STUDYING THE INFLUENCE OF AN ONLINE STUDENT ORIENTATION ON
STUDENTS’ RESOURCE AWARENESS AND UTILIZATION

by
Jeffrey R. Rose

An executive position paper submitted to the Faculty of the University of
Delaware in partial fulfillment of the requirements for the degree of Doctor of
Education in Educational Leadership

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ABSTRACT

A new student orientation (NSO) helps students become more college ready by informing them of the resources offered. Increased resource awareness should lead to increased usage, which will promote positive student outcomes. Despite an NSO being a significant contributor in introducing students to the college’s resources, NSO attendance is low at all four Delaware Technical Community College campuses. Creating an online new student orientation (ONSO) can allow all students to participate in an orientation, regardless of factors leading them to not attend.

To create an effective ONSO, online orientation best practices were established through a literature review. These practices include a consistent layout, multiple formats, campus resources, website navigation services, inquiry support/contact information, orientation assessments, ease of use and design effectiveness. Five ONSOs from other colleges were also reviewed. Through June 2015 to July 2015, 34 participants were recruited to complete the pilot ONSO. The participants were divided randomly into two groups. Group 1 (5 participants) would complete the pilot ONSO and answer questions to provide feedback on its usability. Group 2 (29 participants) would complete the ONSO independently. Both groups were administered a pre-test and a post-test to assess participants’ knowledge of Delaware Technical Community College resources both before and after viewing the ONSO.
Students significantly increased their knowledge of Delaware Tech resources after completing the ONSO. They also reported that the ONSO’s design was effective in helping them navigate through the ONSO. Recommendations for improvements in the ONSO were made based on their feedback.
Chapter 1

INTRODUCTION

Delaware Tech Overview

Delaware Technical Community College (Delaware Tech) is an open admission community college consisting of four campuses across Delaware’s three counties. Delaware Tech offers associate degrees, diplomas and both credit and non-credit certificate programs. To maintain educational standards accountability, Delaware Tech is accredited by the Middle States Commission on Higher Education (MSCHE). Academic offerings are based on ten programs of study which include: Agriculture, Business, Computer Technology, Culinary Arts, Education, Energy and Engineering Technologies, Health and Science, Public Services, and Transportation.

Based upon the most recent Delaware Tech College Fact Book (2013-2014), 14,490 students were enrolled at Delaware Tech’s four campuses for the fall 2013 semester. Of this student population, 40% (5,726) were male and 60% (8,764) were female, 57.78% (8,372) of the student population were White, 24.91% (3,609) were Black or African American, 9.10% (1,318) were Hispanic or Latino and less than 10% were students who identified themselves as another race.
Delaware Tech’s mission includes preparing students for entry into the Delaware workforce and also preparing students for baccalaureate programs at other institutions. Delaware Tech offers a wide variety of programs, activities, and services. The intent of which is to cultivate student learning and success. Delaware Tech strives to create an inclusive environment which promotes respect for diverse cultures, abilities, and points of view. This culture of inclusiveness includes an open admissions policy, this means that all applicants are accepted - regardless of their college readiness and abilities.

**New Student Orientations**

New student orientation (NSO) implementation is the norm among colleges and universities. An orientation’s main functions are to help new students successfully transition into college, assist in their familiarity with student resources and serve as one of the first steps towards student retention and eventual graduation. As Garza Mitchell (2014) noted, “Orientations are provided as a chance for students to familiarize themselves with a college, its structures, functions, and processes, and to discover where to go for assistance” (p.89).

The WestEd and the RP Group (2012) wrote that first time community college students who complete an NSO are more likely to achieve positive educational outcomes than those who do not. New student orientations help students become more college ready by making them aware of the resources offered. Helping students become more college ready is important for Delaware Tech due to its open admissions policy. Increased resource awareness should lead to increased usage, which in turn will promote positive student outcomes.
According to the Center for Community College Student Engagement (2012), a large percentage of colleges and universities found an increase in student services usage after students attend orientations. O’Shea and Vincent (2011) also recognize the importance of NSOs due to their ability to initiate proactive structures of support. NSOs assist colleges in reaching out to new students to help guide them through unfamiliar territory and become more college ready. Reaching out to new students also helps the colleges adhere to their commitment of respecting abilities and cultivating student learning and success.

**Delaware Tech’s New Student Orientation**

Delaware Tech believes its NSO is an integral component of a new student's introduction to the college and a barometer of future success. The information provided to students is based upon the NSO’s learning objectives (Appendix A), which introduce first time students to key resources to enhance college readiness and provide a smooth transition. The NSO represents students’ first opportunity to learn about college resources such as academic assistance, technology to assist in the classroom, departments and faculty, and the Delaware Tech website. The orientation also includes a campus tour for all participants.

Delaware Tech administration recognize the importance of its NSO and the need for first time student attendance. It recently completed a comprehensive program and services review for MSCHE. According to the 2012 Delaware Tech Self-Study Report, the college recommends creating “a consistent ‘front-door’ experience for new students (initial advisement, mandatory orientation, welcome week) to be implemented at all
campuses” (p. 55). The report also notes that “the Deans of Student Services and Instruction have agreed on a policy that ‘expects’ student participation in orientations for new students…” (p. 53).

Based on Delaware Tech data, many students attending an NSO also recognize the importance of attending orientation. A student satisfaction survey administered by Delaware Tech reported that 62% of the student respondents felt "new student orientation services and programs helped me adjust to college and be more successful my first semester."

Despite the NSO being a significant contributor in introducing students to the college’s resources and helping them become more college ready, NSO attendance is low at all four campuses. Only 48% of new students attended a 2013 fall semester NSO, which is lower than the national average. The Community College Survey of Student Engagement (a survey distributed by the Center for Community College Student Engagement to assess national college practices) notes approximately 58% of the student respondents participated in an orientation at their college (Center for Community College Student Engagement, 2012). Since the Delaware Tech NSO is one of the few established resources that provide students with an overview of its numerous services, these low numbers suggest that a majority of first-time students may not be aware of these services. When students do not attend an NSO they are less likely to be as well informed about Delaware Tech resources and available support. According to Tinto (1987), an important factor in student success is integrating them into the college’s social and academic
networks. Based on these findings, the need to better impart information about resources and available support to first-year students is crucial.

Several factors may contribute to students not attending an NSO. First, education is less self-directed in high school than it is in college. In high school, the students’ academic experience is predominantly arranged for them. In college, students must navigate their educational experience themselves by determining pertinent information such as registration periods, financial timelines and degree requirements. Many students transitioning into college have difficulty recognizing this and often do not actively seek out new information (Ellis, 2009; Baldwin, 2007). Second, Delaware Tech has added several session start dates within each semester. As a result, many new students do not start their courses at the beginning of the semester. NSOs are only offered prior to the start of classes each semester; this means students with classes starting after the initial semester start date are unable to attend an NSO. For the fall 2013 semester, as many as 422 new students may not have been given the opportunity to attend an NSO due to starting classes after the last NSO. This variable start of classes has prevented Delaware Tech administrators from making NSO mandatory. Third, some students are not able to attend NSO due to travel issues or time constraints.

**Creating an Online Orientation to Promote Positive Outcomes**

Creating an online new student orientation (ONSO) can positively impact the factors described above. Development of an ONSO will give students the option to attend an asynchronous online orientation, which will strengthen the implementation of a mandatory NSO (as recommended in the 2012 Self Study Report). A mandatory NSO
will ensure that all students receive pertinent college information. Also, since there are several session start dates throughout a semester, a newly developed ONSO can be viewed throughout the semester rather than before the semester begins. Similarly, an ONSO can be viewed regardless of travel issues. Time constraints factors would also be positively impacted since a student can view the orientation at any time. Having all new students attend an orientation that includes an online option can enhance college awareness and subsequent utilization of the college’s resources.
Chapter 2

NSO LITERATURE AND ONSO REVIEW

Introduction

Three separate searches were conducted to assist in the design of the Delaware Tech ONSO. I first examined the literature on effective online college orientation strategies to identify best practices to adopt in my design. I next looked at effective web design practices to determine if there were other practices that I should include. My final step was to examine how five community colleges used these practices in their ONSOs.

As noted above, a literature review was first completed to identify online college orientations strategies. The literature included articles, reports, studies, and empirical research. Terms such as ‘college,’ ‘orientation,’ and ‘online’ were used to search the Education Full Text and Education Research Complete databases. Google Scholar was also utilized to locate current literature on online student orientations. This review of 35 writings resulted in the identification of the following six online orientation practices: consistent layout, multiple formats, campus resources, website navigation services, inquiry support/contact information and orientation assessments.

I next reviewed the literature on effective web design principles. Terms such as ‘web,’ ‘design,’ ‘principles,’ and ‘effective’ were used to search the Google Scholar
database. I identified six web design articles. These articles added two other practices critical to the design of online orientations: ease of use and design effectiveness.

My final step involved the review of community college ONSOs to examine how the above practices were incorporated. I searched the Google database to find community college ONSOs using the terms ‘community,’ ‘college,’ ‘student,’ ‘orientation,’ and ‘online.’ Five community colleges’ ONSOs were purposefully chosen from a group of ten for review that were similar to Delaware Tech in terms of program resources and student needs. These community colleges were; Amarillo College, Paradise Valley, Pima Community College, Southwestern Community College and St. Paul Community College.

This chapter's sections are organized according to the best practices mentioned above. The section headings identify the best practice being discussed. Each section will begin with a description of the best practice. The section will then cite and discuss the literature supporting the best practice. Lastly, each section will illustrate how community college ONSOs utilized that best practice.

**Consistent Layout**

Implementing a consistent layout helps users learn how to navigate a website and increases the time available to engage with the website’s content as well as the probability that the users will return (Dixon, Beveridge, Farrior, & Williams, 2012). A consistent layout can also help make the orientation ‘student friendly’ (Georgas, 2012). Consistent layout includes the positioning or the location of the web site navigation and main points and supplementary text as well as campus photos and logos. As stated by
Georgas (2012), “The [ONSO] was designed to be visually appealing, clear, informative, concise, and easily navigable” (p. 59).

Paradise Valley, located in Phoenix, Arizona has two campus locations and approximately 9,000 students. Their online orientation is a part of their college template, including headers, footers, search bar, and tabs that were visible and consistently located at every juncture. Pima Community College, in Tucson, Arizona has six campuses and approximately 60,000 students. Its online orientation features links highlighted with color. Font and graphic themes are used consistently throughout the orientation.

**Multiple Formats**

Formatting the orientation for multiple types of devices increases the probability that a larger percentage of students will be able to view the online orientation. Multiple format information can be included in an orientation to help explain which devices students can use to view the orientation. In their article *Online Student Services at the Community College*, Hornak, Akweks, and Jeffs (2010) recognize the importance of multiple formats by acknowledging that a student’s primary technology is no longer the personal computer. Dixon, Beveridge, Farrior, and Williams (2012) also emphasize that orientations allow “for content to be viewed on multiple types of devices and screen sizes” (p. 46).

Southwestern Community College, located in Sylva, North Carolina has approximately 8,000 students. A welcome and an overview to the orientation is located on the first page and lists compatible web browsers and tablets. St. Paul College is a two-year technical community college located in St. Paul, Minnesota and has approximately
10,000 students. Its introduction provides a brief overview of what to expect during the online orientation and what system requirements (such as Flash Player and Adobe Acrobat Reader) the student will need to complete it. Allowing more options to view the orientation can increase completion rates.

