that orientation developers are assisting users to absorb content in an expected sequence in order that they may best understand referenced materials and progress through the material as a prescribed curriculum.

A relevant theme concerning delivery involves orientation timing with only two of the studied orientations offered only at a specific time. The use of a self-paced, always available orientation program is aligned with Herx's (n.d.) findings of persistent orientation enrollment paralleling online course enrollment and Georgas's (2014) findings that an online library orientation had higher attendance at the end of the semester, when it was needed by students before a specific project, rather than at the beginning of the semester. This study's findings that most online orientation programs exist year-round confirm Taylor, Dunn, and Winn's (2015) findings of the use of video as a just-in-time course asset. In addition, the prevalence of navigation and LMS aides on topics found in this study such as thread posting and course gradebooks parallel similar practices in the Taylor study.

Finally, the sponsorship of the online learning orientation may itself be significant for what it reveals about the importance of online education to the university. This study found that the majority of institutions are deploying a dedicated office in support of online learning, confirming field literature of the robustness of distance education enrollment (Allen, Seaman, Poulin, & Straut, 2016). With online education becoming an increasingly important contributor to institutional fiscal health (Atchley & Wingenbach, 2011), the delivery of an effective online program, which includes an orientation module, may ensure program sustainability.

Regarding orientation content, the study findings demonstrate that some implementations are ripe for improvement. The use of a self-assessment and/or quiz structure within or in addition to the orientation relates well to McLaren's (2008) usage suggestions of virtual labs and simulations to replicate real conditions; however, such usage was not a significant finding in this

study, hence an area for improvement. Due to low participation rates, this study seems to concur with field literature that institutions are just beginning to put into practice recommendations regarding the use of student vetting and assessment checks as part of an orientation experience (Bailey & Brown, 2016); Hart (2012) furthered the recommendation by linking it to improved student retention rates. As noted in the Results section, the amount of accessibility or directed resources for people with disabilities seems relatively low, especially considering field recommendations calling for greater inclusion in online orientation activities (Farrell, Driver, & Weathers, 2011). With failure to provide equitable learning materials increasingly falling into an area of compliance, developers must take measures to address deficiencies. Despite elevation to a subarea code, this study's findings of a relatively low percentage of help resources related to browser requirements seems to echo findings by Farrell, Driver, and Weathers (2011) of student difficulty in browser usage; implementers of that study took the additional step of recommending a specific browser for better performance. While an expectation that some resources and help should exist behind a login wall, it was expected that schools will provide some orientation materials to prospective students prior to enrollment. In fact, only 12% of institutions provided evidence of limiting some orientation materials by login access, an encouraging finding due to expectations that potential students will make up a significant portion of the viewing population. A slightly more significant finding was that 15% of the sample had access issues related to the adoption of a new learning platform. Recent adoption has impacted the development of a pool of related materials supporting the new system; lack of resources is a factor in faculty technology adoption studies (Bousbhi & Alrazgan, 2014).

When comparing online orientations to current field implementations supported by literature, some differences emerge. This study's findings varied concerning sponsorship of the online orientation, which may be concerning in regard to Mayhew, Vanderlinden, and Kim's (2010) finding that a dedicated office supporting orientation work was the most important factor in reducing the learning gap between student population types. In general, the findings of this study would seem

to avert Presutti's (2016) advocacy of highlighting the success of adult learners because it appears that the orientation materials of this study's sampled institutions lack corresponding testimonials or a promotion agenda regarding online learning. It would be valid to criticize some of Presutti's design choices as flawed by an overdependence on older literature to inform current practice. In addition, the sampled institutions of this study may need to be cognizant of the practices of some institutions to require mandatory orientation, even for online students. Due to documented under-attendance, the North Carolina Community College System is requiring student completion of an orientation program as an intervention to improve certain retention and success rates (Capps & McCluney, 2016).