**Campus Resources**

NSOs have traditionally been viewed as primarily a social event to engage students in a fun and festive environment. This perspective is changing as NSOs adopt “a more serious academic tone” (Robinson, Burns and Gaw, 1996, p. 57) to link students to resources designed to increase student retention. In their study *A Multi-Level Assessment of the Impact of Orientation Programs on Student Learning*, Mayhew, Vanderlinden, and Kim (2010) wrote that “The final factor that played a significant role in explaining an orientation’s impact on student learning involved student perceptions of their functional experiences, how the orientation helped students learn how to access critical campus resources” (p. 338). The importance of informing students of campus resources during orientation was also noted in the report by the Center for Community College Student Engagement (2012). According to the center, the campus resources most frequently discussed during orientations include personal/social support services, academic support networks, and information resources.

Amarillo College, in Amarillo, Texas, has six campuses and approximately 10,000 students. Their online orientation is designed similar to a PowerPoint presentation with ‘slides’ that can be viewed one at a time (without audio or video). The topics covered include academic resources, enrollment services, campus services, and
academic programs. Paradise Valley’s orientation include learning services designed to assist students in becoming academically successful. These services can include tutoring, writing centers, online learning support and computer labs. Both St. Paul College and Pima Community College provide student resource information during their orientations. St. Paul’s online orientation includes student success, student resources, policies, enrollment and registration. Pima Community College incorporates website usage, degree requirements, finding classes, important dates, building a schedule, registration, and student resources in its ONSO.

**Website Navigation Services**

In their study *Online Student Services at the Community College*, Hornak, Akweks, and Jeffs (2010) report that:

Online services are not just for students enrolled in online courses; they can enhance the collegiate experience for all students, particularly those who have infrequently accessed college resources in the past or may prefer to access help and information on the Web. Colleges use online services to attract students; improve outreach, recruitment, and student retention; provide new ways of interacting with financial aid, academic advising, and personal counseling (p. 80).

Having students immediately traverse a college’s website, the college portal, and the college learning management system through an online orientation can introduce students to college resources. Students can learn about programs of study, policies, support services, campus life, clubs and organizations, financial aid and important dates. A survey of 146 student affairs professionals revealed that technology integration during orientation is important for student success (Miller & Pope, 2003). Student affairs professionals not only recommend emphasizing the importance of technological
competence, but also stress the need for new students to experience the website through a hands-on integrated approach during NSO (see Table 1 below). This will ultimately assist students to become better acclimated to the college’s website and its resources.

Table 1

*Means for Technology Integration*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasize the importance of technological competence.</td>
<td>4.28</td>
</tr>
<tr>
<td>Have an online treasure hunt to encourage new students to look at the college’s website.</td>
<td>4.21</td>
</tr>
<tr>
<td>Provide online demonstrations of how to navigate college services.</td>
<td>4.10</td>
</tr>
<tr>
<td>Provide new students with technology to experiment with.</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Website navigation knowledge can also assist students primarily or solely enrolled in online courses. Two-year colleges account for more than half of online enrollment (Johnson and Berge, 2012, p. 897). A higher dropout rate has also been observed among students in online courses than in conventional courses (Ali and Leeds, 2009). “Online courses require students actively to seek help, participate in activities, and be part of a community” (Cho, 2012, p. 1052). Providing students with website navigation information during an orientation can increase student online course readiness. Jones (2013) echoes this sentiment “It appears that a well designed and implemented online orientation-that includes exposure to both technology and soft skills-can effectively prepare first time online/hybrid students to be successful in their online course and increase retention rates” (p. 45).
Several of the reviewed college orientations include a website navigation component. St. Paul College’s orientation includes college website links throughout orientation. Southwestern Community College’s orientation and Pima Community College’s orientation include college website usage as a main topic.

**Inquiry Support/Contact Information**

To answer any additional questions related to the college, online orientations should include college administration contact information through links, email and/or phone. Although including contact information is an important starting point to answer student questions, immediate inquiry support may also be required during an online orientation. This will allow students to submit questions and receive immediate responses, and likely increase engagement. Hornak, Akweks, & Jeffs (2010) suggest that both of these support options are important factors in building community, especially important to a student’s success at a commuter college.

Amarillo College and St. Paul College offer administrative contact information throughout their ONSOs. Amarillo College’s ONSO contains a live chat button option, phone numbers, office numbers, and contact links throughout the presentation. St. Paul College’s ONSO also contains links and college phone numbers.

**Orientation Assessments**

Assessments such as quizzes and surveys are tools frequently used during orientations. These assessments typically have provided colleges feedback on students’ satisfaction with the orientation and other information to improve the orientation. Mayhew, Vanderlinden, and Kim (2010) support moving beyond such measures and
taking a more learning outcomes approach to assessing orientation programming. “Doing
so not only solidifies orientation programming as an important tool in helping students
transition to college, but ultimately helps institutions respond to those advocating for
more accountability in higher education” (Mayhew, Vanderlinden, & Kim 2010, p.321).
To accomplish this, assessment must be completed both prior to and after the orientation
(Robinson, Burns and Gaw, 1996). The assessment should include student expectations,
experience during the orientation and overall evaluation of the orientation. Other
effective evaluation methods can include reviewing faculty and staff responses on student
preparedness after orientation completion and online help desk tickets (Jones, 2013).

A mandatory assessment is required in Southwestern Community College’s
orientation to obtain feedback and verify orientation completion. After students complete
the assessment, an email is sent to them with contact information specific to people/areas
in the videos they observed. Other orientation assessments are presented as quizzes to
determine how much knowledge was gained. Amarillo College presents a quiz at the end
of their orientation. Amarillo College is one of the few orientations reviewed to require
a minimal score to pass and an NSO hold removed from students’ account. Although
Paradise Valley gives a quiz at the end of each section, the orientation and the quizzes are
not mandatory.

**Ease of Use and Design Effectiveness**

In addition to the best practices for online orientations, *Ease of Use and Design
Effectiveness* are also important practices for any web-based delivery model. According
to Friedman (2008), websites are easy to use when they are obvious and self-explanatory.
How easy a website is to use will determine its success or failure. Design effectiveness refers to whether the graphic and interface designs are formatted well enough to promote user intended actions. In order to successfully implement the previously mentioned best practices, an orientation must first have an effective design. Friedman (2008) noted an effective design should contain a clear structure allowing readers to quickly scan and understand what functions are available to them. Zhang and von Dran (2000) conducted a study in which they investigated several design factors which contribute to ease of use and design effectiveness, including clear directions for navigating the website; logical presentation structure; relevant information; presence of an overview, a table of contents and/or summaries/headings; and effective navigation aids. Improving factors such as these can lead to an effective and easy to use website. As Zhang and von Dran (2000) noted in their study:

The real challenge is to identify and develop design factors that can (I) make a Website usable and serviceable, avoiding users frustration or dissatisfaction; (2) create more stimulating, visually pleasing, comprehensive, and commercially viable Websites; and (3) help attract users to a Website, maintain their interest in the Website, and encourage them to return to the Website again (p. 1253).

In an effort to make the ONSO designs more effective and easy to use, some of the reviewed orientations added noteworthy components. Some of these components relate to summary and heading factors while the others relate to factors which make the ONSO more serviceable. Some of the components are bulleted below.

- A ‘Save’ option was added to Amarillo College’s ONSO so that students could leave the orientation and return later to the same location.
- Amarillo College’s quick link on the college website’s main page allows students to easily locate the ONSO.

- Paradise Valley’s orientation introduction is a concise welcome to the college. The welcome does not include instructions on how to navigate the orientation. This seems appropriate since the orientation flow is intuitive.

- St. Paul College’s orientation is a brief overview of what each module tab (located across the top of the webpage) entails. What each student should accomplish is shown at the beginning of each module.

- Southwestern Community College’s ONSO contains a welcome and an overview of the orientation, how to navigate the orientation and a warning that lag times may occur on the videos.

**Best Practices Summary**

Based on the practices described above, I created a pilot ONSO with the *goal of creating an ONSO to help more students develop an awareness of the Delaware Tech services and to teach students how to utilize these services*. Table 2 identifies the best practices utilized in the pilot ONSO. The table also identifies the design principle that each practice represents and explains why that principle is important. The far right column cites the literature and college ONSOs from which these practice were taken.
### Table 2

**Best Practices Utilized in the Pilot ONSO**

<table>
<thead>
<tr>
<th>Design Principle</th>
<th>Purpose(s)</th>
<th>Best Practice(s) Utilized</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consistent Layout</strong></td>
<td>To accelerate the learning curve which leads to continued usage</td>
<td>Consistent layout of text, navigation and main points are used throughout the orientation</td>
<td>Dixon, Beveridge, Farrior, and Williams (2012), Georgas, (2012), Paradise Valley, Pima Community College</td>
</tr>
<tr>
<td></td>
<td>To allow the orientation to be ‘student friendly’</td>
<td>Consistent modalities such as images and links are used throughout the orientation within similar sections</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To create a visually appealing, clear, informative, concise, and easily navigable orientation</td>
<td>The college’s website headers, footers, search bar, tabs are presented during the entire orientation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Links highlighted with color, font and graphic themes are consistently used throughout the orientation</td>
<td></td>
</tr>
<tr>
<td><strong>Multiple Formats</strong></td>
<td>To allow a larger percentage of students to view the online orientation</td>
<td>Compatible web browsers and tablets are defined during the orientation</td>
<td>Hornak, Akweks, and Jeffs (2010), Southwestern Community College, St. Paul College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>System requirements needed to complete the orientation on the chosen device are defined</td>
<td></td>
</tr>
<tr>
<td><strong>Campus Resources</strong></td>
<td>To inform students of campus resources and the college environment to positively impact their initial transition into college</td>
<td>Academic resources, enrollment services, campus services and academic programs are reviewed in orientation</td>
<td>Robinson, Burns and Gaw (1996), Mayhew, Vanderlinden, and Kim (2010), Amarillo College, Paradise Valley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning services are included in the orientation (i.e., tutoring, writing centers, online learning support and computer labs)</td>
<td></td>
</tr>
<tr>
<td><strong>Website Navigation Services</strong></td>
<td>To have students immediately navigate the college website to become more aware of its capabilities. To assist students who are primarily or solely enrolling in online courses.</td>
<td>Online demonstrations of how to navigate college services are provided. Technologies are provided during orientation for experimentation.</td>
<td>Hornak, Akweks, and Jeffs (2010), Miller and Pope (2003), Johnson and Berge (2012), Cho (2012), Jones (2013), St. Paul College, Southwestern Community College</td>
</tr>
<tr>
<td><strong>Inquiry Support/Contact Information</strong></td>
<td>To answer program specific questions, unique college resource questions and/or policy and procedure questions.</td>
<td>Administrative contact information is offered throughout the ONSO. Multiple contact methods such as links, email and/or phone are offered.</td>
<td>Hornak, Akweks, and Jeffs (2010), Amarillo College, St. Paul College</td>
</tr>
<tr>
<td><strong>Orientation Assessments</strong></td>
<td>To continuously enhance and improve the orientation and promote higher accountability. To verify orientation completion.</td>
<td>A mandatory assessment is given before and during the orientation. A quiz is given at the end of each section.</td>
<td>Mayhew, Vanderlinden, and Kim (2010), Robinson, Burns and Gaw (1996), Southwestern Community College, Amarillo College, Paradise Valley</td>
</tr>
<tr>
<td><strong>Ease of Use and Design Effectiveness</strong></td>
<td>To allow students to quickly understand what functions are available to them during the orientation. To make the orientation serviceable and functional and promote user satisfaction.</td>
<td>A welcome and an overview to the orientation are provided which also defines how to navigate the orientation. A brief overview of what each module entails is offered. Timelines which include the content are presented throughout the orientation.</td>
<td>Friedman (2008), Zhang and von Dran (2000), Amarillo College, Paradise Valley, St. Paul College, Southwestern Community College</td>
</tr>
</tbody>
</table>
Chapter 3

DELAWARE TECH ONSO DESIGN

I designed the Delaware Tech ONSO by following the guidelines from the preceding literature review. This chapter reviews the pilot ONSO’s design and how the best practices were incorporated. Figure 1 depicts the ONSO’s five main sections and its navigational design.

Figure 1. *ONSO Navigational Design*

These sections were also based on the NSO Learning Objectives that the Front Door Experience Committee (FDE) expects to be met at the orientation’s conclusion.
The FDE was created in 2012 to provide support services to increase student success. The ONSO is intended to serve as one of these student support services.

This chapter is divided into the five ONSO sections outlined in Figure 1. For each section, I present a flow diagram of how the section is divided. I then explain the contents of each section, including the best practices that were utilized to design the section and which FDE objectives were added to the section. Figures displaying orientation screenshots were added to help the reader conceptualize the ONSO presentation. Best practices codes were created and point to specific orientation components in the figures. The codes were added to explain how each section of the ONSO is informed by the design guidelines resulting from the literature review. The best practices from the design guidelines and their corresponding codes are presented in Table 3.

Table 3

*Codes for Design Section Figures*

<table>
<thead>
<tr>
<th>Best Practice Theme</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent Layout</td>
<td>CL</td>
</tr>
<tr>
<td>Campus Resources</td>
<td>CR</td>
</tr>
<tr>
<td>Website Navigation Services</td>
<td>WN</td>
</tr>
<tr>
<td>Inquiry Support</td>
<td>IS</td>
</tr>
<tr>
<td>Orientation Assessment</td>
<td>OA</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>EU</td>
</tr>
<tr>
<td>Design Effectiveness</td>
<td>DE</td>
</tr>
<tr>
<td>Unique Technique</td>
<td>UT</td>
</tr>
</tbody>
</table>
ONS0 Introduction

Figure 2 shows the Introduction Section four main areas. These are the title screen, an administrative welcome to Delaware Tech, an overview of the orientation and an orientation packet.

Figure 2. *Introduction Section Flow Chart*

As depicted in Figure 3, the orientation begins with a title screen with the Delaware Tech logo. The logo and background instrumental music only appear for a few seconds and then fade out. The Delaware Tech logo remains as a footer throughout the orientation, seen as a consistent layout practice in Paradise Valley’s online orientation.
The colors on the screen are the primary colors used throughout the orientation, leading to a more visually appealing presentation as observed in the Pima College orientation.

Figure 3. *Online NSO Main Title*

After the Delaware Tech logo fades out, there is a brief introduction to the college. As noted as a practice at Paradise Valley and captured in Figure 4, an administrator welcomes and thanks the student for choosing Delaware Tech. This video introduction also includes an overview of the college’s mission statement, reasons why Delaware Tech is an advantageous choice and images of the four campus locations. The reasons are summarized on the screen with one word which, according to Zhang and von Dran (2000), is an effective design technique.
Next, there is a brief overview of how to complete the orientation. Figure 5 depicts this text- and audio-based section which instructs how to manually navigate through the orientation. Based on the consistent layout best practice, the overview is brief due to the orientation being ‘intuitive and concise.’ Similar to St. Paul College and Southwestern Community College’s overview of their orientations, the text-based feature describes what the orientation contains (resource content, links, in-course web browsing, and quizzes) and the audio-based feature describes how each of the sections is uniformly set up.

A heading delineating what will be covered in the section is located above the text in large white letters. Headings in this same size, font and color are used throughout the orientation and are an effective design technique. Timelines are a unique consistent layout technique used within other orientations such as St. Paul College to display the viewer’s progress in completing the orientation. Based on this, a timeline is also included.
at the top of the pilot orientation. A ‘Get Help’ button (shown as a question mark) is placed to the right of the timeline, this allow viewers to email Delaware Tech staff with any questions they may have. This button is available throughout most of the orientation for the inquiry support best practice.

Contact information pop ups are reviewed in this section. These pop ups appear when text-based services are scrolled over. For example, in Figure 5, the word bookstore is underlined, which if scrolled over will display the bookstore phone number. The pop up feature, along with the option to email personnel during the presentation, is also used as a practice at St. Paul College and Amarillo College. These methods offer multiple ways to access additional campus resource information and receive inquiry support.

At the bottom right of the main screen is the Delaware Tech webpage. A Delaware Tech webpage is displayed throughout the Academic, Business and Computer Services sections of the orientation. This webpage displays information based upon the audio and the text being reviewed at that time. Viewers can click on certain areas of this display to open the webpage in their browser. This allows for the website navigation best practice to occur and allows viewers to further investigate any campus resource. In all three main sections, text in the beginning of the paragraph is highlighted when a new paragraph is reviewed by the orator. This was added to help students find the text being reviewed if they are investigating a webpage or lose their place. A clear structure like this helps viewers quickly understand what functions are available (Zhang & von Dran, 2000).
As presented in Figure 6, a downloadable orientation packet was included in the introduction to give students the opportunity to obtain physical documents for future use. This is a campus resource practice from Pima Community College. The orientation packet also covers several FDE learning objectives and includes a Student Success Guide, a Quick Resource Guide, a Blackboard Help Flier and a Now What? Form. These forms are explained in further detail below.

The Student Success Guide details several important topics for a new student. These topics include degree selection, college resources, online information and campus information. The Quick Resource Guide lists the offices, room numbers and phone numbers of several support services. The Blackboard Help flier explains how to log onto the Delaware Tech Network, how to register online, how to contact Delaware Tech for Blackboard support and other important website navigation information. The Now What? Form details the steps a new student should take after the orientation, including...
initial advisement, semester start dates and course payment. Due to the importance of students’ feeling prepared before the semester begins, the Now What? Form is also reviewed during the orientation’s conclusion.

Figure 6. *Orientation Packet*

**ONSO Academic Services Section**

The Academic Services Section consists of four main areas which are represented in Figure 7. These areas are the title screen, an introduction to what will be covered in this section, the topics covered and the test.
To create a consistent, visually appealing and memorable orientation, each of the three main sections (Academic, Business and Computer Services) was constructed and sequenced in the same manner, a technique also utilized in the online orientation at East Carolina University (Dixon, Beveridge, Farrior, Williams, Sugar & Brown 2012). Several of the modalities (text, video, embedded webpage and quiz) applied in the academic services section are also used in each of the subsequent services sections. Consistent layouts are expected to facilitate students’ use of the online NSO. As a result, I will primarily review the format for the Academic Services section. Only the section flow chart, bullets and screen captures unique to Computer Services will be reviewed in the corresponding section.
Figure 8 displays the Academic Services Section which begins with a title screen. This display format is used for the Business Services Section and the Computer Services Section as well. The audio embedded in the title screen gives a brief explanation of what campus resource is being covered, and in this case, what Academic Services are.

![Diagram of Academic Services Overview]

Figure 8. *Title Screen*

Figure 9 shows how the presentation immediately leads into What We Will Cover that explains exactly what the orientation will cover. This overview is another effective design technique noted by Zhang and von Dran (2000). Each of the service sections covers three main areas and is visually formatted in the same manner. This consistent layout throughout all the learning units is supported by Dixon, Beveridge, Farrior, Williams, Sugar and Brown (2012) and helps the viewer mentally break down the presentation into manageable sections.
Figure 9. *Online NSO Academic Services Section*

The Academic Services Section, which are based on the format illustrated in Figure 5, consist of an academic services overview, a program review, a counselor and advisor review, and a test. Each of these subsections is described below.

**Academic services overview.** This section contains audio and text which describe career services, disability support services, learning supports, and program departments. Learning about these services and how they can lead to a student’s success is an FDE NSO learning objective. An embedded Delaware Tech web page is included to ease navigation.

**Programs of study.** This audio- and text-based section reviews the associate degrees, certificate and diploma programs Delaware Tech offers. It also includes programs with competitive or wait list processes, where to find the programs’ requirements, transfer course equivalency information and connected degree information.
As in the academics services overview section, an embedded Delaware Tech web page is included along with the text to increase interactivity.

**Academic counselor vs. program advisor.** This audio- and text-based section discusses the FDE NSO learning objective of the differences between an academic counselor and a program advisor. It explains why this distinction is important, what their responsibilities are, how each can help students succeed in college and how students can determine whom their academic counselor or program advisor is. A screen shot of where students can find their academic counselor and program advisor names is also included.

**Test.** At the end of each section, a screen appears introducing the viewer to the test (Figure 10). A test is embedded after each main section with the same simplistic design and layout. This fosters ease of use and helps assess student knowledge acquisition. Assessments instead of satisfaction measures, according to Mayhew, Vanderlinden, and Kim (2010) allow for more accountability in higher education. Orientation assessments, such as the ONSO quiz at St. Paul College, are noted as a best practice to help students learn the information and also help improve the orientation going forward. As presented in Figure 11, the test in the Academic Services Section includes a scenario depicting a student who is uncertain about whether or not to change her/his major. Participants are then asked to identify whom should be contacted and what information should be obtained. Viewers are also asked about academic advisors and learning supports. Students are given the correct answer and campus resource information if they answer the question incorrectly. Viewers can also locate the correct answers by browsing the embedded Delaware Tech website.
Figure 10. *Test Introduction*

Figure 11. *Test Question Example*
ONSO Business Services Section

Figure 12 exemplifies how the Business Services section is formatted in the same manner as the Academic Services Section and consists of four main areas: the title screen, an introduction of what will be covered in this section, the topics covered and the test.

Figure 12. *Business Services Section Flow Chart*

The Business Services sections, which are based on the format illustrated in Figure 5 consist of business services facts, types of financial aid, a financial aid process review and a test. Each is described below.

**Business services facts.** This section contains audio and text which describe key business services facts such as course registration, tuition, fees and federal work study
program information. In-state and out-of-state rates are reviewed as well as rates for part-time and full-time students. An image of the Course Schedule Form (which delineates a student’s courses, charges and due dates) is also displayed. The Delaware Tech tuition and fees webpage is embedded with the text to give students the opportunity to scan specific areas of interest. This will help students remember where to find the information for future reference.

**Types of financial aid.** This audio- and text-based section includes scholarships, grants, and loan options such as the Pell Grant, Stafford Loans, SEED and scholarship opportunities. The Delaware Tech financial aid and scholarships webpage is embedded within the orientation so that students can immediately investigate in greater detail any financial aid areas of interest. This will also help students remember where to retrieve the information at a later date. This will assist students to list financial aid options, which is an FDE ONSO learning objective.

**Financial aid process.** This audio- and text-based section defines eligibility requirements and the application processes for each type of financial aid. It also includes how to retain financial aid (i.e., maintaining course load, G.P.A. requirements and completing the application yearly). The webpages where the forms are located are embedded in the orientation for participants to print out or save forms.