In general, this study's findings reveal that institutions are making strides to ensure that their online learning orientations serve a greater purpose than mere online tours; it is clear from the depth and breadth of content and its delivery that institutions are trying to foster user familiarity and comfort in an online setting and assist students to actively and effectively engage in online coursework.

### *Conclusion and Future Research*

#### *Implications*

Online orientations and services for online students will continue to expand and occupy a greater amount of time, personnel, and resources as institutions grapple with ways to best serve the needs of their online learners. For institutional administrators, gaining insight into current practices may assist them as they craft responsive orientation learning modules; this study proved informative to a state regent's group devoted to improving online learning.

This study concludes that effective online orientations include modules on: 1) getting started in the online environment; 2) the technical requirements of online learning; 3) success strategies in online learning; 4) help topics; and 5) institution-specific information. Structuring the orientation in a tutorial, video, or guide format with judicious use of quizzes to promote learning acquisition may effectively deliver content to stakeholders. Positioning the online orientation within a logical location in the website hierarchy and providing clear sponsorship and support

contact information may best ensure that follow-up activity reaches stakeholders directly. In addition, avoiding an overly detailed, complex, or lengthy set of materials and deploying an intuitive presentation may foster user satisfaction with the orientation and sustained use as a persistent resource.

An excellent model is Iowa State University's Engineering and Arts & Sciences collaboration, which features dedicated pathways and resources for new students, returning or alumni students, and current students. In addition, their Online Orientation Portal has one-click access to course and institutional digital resources, including storing and sharing mechanisms.

For future research, longitudinal studies that examine the long-term effect of online learning orientations, including impacts on graduation rates and graduate enrollment, would fill a literature deficit and are needed to validate practice. In addition, explorations that link online orientations to sustainable learning communities, especially for niche populations, may offer insights into effective interventions. As noted in the Method section, an eliminated categorical area related to capturing metrics on the effectiveness of the online orientation did not provide robust findings; however, several of the studied institutions present findings related to online student retention including studies and re-enrollment metrics and policies. Due to consistency issues in the reporting efforts and a lack of representable data from the four institutional areas of interest, these data were unavailable for tabulation as part of the study, but this remains an area of potential research. Finally, with related literature increasingly advocating for continued investment in interactivity, implementations of innovative online learning orientations may continue to move forward a student-centered orientation model in the online learning setting.