**Test.** The business services test assesses participant’s business services knowledge acquisition. Scenarios were included that depict several students who have different financial aid needs and income levels. The participant is asked to identify which financial aid would be most applicable to the particular student and what steps
should be taken to receive the financial aid. Students again are given the correct answer if they answer the question incorrectly and are also able to locate the correct answers by browsing the embedded Delaware Tech website.

**ONSO Computer Services Section**

Figure 13 illustrates how the Computer Services Section is formatted in the same manner as the Academic Services Section and the Business Services Section and also consists of four main areas. These areas are the title screen, an introduction of the topics covered and the test.

![Computer Services Section Flow Chart](image)

*Figure 13. Computer Services Section Flow Chart*

The Computer Services sections, which are based on the format illustrated in Figure 5 consist of a Delaware Tech website navigation review, a MyDTCC resources
review, a Banner and Blackboard review and a test. Each of these subsections is described below.

**Delaware Tech website navigation.** As captured in Figure 14, this section contains audio and text which describe the Delaware Tech website and what campus resources can be found under the seven main tabs including the academic calendar, student handbook, career services, clubs and organizations and activities calendar. The seven main tabs are used as the website’s table of contents. This is an effective design technique/navigation aid noted by Zhang and von Dran (2000). This design technique is also utilized in Delaware Tech’s MyDTCC Portal and Banner. Learning how student clubs and organizations and student activities contribute to a student’s success is an FDE NSO learning objective. The main Delaware Tech webpage is embedded within the orientation to allow students to become acclimated to the Delaware Tech website and increase student website navigation knowledge and resource utilization. Website navigation can also help enhance the college experience and assist in student retention (Hornak, Akweks, & Jeffs, 2010). The Delaware Tech website also includes a search bar. Search words can be entered into the bar if it is not immediately understood where certain information is located. This layout is comparable to many other websites, which makes it recognizable, easy to use and self-explanatory. Ease of use and self-explanatory design lead to an effective web design (Friedman, 2008).
Figure 14. *Delaware Tech Main Website*

**MyDTCC resources.** Figure 15 captures the Delaware Tech main website. The audio, text and embedded MyDTCC webpage examine the MyDTCC portal and what student resources are available there, including their student email, the library database, the study abroad handbook and mental health resources. This website navigation best practice is also utilized by Southwestern Community College. Southwestern Community College added their portal to their ONSO to help students learn about important resources which they are expected to use but not necessarily taught how to use. Students are then asked to click on the corresponding resource to display the resource information and to proceed further into the orientation. Including this process supports website navigation services interactivity that does not occur during an in person orientation.
**Figure 15. MyDTCC Main Screen**

**Banner and Blackboard.** Figure 15 captures Delaware Tech’s Banner and Blackboard portals. The Banner portal provides access to student services and personal information and Blackboard is the college learning management system. Banner and Blackboard are integral components in a student’s educational success. Reviewing Banner through text and an embedded website can help students locate important resources such as online payments, personal information, student records, and class registration. Reviewing Banner and Blackboard early on can improve technical competencies and help demonstrate how to navigate college services deemed as important orientation topics (Miller & Pope, 2003). Banner also contains a student’s Student Educational Plan which delineates his or her academic standing, academic advisor, academic holds and degree evaluation. Reviewing online college website services such as the Student Educational Plan is an FDE learning objective and a website navigation best practice. Blackboard contains student course information, assignment notices, syllabi, instructor information and current grades for assignments, quizzes and
tests. As in the MyDTCC resources section, students are then asked to click on the corresponding resource to display its information.

![Delaware Tech Banner Main Screen](image)

Figure 16. Delaware Tech Banner Main Screen

**Test.** How much participants have learned about Blackboard, Banner, MyDTCC and the Delaware Tech website is assessed through this section’s test. Scenarios are also included in this test depicting students at different points in their academic careers (new student, returning student and graduate). Participants must decide what information may be needed at those junctures and how they should retrieve the information. As with the other tests, students are given the correct answer if they answer incorrectly and are also able to locate the correct answers by browsing the embedded Delaware Tech website.

**ONSO Conclusion**

The Conclusion Section (see Figure 17) consists of a congratulatory statement, a ‘Next Steps’ section and to end the orientation, graduation pictures with audio reinforcing the importance of persistence.
Figure 17. **Conclusion Section Flow Chart**

Figure 18 presents how the Conclusion starts with a graphic, audio- and text-based statement congratulating the viewer for successfully completing the orientation. The text, color scheme, font and layout is the same throughout the orientation. During the conclusion, students are also given their test score (which is done at Amarillo...
College). The text also reaffirms the purpose for completing the orientation and how students have taken their first steps towards their educational success.

Figure 18. Congratulatory Statement

As captured in Figure 19, through text, audio and graphics, students are told what the next steps are to continue their education at Delaware Tech, which is a practice noted at Paradise Valley College. The Now What? Form from the orientation packet is again reviewed to support this objective. In addition to this, payments and respective deadlines, course textbook purchasing, student I.D. badges, and semester/session start dates are reviewed. Offering students the campus resource information will help assist in an effortless transition into the college setting.
Figure 19. *Next Steps*

Figure 20 displays the graduation commencement montage that ends the orientation, which is a unique feature from Southwestern Community College. Images begin to appear around the Delaware Tech logo which launched the orientation. Audio is included in the montage to highlight the significance of graduation and the importance of students remaining committed to their education. The montage and audio will help students better visualize their persistence and eventual graduation from Delaware Tech.

Figure 20. *Graduation Collage*
Chapter 4

METHODOLOGY

This chapter reviews the methodology that was used to pilot test the newly designed ONSO. It describes the sampling strategy, the instruments used to collect all data, and the data collection and analysis procedures. UD’s Institutional Review Board for the protection of human subjects approved all procedures (Appendix B). The pilot test began in June 2015 and ended in July 2015.

Participant Recruitment and Selection

Once I received UD’s Institutional Review Board approval, I began to recruit and select participants for the project. A purposeful sampling method (Patten, 2002) was used to select approximately 30 first-time Delaware Tech students who had not attended an in-person orientation, and therefore, had not already been exposed to the resources presented in the Delaware Tech ONSO. The 30 participants would be divided randomly into two groups. Group 1 (5 participants) would complete the ONSO in a structured setting, answering questions as they completed it. Group 2 (20 participants) would complete the ONSO independently in an unstructured setting more closely resemble how they would interface after the pilot test.

To recruit participants for both groups, I emailed 243 new students who applied for the 2015 fall semester at Delaware Tech. The email gave an overview of the project,
its purpose, participation requirements, and how to respond if interested. Twenty new students responded as interested in participating. These students were emailed with times and dates to attend (June 30th at 10 am or July 1st at 2 pm). The respondents who could attend during these times were assigned to Group 2. Those who couldn’t attend either session due to time constraints were emailed and asked if they could meet individually to complete the orientation. Those responding positively were assigned to Group 1.

A total of five students agreed to participate in Group 1 and 13 agreed to participate in Group 2. All five participants in Group 1 completed the ONSO on their designated dates. Only nine of the original 13 Group 2 participants showed up on their scheduled dates. To increase the number of students in Group 2, I asked new students who were participating in a separate Student Affairs group registration process if they would like to participate in the project. Through this method, I found 20 additional participants for Group 2, for a grand total of 29 participants. No one selected through this new method had attended another NSO.

Once students agreed to participate, they were then asked to sign an Informed Consent Form (Appendix C). If any students did not agree to participate, they would have been excused from the project at that point. All of the students agreed to participate and therefore moved to the next step of the pilot ONSO. Table 4 lists the demographic totals for all the participants.
Table 4

**ONSO Participant Demographics**

<table>
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<th>Demographic</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Total</th>
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<td>17-18</td>
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<td>21</td>
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<tr>
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<td>2</td>
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</table>

*Note.* One participant only noted age and due to this, no other information was compiled for that student. The total number of responses for age was 34, whereas the total number of responses for all the other demographics was 33.
As the table delineates, the majority of the participants were under 18 years old and either Black or Caucasian. Nursing students were the predominant participants in the project and are listed under Health and Science. Due to the low number of participants in the other programs, all other programs are listed as Other. Most of the participants were either registered for a full time course load or had not previously registered. To determine their Entry Level status, new students must provide documentation they are ‘college ready.’ This can be done by submitting SAT scores or taking the college placement test. Based on these scores, new students are either be placed into developmental courses or college level courses. Although a significant majority of the participants tested into developmental math courses, the number of students testing into developmental English and college level English were similar. There were only two students who participated in the ONSO who had transferred from another college.

**Instruments**

Instruments were designed for the pilot ONSO in order to collect data on the participants’ background, their awareness of Delaware Tech resources and how effective they felt the orientation was in incorporating the previously discussed best practices.

**Demographic Information Form.** All participants in both groups completed a Demographic Information Form (Appendix D) which gathers the following information: age, gender, ethnicity, degree program, number of credits currently enrolled in, number of required developmental courses, whether the participant has attended any other colleges, and any possible barriers to using specific technologies.
**ONSO Pre-test/Post-test.** An online test was developed to test participants’ knowledge about Delaware Tech. It was administered to all participants as a pre-test and post-test (i.e., prior to participants starting the ONSO and after completing the three main sections (Academic, Business and Computer sections). The test contains 18 questions based upon the FDE learning objectives addressed in the Delaware Tech’s ONSO. The questions cover advising, learning supports, different types of financial aid and how to access specific college information online. The test includes nine multiple choice questions, four true/false questions, three hot spot questions (marking a specific location on a website), one rank order question and one pick/group question.

**Interview Guide.** The Interview Guide (Appendix E) is a paper document which contains specific questions asked of Group 1 participants as they completed the ONSO. The guide includes a brief opening which I read to the participants before the ONSO began. This opening thanks them for participating, explains how long the orientation should take, explains what I will be doing during the orientation and how the participants should progress through the orientation. The questions are divided into the same sections as the ONSO (i.e., Introduction, Academic Services, Business Services, Computer Services, and Conclusion). Once the participants completed the orientation, they were also asked questions from a final section entitled Summary Section. This section includes questions regarding the participants’ reactions to the overall orientation. This section also allows the participants to add additional comments if they choose.

All of the guide’s questions were based on the best practices (i.e., consistent layout, campus resources, website navigation, inquiry support/contact information,
orientation assessment, ease of use and design effectiveness) to ascertain how effective they were incorporated into the orientation. For example, to determine the participants’ perceptions on the ONSO’s ease of use, I asked them “Did you find this section easy or difficult to navigate?” To learn if participants felt campus resources were effectively included, I asked them “Did you find the content in this section helpful? What would you change regarding the content? Explain.”

Data Collection

Pilot ONSO data was collected using the Demographic Information Form, ONSO test and Interview Guide (see Table 5 below). Demographic, test and Interview Guide data were collected from Group 1 participants while demographic and test data were collected from Group 2 participants.