# REFERENCES

- Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Newburyport, MA: Sloan Consortium.
- Allen, I. E., Seaman, J., Poulin, R., & Straut, T. T. (2016). *Online report card: Tracking online education in the United States*. Oakland, CA: Babson Survey Research Group and Quahog Research Group, LLC. Retrieved from <https://onlinelearningsurvey.com/reports/online-reportcard.pdf>
- Asiri, M. J. S., Mahmud, R., Bakar, K. A., & Ayub, A. F. (2012). Factors influencing the use of learning management system in Saudi Arabian Higher Education: A theoretical framework. *Higher Education Studies*, 2(2), 125. doi:10.5539/hes.v2n2p125
- Atchley, W., & Wingenbach, G. (2011). Foundations of online education at Tarleton State University. *Journal of Instructional Pedagogies*, 6, 1.
- Bailey, T. L., & Brown, A. (2016). Online student services: Current practices and recommendations for implementation. *Journal of Educational Technology Systems*, 44(4), 450–462. doi:10.1177/0047239515616956
- Benavides, A. D., & Keyes, L. (2016). New-student orientations: Supporting success and socialization in graduate programs. *Journal of Public Affairs Education*, 22(1), 107–125. Retrieved from <http://www.jstor.org/stable/44113673>
- Boatright-Horowitz, S. L., Langley, M., & Gunnip, M. (2009). Depth-of-processing effects as college students use academic advising web sites. *CyberPsychology & Behavior*, 2(3), 331–335. doi:10.1089/cpb.2008.0207
- Bousbhi, F., & Alrazgan, M. S. (2015). Investigating IT faculty resistance to learning management system adoption using latent variables in an acceptance technology model. *Scientific World Journal*, 1–11. doi:10.1155/2015/375651
- Buxton, E. C., Burns, E. C., & De Muth, J. E. (2012). Professional development webinars for pharmacists. *American Journal of Pharmaceutical Education*, 76(8), 155. doi:10.5688/ajpe768155
- Byrd, J. C. (2016). Understanding the online doctoral learning experience: Factors that contribute to students' sense of community. *The Journal of Educators Online*, 13(2), 102–135. Retrieved from ERIC database: EJ1106735
- Capps, V. L., & McCluney, A. L. (2016). *Improving community college completion rates: The case of isothermal community college* (Doctoral dissertation, Western Carolina University). Retrieved from <https://libres.uncg.edu/ir/wcu/f/Capps2016.pdf>
- Cho, M-H. (2012). Online student orientation in higher education: A developmental study. *Educational Technology Research & Development*, 60(6), 1051–1069. doi:10.1007/s11423-012-9271-4
- Dixon, M., Beveridge, P., Farrior, C., Williams, B. A., Sugar, W., & Brown, A. (2012). Development of an online orientation for an instructional technology master's program. *TechTrends: Linking Research and Practice to Improve Learning*, 56(6), 4448. doi:10.1007/s11528-012-0613-1
- ECDL Foundation. (2015). *The fallacy of the 'digital native': Why young people need to develop their digital skills*. ECDL Foundation Whitepaper. Retrieved from [http://ecdll.org/media/thefallacyofthedigitalnativepositionpaper1\\_1.pdf](http://ecdll.org/media/thefallacyofthedigitalnativepositionpaper1_1.pdf)
- Estrada, D., Poulsen, S., Cannon, E., & Wiggins, M. (2013). Orienting counseling students toward multiculturalism: Exploring privilege during a new student orientation. *Journal of Humanistic Counseling*. 52(1), 80–91, doi:10.1002/J.2161-1939.2013.00034.X
- Farrell, B., Ward, N., Jennings, B., Jones, C., Jorgenson, D., . . . & Kennie, N. (2016). Participation in online continuing education. *International Journal of Pharmacy Practice*, 24(1): 60–71. doi:10.1111/ijpp.12202
- Farrell, S. L., Driver, C., & Weathers, A. (2011). Now's the time: Online library orientations. *Community and Junior College Libraries*, 17(1), 7–14. doi:10.1080/02763915.2011.547142
- Fathema, N., Shannon, D., & Ross, M. (2015). Expanding the Technology Acceptance Model (TAM) to examine faculty use of Learning Management Systems (LMSs) in higher education institutions. *Journal of Online Learning & Teaching*, 11(2). Retrieved from [http://jolt.merlot.org/V0111n02/Fathema\\_0615.pdf](http://jolt.merlot.org/V0111n02/Fathema_0615.pdf)
- Fletcher, J. (2012). The keys to success in hybrid programs. *T.H.E. Journal*, 39(6), 27–31.
- Forsyth Technical Community College (n.d). Promising and practical strategy: Mandatory new student orientation [Department of Education Whitepaper: Promising and Practical Strategies to Increase Postsecondary Success Series]. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.ed.gov/college-completion/promising-strategies/tags/Mentoring>
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2), 87-105.
- Georgas, H. (2014). The Implementation of an independent and self-paced online library orientation for freshman students and the use of Sakai as a quiz management system (QMS). *College & Undergraduate Libraries*, 21(1), 56-75.
- Gilmore, M., & Lyons, E. M. (2012). NURSING 911: An orientation program to improve retention of online RN-BSN students. *Nursing Education Perspectives*, 33(1), 45–47.



doi:10.5480/1536-5026-33.1.45

- Gino, F., Brooks, A., & Schweitzer, M. (2012). Anxiety, advice, and the ability to discern: Feeling anxious motivates individuals to seek and use advice. *Journal of Personality and Social Psychology* 102(3), 497–512. Retrieved from <http://nrs.harvard.edu/urn-3:HUL.InstRepos:10996805>
- Goldman, C., Turnbow, D., Roth, A., Friedman, L., & Heskett, K. (2016). Creating an engaging library orientation. *Communications in Information Literacy*, 10(1), 81–98. Retrieved from ERIC database: EJ1103401
- Gullixson, A. (2010). *Research of best practices and curriculum for an online course orientation* (Master's Thesis University of Wisconsin-Stout). Retrieved from <https://pdfs.semanticscholar.org/dd50/594fd8e9f8e0bdacd001f22752f854416d73.pdf>
- Hart, C. (2012). Factors associated with student persistence in an online program of study: A review of the literature. *Journal of Interactive Online Learning*, 11(1), 19–42.
- Hegar, G. (n.d.). *Transparency stars: General criteria*. Texas Comptroller of Public Accounts. Retrieved from <https://comptroller.texas.gov/transparency/local/stars/general-criteria.php>
- Helms, J. L. (2014). Comparing student performance in online and face-to-face delivery modalities. *Journal of Asynchronous Learning Networks*, 18(1). Retrieved from ERIC database: EJ1030563
- Herx, D. (n.d.). Creating a scalable online orientation to better prepare online students for success [whitepaper]. *Online Learning Consortium*. Retrieved from [https://secure.onlinelearningconsortium.org/effective\\_practices/creating-scalable-online-orientation-better-prepare-online-students-success](https://secure.onlinelearningconsortium.org/effective_practices/creating-scalable-online-orientation-better-prepare-online-students-success)
- Hsieh, H-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. doi:10.1177/1049732305276687
- Hudak, N. M., & Stouder, A. (2014). Prepare for landing: A student orientation for international clinical rotations. *Journal of Physician Assistant Education*, 25(1): 55–58. doi:10.1097/01367895-201425010-00010
- Hullinger, M., & Hogan, R. L. (2014). Student anxiety: Effects of a new graduate student orientation program. *Administrative Issues Journal: Education, Practice, and Research*, 4(2), 27–34. Retrieved from ERIC database: EJ1058507
- Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55(3), 1080–1090. doi:10.1016/j.compedu.2010.05.004
- Jacob, B. (2012). About successful Web sites. *IBM Redbooks: Creating External Web sites with WebSphere Portal*. Retrieved from [https://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Redbooks%3A+Creating+External+Web+sites+with+WebSphere+Portal#action=openDocument&res\\_title=About\\_successful\\_Web\\_sites&content=pdcontent](https://www-10.lotus.com/ldd/portalwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Redbooks%3A+Creating+External+Web+sites+with+WebSphere+Portal#action=openDocument&res_title=About_successful_Web_sites&content=pdcontent)
- James, R., Krause, K. L., & Jennings, C. (2010). The first year experience in Australian universities. *Canberra: Department of Education, Employment and Workplace Relations [DEEWR]*. Retrieved from [http://melbourne-cshe.unimelb.edu.au/\\_data/assets/pdf\\_file/0003/1706403/FYE\\_Report\\_1994\\_to\\_2009-1.pdf](http://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0003/1706403/FYE_Report_1994_to_2009-1.pdf)
- James, S., Swan, K., & Daston, C. (2015). Retention, progression and the taking of online courses. *Online Learning*, 20(2). doi:10.24059/olj.v20i2.780
- Johnson, H., Meija, M. C., & Cook, K. (2015). *Successful online courses in California's community colleges* [white paper]. San Francisco, CA: Public Policy Institute of California. Retrieved from [http://www.ppic.org/content/pubs/report/R\\_615HJR.pdf](http://www.ppic.org/content/pubs/report/R_615HJR.pdf)
- Jones, K. R. (2013). Developing and implementing a mandatory online student orientation. *Journal of Asynchronous Learning Networks*, 17(1), 43–45. Retrieved from ERIC database: EJ1011381
- Jose, A., & Lee, S. (2007). Environmental reporting of global corporations: A content analysis based on website disclosures. *Journal of Business Ethics*, 72(4), 307–321. doi:10.1007/s10551-006-9172-8
- Karp, M. M., O'Gara, L., & Hughes, K. L. (2008). Do support services at community colleges encourage success or reproduce disadvantage? An exploratory study of students in two community colleges [CCRC Working Paper No. 10]. New York, NY: Community College Research Center, Columbia University.
- Koc, S., & Liu, X. (2016). An investigation of graduate students' help-seeking experiences, preferences and attitudes in online learning. *Turkish Online Journal of Educational Technology*, 15(3), 27–38. Retrieved from ERIC database: EJ1106358
- Kwon, D. Y., & Jeong, S. R. (2015). A content analysis for website usefulness evaluation: Utilizing text mining technique. *Journal of Internet Computing and Services*, 16(4), 71–81. doi:10.7472/jksii.2015.16.4.71
- Lawanto, O., Santosi, H. B., Lawanto, K. N., & Goodridge, W. (2014, July). Self-regulated learning skills and online activities between higher and lower performers on a Web-intensive undergraduate engineering course. *Journal of Educators Online*, 11(3). Retrieved from ERIC database: EJ1033324
- Mayhew, M. J., Vanderlinden, K., & Kim, E. Y. (2010). A multi-level assessment of the impact of orientation programs on student learning. *Research in Higher Education*, 51(4), 320–345. doi:10.1007/s11162-009-9159-2