Table 5

<table>
<thead>
<tr>
<th>Group</th>
<th># of Participants</th>
<th>Data Collection Methods</th>
<th>Analysis Methods</th>
</tr>
</thead>
</table>
| 1     | 5                 | Interview Guide, test and demographics | Interview Guide: a priori coding
Test: mean, standard deviation, t test, difficulty index
Demographics: mean, standard deviation |
| 2     | 29                | Test and demographics    | Test: mean, standard deviation, t test, difficulty index
Demographics: mean, standard deviation |

Group 1 data collection. For Group 1, five participants individually met with me to complete the orientation in one sitting in a Delaware Tech office. These meetings were completed July 7th through July 14th and lasted approximately 90 minutes. After completing the Informed Consent and Demographic Information Forms, I stressed how
important it was for the participants to thoroughly examine the orientation and to take as much time as needed. Each participant was then given a quick overview of the orientation, identifying the five parts they would be asked to review (Introduction, Academic Resources, Business Resources, Computer Resources, and Conclusion). The participants were also informed they would be given a test before the orientation and a test after each service section. Their answers were automatically entered into two separate computer programs (Qualtrics and Blackboard) for later analysis. I then stated the purpose of the tests was to determine if the orientation helped the participants learn the information provided. Instructions were then provided on how to access the pre-test and post-test. It was stated they would be observed by me while they completed the orientation and that I would record their interactions with the ONSO on the Interview Guide. It was also stated I would also ask them questions both during and after the orientation, and recording their answers on the Interview Guide. The participants’ responses were also recorded by an audio device.

**Group 2 data collection.** Group 2 totaled 29 participants through the modified recruitment methods. These participants completed the orientation in approximately 45 minutes during five different group sessions from June 30th to July 15th. Groups ranged from three to nine participants (or about 6 participants per session). The participants in Group 2 were also given the Informed Consent and Demographic Information Forms and also given the same ONSO instructions as Group 1 participants. As with Group 1, their pre-test and post-test answers were automatically entered into two separate computer programs for later analysis. Instead of completing the orientation in an office with only
me, they were in a room with other participants independently engaging in the same task along with a pilot director (myself as well as other Student Affairs representatives). This group was not observed one-on-one during its ONSO completion thus more closely resembling how a new student would complete the ONSO. The pilot director was also available to answer questions if necessary. I was the pilot director for three of the five sessions. The other two sessions were directed by two other Student Affairs personnel. I reviewed how to oversee the Group 2 process with the other pilot directors and also gave them an ONSO Instructions Document (Appendix F) to save and review later if necessary.

Minor issues arose when many of the computer sound bars did not produce audio. To alleviate this issue, all the computer sound bars in the classroom were immediately checked and participants moved to computers with functional sound bars. Information Technology was then contacted and fixed the sound bars for the next group. Another issue arose when participants became distracted upon simultaneously hearing the audio of several other orientations as well as their own. To alleviate this issue, it was suggested to the remaining participants to use earbuds while listening to the orientation.
Chapter 5

FINDINGS

This chapter reviews the results of analyses conducted to determine how effective the ONSO was in developing student resource awareness as well as students’ perceptions of the ONSO design. The findings are divided into two sections: the first summarizes the pre-test/post-test data compiled from all 34 participants and the second details the data compiled from interviewing and interacting with the five Group 1 participants.

Pre-test/Post-test Data

The 34 matched pre-tests and post-tests were scored to determine the number of items answered correctly at each point in time. The mean correct numbers and standard deviations were then calculated for the overall sample (Table 6). The correct numbers were compiled for the entire test as well as for each of the three service sections (Academic Services, Business Services and Computer Services). Four paired sample one-tailed $t$ tests were then conducted to determine whether statistically significant increases occurred on the test overall as well as the three service sections.

Table 6

*Mean, Standard Deviation and $t$ Test Results*

<table>
<thead>
<tr>
<th></th>
<th>Total Pre</th>
<th>Total Post</th>
<th>Academic Pre</th>
<th>Academic Post</th>
<th>Business Pre</th>
<th>Business Post</th>
<th>Computer Pre</th>
<th>Computer Post</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>10.71</td>
<td>14.76</td>
<td>4.00</td>
<td>4.70</td>
<td>3.88</td>
<td>5.18</td>
<td>2.82</td>
<td>4.88</td>
</tr>
</tbody>
</table>
As Table 6 indicates, there were statistically significant increases in the overall scores from pre-test to post-test as well as for all three service sections (p<.01). All but three of the 34 participants increased their scores after completing the pilot ONSO. Two of these three participants answered one fewer question correctly and the third answered two fewer questions correctly (this participant answered all the questions correct in the pre-test).

Table 7 displays the post-test means based on the demographic data gathered on participants’ Demographic Information Forms. As the table indicates, the differences in the post-test scores were minimal across different demographic groups. This suggests that the ONSO was equally effective all across demographics groups.

Table 7

Post-test Means by Demographics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Age</th>
<th>Gender</th>
<th>Ethnicity</th>
<th># of Credits</th>
<th>Program of Study</th>
<th>Dev. English</th>
<th>Dev. Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test Mean</td>
<td>15.11</td>
<td>14.75</td>
<td>15.00</td>
<td>14.75</td>
<td>15.12</td>
<td>15.12</td>
<td>15.12</td>
</tr>
<tr>
<td>SD</td>
<td>1.90</td>
<td>2.16</td>
<td>2.05</td>
<td>2.16</td>
<td>1.93</td>
<td>1.93</td>
<td>1.93</td>
</tr>
</tbody>
</table>

Analyses were conducted on both sets of items to determine which were particularly easy or difficult for participants to answer correctly. For the pre-test, five items (4, 5, 10, 12, and 17) were considered too easy, that is over 80% of the participants answered the item correctly before completing the ONSO. For the post-test, only one
item (3) was particularly challenging for the participants; less than 60% of the students answered this item correctly.

**Interview Guide Data**

This section summarizes the findings from interviewing Group 1 participants who completed the ONSO. I transcribed the audio from each of the five participant meetings. All participant responses were organized by the seven best practices associated with effective ONSOs: consistent layout, campus resources, website navigation, inquiry support, orientation assessment, ease of use and design effectiveness (see Figure 21).

![Figure 21 Interview Guide Notes Categorization Process](image)

The responses were then sorted into two categories: Effective Design Element or Ineffective Design Element. Additional information was also noted when available to further explain why a participant felt the design element was effective or ineffective.

Examples of participant responses are presented in Table 8.

Table 8

<table>
<thead>
<tr>
<th><strong>Qualitative Data Coding System</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response Type</strong></td>
</tr>
<tr>
<td>Effective Design Element</td>
</tr>
</tbody>
</table>
design was helpful in some way to promote any of the best practices. See what the right answer is and everything.

**Ineffective Design Element**

This code was used when participants felt the orientation’s design was not helpful to promote any of the best practices. Ah I think it was sort of unnecessary...Because it is self-explanatory

Frequency counts for both effective and ineffective design elements were then calculated for each best practice (Table 9). These counts provide a measure of frequency in which participants felt a best practice was effectively or ineffectively addressed in the ONSO. Participants sometimes offered contradictory assessments (information presented effectively and ineffectively) or offered multiple similar responses for the same question. Additional comments were sometimes offered by participants without prompting during the interview; these thoughts provided additional feedback on the ONSO and were added to the most appropriate best practice. Pseudonyms were given to each participant to preserve their identity.

Table 9

*Participant Responses Based on Best Practices*

<table>
<thead>
<tr>
<th></th>
<th>Number of Questions</th>
<th>Number of Effective Design Element Responses</th>
<th>Number of Ineffective Design Element Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistent Layout</td>
<td>2</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Campus Resources</td>
<td>5</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>Website Navigation</td>
<td>3</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Inquiry Support</td>
<td>1</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Orientation Assessment</td>
<td>2</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>13</td>
<td>43</td>
<td>15</td>
</tr>
</tbody>
</table>
Note. Participants sometimes offered multiple responses to questions. In some cases, their responses offered both effective and ineffective assessments of the design element.

**Consistent layout.** Dixon, Beveridge, Farrior, and Williams (2012) observed that consistent layouts strengthen online orientations. Consistent layouts include similar colors and font styles throughout, resources equally divided and presented in sections, different modalities used throughout each section and concise introductions to the orientation and each service section. Consistent layouts are important in promoting a clear, informative and concise presentation that is easily navigable.

Two questions asked participants if they felt the ONSO offered a consistent layout. All five participants felt there was a consistent layout which assisted in their ease of use. As Joe observed:

Yes I feel like it provided a consistent layout. It’s quite specifically the same format throughout each topic so that gives me an opportunity to familiarize myself with it. I don’t have to learn a new format. I like that…Quite intelligent design.

Kelly reaffirmed Joe’s consistent formatting response by stating, “In every section it had the actual webpage which you could pull up while it was talking.” Other participants also discussed the importance of having the webpages in the same location throughout the orientation. This supports familiarity with the Delaware Tech website and future website usage. When Kelly was asked if she felt the consistent layout was a positive attribute, she stated “Yeah because then you’re familiar with each page that are pulled up.”
**Campus resources.** Effective ONSOs also emphasize the importance of reviews of academic, business and computer services available to support students as well as review what students should do before the semester begins. These reviews support student access to critical campus resources (i.e. tutoring, writing centers, online learning support and computer labs) to assist in their seamless transition into college.

Participants were asked five questions regarding whether the ONSO offered sufficient information about Delaware Tech campus resources. The five participants provided 28 responses; 25 of the 28 responses indicated that the campus resources information was sufficient. One participant provided three responses in which he found certain campus resources elements ineffective. These responses suggested the orientation should encourage more pausing to help retain information, should limit website accessibility to decrease distractions and should also contain less Business Services information since he was already aware of this information. Several of the participants commented on facts they did not know prior to the orientation, which suggests knowledge acquisition. In some of the statements, they also seemed to appreciate receiving the information. Sarah and Jessie were especially complimentary of the orientation’s resource review when asked if they found the content useful. Here are some samples of this:

- Yeah, I didn’t know about the library database at all and the fact I needed a pin to get into it. It’s kind of nice I can do that at home instead of having to come to the library. (Sarah)
- I heard that you could transfer but I didn’t know what colleges they transferred to. So this is good. (Sarah)

- Oh yeah like the information yeah it tells you which ones (Financial Aid options)? Which ones you need to pay back which ones you don’t? That was good. (Jessie)

- The official transcript is free? Wow. (Jessie)

Although all the participants found the Academic, Business and Computer sections to be helpful, they seemed to differ on what section and resource they found to be the most helpful. Their assessments seemed to rely on how much knowledge they had of the section/resource beforehand and whether they would use this new knowledge/resource in the future. As previously mentioned as an ineffective element, information was found to not be useful if it had already been reviewed, either firsthand or by someone in another venue. This was reflected in Kelly and Joe’s responses when asked if they found the content useful. In response to the question Kelly stated, “Minus the financial aid part. Because that would be something my mother would look at.” Joe stated, “I found the business section the least useful just because that was one of the topics that I personally, on my own time, took a lot of consideration and thought.” The fact that the caretaker felt the need to review it before she began the semester or that the participant already gave the information “consideration and thought” validates the importance of the financial aid information in the ONSO.
Joe even asked how to download the orientation after the meeting. Although he felt that the website information was useful, he was interested in accessing the resource information again at a later time.

I mean if later on if I were to get to a computer of my own to download it how would I be able to find this information to download to my personal computer?...Or a way to access it from the blackboard itself.

This statement demonstrates Joe’s investment in the orientation and a desire to learn more about the resources after the required orientation viewing ended.

**Website navigation.** Another best practice in online orientations is to allow students to navigate the website during the orientation to increase their awareness of the college website. Developing an orientation which encourages students to explore the Delaware Tech website will aid in developing their resource awareness and utilization.