- McLaren, A. C. (2008). Designing effective e-learning: Guidelines for practitioners. *Distance Learning*, 5(2), 47.
- McClenney, K. (2011). A matter of degrees: Promising practices for community college student success. *Center for Community College Student Engagement*. Retrieved from [https://www.ccsse.org/docs/matter\\_of\\_degrees.pdf](https://www.ccsse.org/docs/matter_of_degrees.pdf)
- Meiss, M. R., Goncalves, B., Ramasco, J. J., Flammini, A., & Menczer, F. (2010). Agents, bookmarks and clicks: A topical model of Web navigation. *Proceedings of the 21th ACM conference on Hypertext and hypermedia*, 229–234. doi:10.1145/1810617.1810658
- Miller, A., & Erisman, W. (2011). *Sealing the gaps: Supporting low-income, first-generation students at four-year institutions in Texas post-transfer*. Pell Institute for the Study of Opportunity in Higher Education. Retrieved from ERIC database: ED543251
- Nehmadi, L., Meyer, J., Parmet, Y., & Ben-Asher, N. (2011). Predicting a screen area's perceived importance from spatial and physical attributes. *Journal of the American Society for Information Science & Technology*, 62(9), 1829–1838. doi:10.1002/asi.21580
- Presutti, L. (2016). *Designing an online orientation program for adult learners at Grand Valley State University* (Master Thesis, Grand Valley State University, Michigan). Retrieved from <https://scholarworks.gvsu.edu/coeawardwinners/7>
- Porter, J. (n. d.). *Testing the three-click rule*. Retrieved from [https://articles.uite.com/three\\_click\\_rule/](https://articles.uite.com/three_click_rule/)
- Rebolledo, M., Medina, R. Z., & Virgili, J. R. (2016). Transparency, accountability, and participation in local governments: A comparative study of Spanish council websites. *Media Studies*, 7(14), 48–64. doi:10.20901/ms.7.14.5
- Rider, K. M. (2012). *Make your home page: Follow these basic principles to boost your Web traffic*. Kalmbach Publishing Co., 125(9), 26–27. Retrieved from the Literary Reference Center: 78390779
- Sánchez, R., Hueros, A., & Ordaz, M. (2013). E-learning and the University of Huelva: A study of WebCT and the technological acceptance model. *Campus-Wide Information Systems*, 30(2), 135–160. doi:10.1108/10650741311306318
- Schreurs, J., Vanhoe, B., & Al-Zoubi, A. (2009). Assembling content into dynamic learning objects versus authoring of e-learning courses. *International Journal of Emerging Technologies in Learning*, 3(3), 15–20. doi:10.3991/ijet.v4s2.812
- Shen, L. (2016). Both online and in-person library orientations have positive effects on graduate students' information literacy skills. *Evidence Based Library & Information Practice*, 11(2), 189–191. doi:10.18438/B8C620
- Singh, G. (2012). Video conferencing as a bridging medium in open and distance learning (ODL): Making it more effective. *Malaysian Journal of Distance Education*, 14(1), 25–40. Database: Education Research Complete. Accession Number: 92759193