Three Interview Guide questions asked participants if they felt reviewing Delaware Tech online resources was an effective component of the ONSO. Overwhelmingly, the participants found that visiting the Delaware Tech website, MyDTCC and Blackboard during the orientation was an effective way to make them aware of the online resources. Seventeen responses from all five participants suggested reviewing the Delaware Tech website was effective in helping them become aware of the college’s online resources. To this point, Sarah stated “The fact that I could navigate and interact on the actual website was helpful. And the fact that I can click on the different links that were embedded into the paragraph.” Even Kenzie, who gave minimal responses during the orientation stated “yeah, because I know where everything is now.”
Only three responses identified issues with the website navigation. Joe found the web browser opening up distracting about ‘a fifth of the time.’ Sarah and Jessie also had similar issues. Jessie reiterated this sentiment by her response: “I’d want to read as he (the speaker) was saying but he was saying click stuff so maybe that was a little bit distracting.” Sarah stated there were a few times when she lost her place when trying to navigate the website. For each of these three participants, there seemed to be a need to navigate the website while listening to the speaker or reading the orientation’s text. This created discomfort when the participants were not able to keep pace with the presentation. These participants did not utilize the pause button to discontinue the audio.

Nevertheless, each of these participants also reinforced the importance of the website navigation. To this point, Joe stated, “It is nice actually to do that. A student can actually take the time to really dive into it. This is excellent scaffolding for me to explore the website with… detailed descriptions as to what I’m exploring.” Joe’s statement supports the purpose of adding the web browser to the ONSO to increase students’ comfort level in navigating the Delaware Tech website in the future. Jessie disclosed her distraction arose from being a visual and audio learner. “If a person who doesn’t want to read and he’s just listening…it’d be alright, but since I’m a visual and audio (learner)…it was a little difficult for me.” Despite this comment, Jessie still noted navigating the Delaware Tech website was an effective tool in making students aware of online resources.

**Inquiry support.** Inquiry support is also helpful in supporting the effectiveness of ONOs. Inquiry support means that contact information such as links, email and/or
phone numbers is added throughout the orientation to answer any questions students may have while viewing the ONSO. Although not as immediate as Amarillo College’s ‘Live Chat Now’ button which gives viewers immediate assistance, the contact information provided in the online orientation can lead the student to resources to answer any orientation questions and to increase connections with the college.

Participants were asked if the orientation provided them with enough ways to locate additional information and assistance. All six responses from the five participants affirmed the ONSO was effective in offering inquiry support information. As Sarah stated, “I think it was very interactive and good and the fact that you have the ability to contact someone if you’re confused about something that’s on the webpage is helpful too.” Additional participants’ comments focused on learning how to locate the answers themselves and not on how to locate Delaware Tech personnel for assistance. This was most notable in Sarah’s response of “The fact that I can now navigate through and use the resources without having to call and ask is very helpful.” Joe’s response of “If I couldn’t find it through the little search bar at the top corner of the website, I’d be able to find it through the links itself” affirmed this. These statements suggest that not only did the orientation build participants’ confidence to locate information on their own, but it may also minimize the need for Delaware Tech personnel assistance. These statements may belie the fact that students did need support. All of the participants asked questions throughout the orientation that were only answered because I was present. Questions that were asked throughout the presentation included:

- Does the SSC, what is that? (Kenzie)
• So what’s the difference between a counselor and an advisor? (Sarah)

• So they did talk about grants a little bit but what’s the difference (between the grant offerings)? (Sarah)

Participants also asked other questions that led to more questions and further discussion on that particular subject. Here is an example of a discussion I had with Joe:

• What did you say about the library? (Joe)

• Number? You’re going to need a pin number which is different than your 700 number so you’ll need to go up to the library to get that. (Me)

• And it’s different from the password that we need to sign on to.. (Joe)

• Correct. The rationale behind that is that that pin number is good for any library database throughout the state it’s not specific to Delaware Tech. (Me)

• Ok. And where do I go to get that again? (Joe)

• The library. So when you went up those stairs you could of…right when you go up those stairs and you look to the right, it’s right there. (Me)

• Ok, the room that has the big glass window? (Joe)

• You got it. (Me)

• Ok. (Joe)

The Conclusion Section reviewed what students needed to do before the semester begins. All of the students expressed a desire to be prepared before they started the semester. During this section, all of the participants asked additional questions on what they should do next before the semester begins. Here are some samples:

• I don’t know when the semester actually starts. (Kelly)
• So I can look up what books I need for each class that are specific to me right now? (Sarah)

• Where did it say to pick up the badge at? (Joe)

• Does the bookstore do refund checks here (in reference to paying for books out of pocket before Financial Aid is awarded)? (Jessie)

• …And you just take some of the credit and you put it like on a card to go to the bookstore and buy your books are you using that? (Jessie)

• Will it tell you what books you need? (Kenzie)

These questions reveal a desire to learn more about certain college subjects and reaffirm the importance of responding to students’ inquiries. But the fact that all of the participants had questions during the Conclusion section, even Kenzie who was taciturn through most of the orientation and Jessie who already attended another college, was especially noteworthy.

Orientation assessment. Effective online orientations assess student knowledge acquisition. Two questions asked participants if they felt the test was an effective way to measure how much they learned. All five participants affirmed the tests as an effective tool to gauge how much they learned (as noted through nine responses). For example, Jessie reported that the pre-tests and post-tests “help make you pay attention.” When asked the same question, Sarah appreciated the fact that she could see the correct answer if she got it wrong. Kelly felt the questions assisted in learning the information.

Three responses from two of the participants suggested the test was ineffective in some aspects. Sarah and Jessie felt some Business Services questions were either
confusing or tricky. Indicative of these three sentiments, Jessie stated “that was a little bit tricky ‘cause if you’re not paying attention or if you don’t put two and two together to read exactly what he was talking about.” An additional response from Joe relayed some Financial Aid questions had more than one answer but he considered this a positive, since it is “good to make you think it out.” At the end of orientation, participants were asked if there was anything else they wanted to add to clarify their thoughts, Joe suggested adding more questions to assist with knowledge acquisition:

I feel like there should be more questions but I’m not sure how I’m not sure where those questions would be placed or what those questions would be…I feel like it would stick in the mind better with more questions.

Joe’s statement implied a desire to improve the orientation for future viewers by helping students retain the information, which was a constant theme for him. Jessie also commented on the test buttons which mandate you click ‘Submit’ before you click ‘Continue’ to advance in the presentation. Although the intent was to force students to answer every question before progressing, Jessie felt this should be revised.

**Ease of use.** Ease of use is important for any website or web-based program. They must be self-explanatory in order to promote continued usage. The five participants were asked 13 questions to assess the ONSO’s ease of use. Almost two-thirds of the responses (i.e., 43 of 68, 63.2 percent) from the five participants suggested that aspects of the ONSO were easy to use; the other responses suggested that other aspects were not easy to use. Ease of use was discussed for each of the three main service sections (Academic, Business and Computer), the Introduction and the Conclusion.
The majority of the responses noted the Academic and Business sections were easy to navigate. Joe found the ONO easy to navigate “if you know how to navigate Facebook, it’s not much different. Just extra things.” Issues seemed to arise when participants were trying to follow the audio and click and/or scroll or when they were investigating information. One participant did not understand that the presentation could be paused to see what was missed, even though this was reviewed in the Introduction. When I asked if she got lost, Jessie responded, “So that’s one thing that might be a worry…when I’m on my computer I never focus on one thing…that’s just how my generation is you never focus on one thing one task at a time.”

When I asked Sarah if she got lost she replied, “Yeah. Yeah. So I was going to go back to see if I missed anything.” These statements along with others suggest that participants were investigating new information and wanting to learn more about Delaware Tech for future resource utilization.

Participants became confused during the orientation for a variety of other reasons: they did not scroll down far enough to retrieve the information, they had difficulty opening up a new browser and had difficulty locating information. Most of the programming issues occurred during the Computer Services section. As Kelly stated, this section was “difficult because of the bugs.” These programming issues included not being able to pause the orientation at certain times, the audio starting again without pressing the start button again and difficulty logging in with their username and password.
Design effectiveness. Design effectiveness describes the orientation’s modalities and structure included to present the information in a clear and effective manner. Modalities and structure may include a well constructed overview, table of contents, navigation aids and headings. The more effective the orientation’s design is, the more efficiently information can be displayed and received. Participants were asked nine questions regarding the ONSO’s design effectiveness. Twenty-eight responses from the five participants suggested that aspects of the ONSO were effectively designed and 15 responses suggested other aspects of the ONSO were not effectively designed. This best practice had the highest percentage of ineffective design element responses.

Most of the participants found the Introduction’s design effective. This included the interactivity, the audio, the highlighted text and the orientation’s overview. An orientation packet is available to download during the Introduction. Keeping in line with Joe’s desire to continually learn, he suggested having the orientation packet materials also available on Blackboard to download at a later time. But no participants chose to download the materials during the orientation. When questioned about why they did not download the packet, most participants replied they would have downloaded it if they were at home. This may have been stated for appearance sake, since none of the participants scrolled over the packet or even attempted to download the materials. Kelly felt the orientation overview was unnecessary because the presentation itself was self-explanatory.

Most participants found the Academic Services section’s design effective. They felt the audio assisted them in learning the orientation’s information. One participant
mentioned he appreciated the audio pauses which allowed him time to review the materials presented. Despite this, some participants became confused on what to click. Jessie felt it confusing that the graphic on the ONSO did not change once they clicked on the link as requested. Also, when Jessie was asked why she did not click on a tab she responded: “I got confused as to what they wanted me to do.” Sarah’s response to the same question was “I clicked on the link but I didn’t know if I was supposed to click on the ‘I agree’ part and star it.” After I asked Kenzie if she did not hit the transfer option because she could not find it, she responded “Uh huh.” Confusion seemed to arise when the participants were independently traversing the information without pausing the audio. Confusion was also created when they did not click on something but later found out that it was necessary to do so in order to follow to presentation. Joe felt it was a suggestion to click and not a request (“There was a brief pause and he also mentioned it so I thought he was just mentioning the tab and not a request.”).

Overall, most participants found the Business Services section helpful. This included the website links, the audio and the highlighted text. When asked what modalities were useful to her when she was viewing the Business Services section, Kelly stated that “highlighting in red and audio was useful to know where you were going.” Participants did not find the Net Price Calculator helpful. The Net Price Calculator was added to our website to give students an average of what they would owe each semester. They may not have found the calculator helpful due to the amount of information the calculator requested to produce the average. Also, participants may have felt they did not need to know what they owed. When I stated it was up to her if she wanted to click on
the Net Price Calculator, Kelly stated she did not need to since she already had her financial aid set it up. Kenzie did not click on the calculator because she did not know her household income (a requirement to use the calculator). Sarah also had issues with what to click in this section. This was noted in her stating “The only thing I can say about the little pops up on the screen is that it’s a little bit difficult to read.”

For the Computer Services section, the participants predominantly felt the modalities were helpful in viewing the orientation. This again included the audio and the website links. When asked if she felt the modalities were helpful in the Computer Services section, Sarah complimented the orientation by stating “I think a combination of the audio and the website was very helpful.” Kelly stated when asked the same question that she “didn’t like the whole clicking the web page there was little bugs on it” which reaffirms the issues noted in the Ease of Use section. Participants seemed to investigate the most information in this section although at one point one student admitted they weren’t paying attention. The investigative behavior included traversing the Resource tab on MyDTCC, clicking ahead of the orientation to review materials, and investigating the information on note taking. When I asked Sarah why she clicked on note taking, she responded, “‘Cause I’m going to really need it.” These behaviors support the orientation’s exploratory nature to help students search additional information they believe to be important. The participants also gave suggestions throughout the orientation to assist in improving it. Two of the suggestions were put forth by the participants to improve the design’s effectiveness for future viewers:
• So say if you’re…And couldn’t finish it, can you go back to it or do you have to start all over? (Kenzie)

• Unfortunately you have to start all over. That’s a good question. Maybe I should say that in the beginning so people don’t try to click out and start all over again. (Me)

• I think it should be said in the beginning of the whole thing. (Kenzie)

• Can people click through it without having to listen to what the guy says? (Inaudible) and listen to what he’s saying. Me, if I was at home I would probably click through it if I could. I’m just being honest…I would just make sure if you want them to pay attention to the orientation don’t make it so they can click through the whole entire thing without listening to the guy. (Jessie)

For the Conclusion section, participants overall found this section’s design effective although Kenzie stated she did not know she could click on the Student Resources tab in the ‘What Next’ slide (although requested in the audio to do so). This was in contrast to Kelly who scrolled over the bookstore in the ‘What Next’ slide to obtain their phone number (although not requested by the audio to do so).
Chapter 6

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this project was to create an ONSO that allows all students to participate in an orientation to Delaware Tech, its programs and services. Orienting all new students to Delaware will lead to an increase in resource awareness and utilization which based on the reviewed literature, will promote positive student outcomes. The data gathered from the two groups support that the project’s purpose was accomplished. Based on the pre/post test data, students significantly increased their knowledge of Delaware Tech resources after completing the ONSO. Based on the Information Guide data, students reported that the ONSO’s design was effective in helping them navigate through the ONSO.

Participants felt there was a consistent layout throughout the ONSO. A majority of the responses indicated the ONSO was easy to use. They also commented on facts unknown to them prior to the ONSO. Additional comments suggested an appreciation of learning new information and a desire to learn more. Participants repeatedly commented that navigating the Delaware Tech website during the ONSO helped them learn more about the college resources. Navigating the website helped students become more comfortable in locating website information themselves, which promotes resource utilization after ONSO completion. Participants also found the test to be an effective tool
in measuring knowledge acquisition. Due to answers being offered when a question was answered incorrectly, one participant commented she was “able to see if I did make a mistake, I could see what the right answer is…” All of these details imply that students became more aware of the college resources during the orientation and may also utilize these resources later on.

Students also reported there were components of the orientation that were not effective. Based on these statements and the test score data, six recommendations are offered for the revision of the ONSO before it is formally implemented at Delaware Tech.

**Maintain Consistent Layout throughout the Orientation**

The participants provided unanimous positive feedback regarding the ONSO’s usage of a consistent layout. As with any website or program, a consistent layout leads to immediate familiarity which assists in continued usage and an unencumbered path to learning new information. One participant specifically noted this by stating he could become familiar with the orientation without learning a new format. The layout allowed participants to review the Delaware Tech website without losing their place due to a new format. The unencumbered path to learning new information may have aided the increases in overall pre-test (mean = 10.71) to post-test (mean = 14.76) scores as well as the increases in scores for all three service sections. Due to the positive feedback, it is suggested that the consistent layout remain intact when the orientation is offered. This should include the same navigational design as well as the same fonts, colors and display of information throughout the ONSO.
Limit and Revise Website Navigation

Although participants felt that visiting the Delaware Tech website, MyDTCC and Blackboard during the orientation was an effective way to make them aware of Delaware Tech web resources, some participants felt it was distracting and contributed to them “losing their place.” In order for students to familiarize themselves with Delaware Tech website navigation and obtain additional college resources, website access should remain in the ONSO. Based on this, I recommend retaining website navigation, but revising when and how the website is accessed in the orientation. This is supported by the Community College Professional responses in the study by Miller and Pope (2003), who believe an important orientation feature is for new students to learn online resource navigation. Students should be limited to the times they are asked to visit the Delaware Tech website, however, and these times should primarily focus on gathering additional resource information not provided by the orientation. This would also limit the times participants become distracted when they independently navigate the website while viewing the orientation.

In addition to limiting website access, revisions to website access should also be made. Participants became confused when they did not know what website link to click. To minimize confusion, directions should be made more explicit as to which website tabs/links to click. Participants also became confused when they did not click on an integral part of the orientation. Based on this, I recommend the audio script be more direct and specific in having viewers follow along. Specific attention to the Academic
Services section should be made when implementing these revisions. A more calculated approach to website navigation should subsequently lead to an increase in resource awareness. This may help increase the Academic Services section test scores, which had the lowest post-test score mean (4.70) for all three sections.

**Expand on Inquiry Support/Contact Information Features**

When asked about the orientation’s inquiry support, participants focused on finding information without the need of Delaware Tech personnel. The responses also implied that the knowledge gained from the orientation reduced the need for Delaware Tech personnel assistance. This outcome was also noted at California Lutheran University which found that orientation completion reduced the number of college inquiry emails (Valosik, 2014). Only one participant stated she appreciated the fact she could contact someone during the orientation. However, based on the numerous student questions to the facilitator during the ONSO presentation, inquiry support seems vital to the orientation’s success. This may suggest the need to reaffirm the Delaware Tech contact options throughout the orientation and the need to revise the ‘Get Help’ button to make it more noticeable and self-explanatory.

Students also initiated comments and discussions throughout the orientation (especially during the Conclusion section). The comments and discussions imply a desire to learn more about certain subjects. Since all participants wanted further discussion, I recommend not only having a ‘Get Help’ button, but also having a ‘Live Chat’ button similar to Amarillo College’s previously aforementioned button. This would promote further dialogue during the orientation to make sure the viewer is comfortable and
prepared before the semester begins. Being comfortable and prepared before the semester begins could help promote student success.

A discussion board, hosted by a current student, could also be employed to assist with inquiry support, student campus engagement, and resource awareness. Current students would be chosen based upon their knowledge of Delaware Tech and its resources. Although students may add their own forum questions, prepared questions could also be installed to initiate discussions. Questions could include “what would you like to ask another current student that you have not had answered yet?” and “what do you feel a new student needs to know in order to be successful in college?”

**Provide Test Questions that Adequately Test Resource Knowledge**

The participants felt the test was integral to the orientation’s success. The test helps measure resource awareness and also provides additional resource information if a question is answered incorrectly. One participant suggested adding more questions to the ONSO to assist in information retention. Questions should only be added if any NSO learning objectives are not covered in the current questions. The participant’s statement may also suggest asking the viewers open ended questions throughout the orientation. This would allow the students to think about their own experiences and how the information pertains to them.

Pre/post test results suggest second semester student questions should be revised. The question, “Britta, a second semester student is unsure if she should change her major. Whom should she contact?” was difficult for students whose scores decreased from pre-test to post-test. The question (and the corresponding answer) should be
reviewed to make sure it is properly stated to not confuse participants. The difficulty with answering the question correctly may also be due to the limited information provided during the orientation. Currently, the orientation presents the differences between first and second semester students by stating that academic advising is available to all students after they begin their first semester. The orientation also states to ensure appropriate course selection and a basic understanding of the program, academic advising is mandatory before students register for their second semester. This information may not be thorough nor explicit enough for participants to understand the difference between a first semester and second semester student. It is recommended to expand on these differences in the orientation for a more comprehensive understanding of the differences.

Based on this, another question focusing on second semester students (“How would Troy, also a second semester student, find out if the degree he’s interested in is a connected degree?”) should also be reviewed.

Although the Academic Services section pre-test scores had the highest mean (4.0) of the three main sections, the Academic Services section post-test scores had the lowest mean (4.7) of the three main sections. These data could imply new students knew more about academic services before they attended the orientation. The data could also imply they learned the least regarding academic services from the orientation. Interview Guide data may support the latter statement since participant responses primarily focused on how the Computer and Businesses Services sections were the most helpful. Based on this, the Academic Services section questions should be reviewed to discern if new students are already aware of this information. The low post-test scores may also be
attributed to the second semester student questions previously discussed in this section, both of which are found in the Academic Services section. As aforementioned, these questions along with the information provided in the section should be reviewed.

Participants noted the Business Services questions were ‘tricky’ and some Financial Aid questions had more than one answer. Joe considered this a positive though, since it is “good to make you think it out.” Participants may have ‘thought it out’ since the Business Section post-test scores had the highest mean for all three sections (5.2). Despite this, based on the participants’ concerns the Business Services section questions should be reviewed and possibly refined to minimize confusion and support ease of use.

Three of the four true/false questions had a difficulty index of over 80% which means a significant majority of the participants answered these questions correctly on the pre-test. The high scores are assuredly due to the high probability of getting a true/false question correct. Based on this, I recommend a review of the true/false questions to discern whether new students were aware of the information before participating in the ONSO. If they were aware beforehand, the questions and the corresponding information in the ONSO would be unnecessary and should be removed. If the questions are deemed necessary, they should be revised as multiple choice questions to limit the probability of getting the question correct by chance. Questions #4 and #10, which also had a difficulty index of over 80%, should also be reviewed to insure they do not to indicate which answer is correct.
Update Design Features to Promote Ease of Use

There were some design issues that would also need to be addressed before the ONSO is administered to new students. The following table provides recommendations based on the test scores and the Interview Guide data findings. Correcting these issues will improve the ONSO’s design and therefore increase the ease in obtaining ONSO resource information.

Table 10

Design Issue Recommendations

<table>
<thead>
<tr>
<th>Design Issues</th>
<th>Recommendation 1</th>
<th>Recommendation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Website Navigation Issues</strong></td>
<td>Remind students to scroll down far enough to retrieve website information.</td>
<td>Fix links that did not bring participants to the appropriate website.</td>
</tr>
<tr>
<td><strong>Inquiry Support Issues</strong></td>
<td>Revise the ‘Get Help’ button to consistently open the email program.</td>
<td></td>
</tr>
<tr>
<td><strong>Orientation Assessment Issues</strong></td>
<td>Adjust the ‘Submit’ and ‘Next’ buttons to alleviate confusion on the sequence of button pushing.</td>
<td></td>
</tr>
<tr>
<td><strong>Ease of Use Issues</strong></td>
<td>Remind students of the pause option throughout the orientation to alleviate confusion and students not ‘keeping up.’</td>
<td>Correct programming, audio and password/log-in issues.</td>
</tr>
<tr>
<td><strong>Design Effectiveness Issues</strong></td>
<td>Revise audio and graphics to be more direct and prominent during integral portions of the orientation.</td>
<td></td>
</tr>
</tbody>
</table>
Provide Access to ONSO Information after Completion

The design seemed to promote participants’ exploratory nature to acquire new information. Despite this, participants did not download any materials nor write down any information while viewing the ONSO although stating they would have downloaded the Information Packet if they were home. The Information Packet contained a Student Success Guide, a Quick Resource Guide, a Blackboard Help Flier and a Now What? Form, all of which are important reference tools for first semester students. Based on a participant’s suggestion, students should be able to access these orientation materials at a later time on the Delaware Tech website. A list of contact information presented during the orientation should also be available afterwards. Where to download the information should be noted during the ONSO Introduction. This would promote accessibility without the need of revisiting the ONSO. I also recommend offering a downloadable orientation overview, which can be accessed after orientation completion. This would further promote resource awareness and utilization.