- Soria, K., Lingren-Clark, B., & Coffin-Koch, L. (2013). Investigating the academic and social benefits of extended new student orientations for first-year students. *Journal of College Orientation and Transition*, 20(2), 33–45. Retrieved from <http://hdl.handle.net/11299/150089>
- Southerland, S., & Dodd, B. J. (2012). *Developing effective online course orientations: Using mastery learning strategies to prepare students in online Spanish courses*. Poster presentation presented at the 2012 ED-MEDIA conference in Denver, CO. Retrieved from [http://olc.onlinelearningconsortium.org/effective\\_practices/implementing-effective-online-orientation-online-spanish-courses](http://olc.onlinelearningconsortium.org/effective_practices/implementing-effective-online-orientation-online-spanish-courses)
- Swett, D. (2016). Online student orientation: Guerrilla style. *Change: The Magazine of Higher Learning*, 48(5), 26–35. doi:10.1080/00091383.2016.1227673
- Taylor, J. M., Dunn, M., & Winn, S. K. (2015). Innovative orientation leads to improved success in online courses. *Online Learning*, 19(4). Retrieved from ERIC database: EJ1079576
- 81<sup>st</sup> Texas Legislature, Regular Session. (2009). *House Bill 2504*. Retrieved from <https://capitol.texas.gov/tlodocs/81R/billtext/html/HB02504F.HTM>
- Turner, B., Fuchs, C., & Todman, A. (2015). Static vs. dynamic tutorials: Applying usability principles to evaluate online point-of-need instruction. *Information Technology & Library*, 34(1), 30–54. doi:10.6017/ital.v34i4.5831
- Vlami, E., Bell, B. J., & Gass, M. (2011). Effects of a college adventure orientation program on student development behaviors. *Journal of Experiential Education*, 34(2), 127–148. doi:10.5193/JEE34.2.127
- Wake, D., & Bunn, G. (2015). Online learning for the left-behind generation. *SRATE Journal*, 24(2), 40–50. Retrieved from ERIC database: EJ1083123
- Walters, N., & Ayodele, A. (2011). *Intervention for College Attendance Program: 2009–2010 Report*. Minnesota Office of Higher Education. Retrieved from ERIC database: ED529203
- Wang, C. H., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323. doi:10.1080/01587919.2013.835779
- Weare, C., & Lin, W. Y. (2000). Content analysis of the World Wide Web: Opportunities and challenges. *Social Science Computer*

*Review*, 18(3). doi:10.1177/089443930001800304

Wenzel, C., & Rowley, L. (2010). Teaching social skills and academic strategies to college students with Asperger's syndrome. *Teaching Exceptional Children*, 42(5), 44–50. doi:10.1177/004005991004200505

West, E., Jones, P., & Semon, S. (2012). Promoting community for online learners in special education. *Journal of Digital Learning in Teacher Education*, 28(3), 108–116. Retrieved from ERIC database: EJ972451

Yan, Y., Taylor, J., Cao, L. (2016). The 3 x 2 achievement goal model in predicting online student test anxiety and help-seeking. *International Journal of E-Learning & Distance Education*, 31(1). Retrieved from ERIC database: EJ1109273