For various reasons, one feature no student completed or felt the need to acquire was the Net Price Calculator. According to Mayhew, Vanderlinden, and Kim (2010) an orientation’s impact is based upon if students learn how to access critical campus resources. Although payment due dates and financial aid information are included in the NSO learning objectives, student financial resources (i.e., the Net Calculator) are not. Based on this, I recommend removing the calculator from the orientation.
Add Optional Sections Based on Interest and Prior Knowledge

Although all the participants found the Academic, Business and Computer Services sections helpful, they seemed to differ on what section and resource they found most helpful. Participant responses suggested that the resources they did not deem as important was due to prior subject knowledge. Mandatory and non-mandatory ONSO sections could be created to allow students to review optional sections based on their prior knowledge or interests. This could include a section based on the Delaware Tech Library which two participants asked questions about. The learning units in Brooklyn College’s Library’s Online Orientation Program (LOOP) could be used as guides for developing this section. A section based on a Delaware Tech competitive program (i.e., Nursing Program) could also be developed to help new students become aware of the program’s admission requirements, program requirements, deadlines, and program objectives. The MS-IT graduate online program reviewed by Dixon, Beveridge, Farrior, and Williams (2012) could be used as a guide when creating this section.

Limitations

This project does contain limitations. Based on the test results, there were statistically significant increases in pre-test to post-test scores. Although this suggests an increase in Delaware Tech resource knowledge, a strong conclusion could not be garnered from the test results. To achieve a stronger conclusion, the increase in the pre-test to post-test scores would need to be compared against other orientation pre/post test results, such as the orientation program currently available at Delaware Tech or other community college online orientations.
Another limitation involves the multiple formats best practice. Orientation accessibility through multiple formats were noted as a best practice by Hornak, Akweks, and Jeffs (2010) and Dixon, Beveridge, Farrior, and Williams (2012). Southwestern and Saint Paul Community Colleges added notifications in their orientations to explain which devices will display their orientation. Due to all of the participants using the same computer based technology to view the orientation, multiple format data were not collected. Even though data were not collected, the importance of multiple device viewing should not be overlooked when implementing the Delaware Tech ONSO.

Due to Captivate’s limitations, students will not be able to save their progress in the orientation to complete it at a later time. Due to this, it should be stressed during the introduction that there is no save option and they should allow sufficient time to complete the orientation. Also, for resource knowledge and utilization purposes it is important for students to review sections of the orientation. The Captivate program will only allow both forward and rewind options or neither option. Allowing students to move forward in the orientation without needing to view the information may decrease resource awareness. To alleviate this issue, I recommend students earn a minimum test score to receive credit for completing the orientation. If a student does not earn the minimum score, he or she would be required to complete the ONSO again or attend the in-person orientation.

Experimenter-expectancy effects may have occurred during the project. Since I designed the ONSO, I may have wanted positive responses while conducting the interviews and subsequently biased the results. Although Group 1 participants were not
aware I created the ONSO, my questions may have unconsciously guided them to specific responses. For instance, I asked Group 1 participants if they found aspects of the orientation helpful, which may have suggested I wanted those aspects to be seen as helpful. This effect may have been avoided if other Student Affairs representatives completed the Interview Guide.

**Additional Considerations**

It is recommended that the Front Door Experience Committee test the orientation before final college rollout and review the orientation regularly due to changes in student needs, college resources and technology. I also recommend that the committee review the current NSO learning objectives to possibly include online NSO learning objectives. Based on the ONSO’s unique setting, additional educational software/website goals could be created and tested during the online orientation to create a more kinesthetic learning experience.

The Front Door Experience Committee will also need to decide on the definition of mandatory and which students will be required to attend. Which students are required to attend an NSO at other colleges varies. Amarillo College’s online orientation is mandatory for all new students enrolled in eight or more credit hours. Other colleges may or may not include transfer students, visiting college students, or may only include those students needing pre-college level courses. An orientation for pre-college level students is supported by The Center for Student Success and the RP Group (2012), which suggests the need for, and importance of, additional supports such as an orientation for developmental students.
Research has also suggested that retention and graduation rates improve through extended orientation programs, also known as orientation courses. These programs continue throughout a student’s first semester (some continue throughout a student’s first year) and strongly promote competencies such as academic skills, resource awareness, network support, career development, personal development and social integration. Astin (1993) noted that orientation courses can improve academic and campus engagement, which can lead to student satisfaction and student retention. Derby and Smith (2004) conducted a study of over 7,000 students who attended an orientation course to evaluate if the course impacted; transfers within a two year time frame, retention rates, re-enrollment and persistence rates. Based on their study, the authors concluded the following:

It appears that associations exist between taking an orientation course and student retention, particularly with respect to associate degree attainment within the two-year traditional time frame. Moreover, enrollment in such an orientation course could aid in deterring students from dropping out, assisting students in wanting to re-enroll after stopping out, and helping students persist beyond the traditional time frame to earn a degree. (p. 771)

It should also be decided how Delaware Tech will mandate orientation completion and what the penalty will be if a student does not attend an NSO. Some colleges such as Amarillo College have ‘NSO holds’ on student accounts and are not permitted to re-enroll until they complete the orientation. California Lutheran University also has holds placed on international students’ accounts until they have passed the international orientation test and received the orientation certificate (Valosik, 2014). Other colleges have orientations embedded in college courses such as student success
courses (WestED & the RP Group, 2012). Having Blackboard note orientation completion percentages could be a useful tool if the orientation was an assignment in a student success course.

An ONSO will help reduce factors which contribute to students not attending an NSO. Ultimately though, implementing an ONSO option will need a systematic approach from all college departments to help create, edit, add, and review the orientation to make sure the information is complete and up to date. Once the final ONSO is implemented, it will help students develop a stronger awareness of college resources to utilize and be more successful at Delaware Tech.
REFERENCES


Center for Community College Student Engagement. (2012). *A matter of degrees: Promising practices for community college student success (a first look).*


Center for Student Success and the RP Group. (2007). *Basic skills as a foundation for student success in California community colleges*. San Francisco, California:

Center for Student Success and the RP Group.


Appendix A: Front Door Experience New Student Orientation Learning Objectives

Learning Outcome is met by start of first semester:

- Students name key dates on the academic calendar, including payment due date, semester/session start date, drop/add period(s), and withdrawal period(s). (SEP G3 policies)

- Students distinguish between the roles of the Academic Counselor and their Program Advisor. (SEP G3 responsibilities)

- Students explain the need to contact their Program Advisor (in order to receive advisement before they are permitted to register for their second semester). (SEP G3 responsibilities)

- Students name the key resources available on MyDTCC: Welcome, Resources, Blackboard/Courses, email, and Banner.

- Students describe the need for a student (picture) ID. (SEP G3 policies)

- Students logon on to MyDTCC.

- Students access their Delaware Tech email (and can sync with their smartphones, if desired).

- Students identify key campus resources and locations, including Career Services, Open Lab, Financial Aid, Academic Centers (i.e. Tutoring, Math, Writing, etc.), Learning Commons/Library, Student Support Services, Disability Support Services, Wellness Center, Public Safety, cafeteria. (SEP F)

- Students explain the importance of regularly checking their Delaware Tech email.

Learning Outcome is met by end of first semester:

- Students list student life opportunities, including student clubs/organizations and activities/events. (SEP F)

- Students describe how campus resources contribute to success in college, including advisement, Academic Centers, financial aid, Student Success Courses, learning communities, student clubs and organizations, student activities, and international education.

- Students list financial aid options, including Pell Grant, loans, scholarships, SEED, and Federal Work Study.

- Students describe the appropriate steps to resolve concerns/issues. (SEP G3 policies)

- Students explain they have a Student Educational Plan (SEP).
Appendix B: IRB Approval Form

DATE: March 19, 2015

TO: Jeff Rose
FROM: University of Delaware IRB

STUDY TITLE: [730444-1] Studying the Influence of an Online Student Orientation on Students' College Resource Awareness and Utilization

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: March 19, 2015
EXPIRATION DATE: March 18, 2016
REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # (6,7)

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.
Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

If you have any questions, please contact Nicole Fames McFarlane at (332) 931-1116 or nicolefm@ucel.edu. Please include your study title and reference number in all correspondence with this office.
Appendix C: Consent Form

Online New Student Orientation Project Consent Form Group One

Project Manager: Jeff Rose

Introduction:

You are invited to participate in this study because you are a first time Delaware Tech student who has not attended a New Student Orientation. During this project, you will complete an Online New Student Orientation (ONSO) which will eventually be given college wide to first time students. You will also be asked questions by the project manager while completing the ONSO to note your thoughts on its usability.

What is the purpose of this study?

The purpose of this study is to create an effective ONSO for first time students based on the suggestions and responses of students participating in the project.

Who will participate in this study?

First time students who have not attended a Delaware Tech New Student Orientation will participate in the study.

What will you be asked to do?

You will be asked to complete an ONSO and will be given pre and post-tests to record what you’ve learned through the ONSO. The orientation and quizzes should be completed in full. This will take approximately one and ½ hours. You will also be asked to respond to questions by the project manager while you are completing the orientation. I will make an audio recording of this session for further documentation. You will be able to stop the interview at any point if you do not wish to continue. There will be no consequences for no longer participating.

What are the possible risks and discomforts?

There are no risks to your participation.

What are the potential benefits?

There is no direct benefit to you for participating. However, your participation will help give those students who cannot attend the in person orientation an opportunity to learn about all the resources Delaware Tech has to offer.

How will confidentiality be maintained?

The project manager will make every effort to keep all the information you tell us during the study strictly confidential. All documentation, orientation results and audio recordings will only
be accessible to the project manager. If used in any subsequent reports, documentation such as quiz scores and quotes during the observation will be reported without anything to identify the participant by. Any documents you sign or where you can be identified by name will be kept in locked storage.

**Will there be any costs related to the research?**

There are no costs for you to participate in this study.

**Will there be any compensation for participation?**

Participants who complete the study will be given a $20 gift card.

**Do you have to take part in this project?**

Participation in this project is completely voluntary. If you agree to participate in this study, you have the right to stop taking part in the project at any time. Not taking part or not completing the project will have no effect on any current or future interactions with the Delaware Tech community.

**Who should you call if you have questions or concerns?**

You should contact the project manager (Jeff Rose) at 302-454-3944 if you have any questions regarding this project. If you have any questions or concerns about your rights as a participant, you may contact the Dean of Student affairs at 302-454-3999.

---

Your signature below indicates that you have been informed about the study’s purpose, procedures, possible risks and benefits. You have been given the opportunity to ask questions about the research and those questions have been answered. You will be given a copy of this consent form to keep. By signing this consent form, you also indicate that you voluntarily agree to participate in this study.

______________________________
Signature of Participant

______________________________
Name of Participant Printed

______________________________
Date

______________________________
Date
Online New Student Orientation Project Consent Form Group Two

Project Manager: Jeff Rose

Introduction:

You are invited to participate in this study because you are a first time Delaware Tech student who has not attended a New Student Orientation. During this project, you will complete an Online New Student Orientation (ONSO) which will eventually be given college wide to first time students.

What is the purpose of this study?

The purpose of this study is to create an effective ONSO for first time students based on the suggestions and responses of students participating in the project.

Who will participate in this study?

First time students who have not attended a Delaware Tech New Student Orientation will participate in the study.

What will you be asked to do?

You will be asked to complete an ONSO and will be given pre and post quizzes to record what you’ve learned through the ONSO. The orientation and quizzes should be completed in full. This will take approximately one hour. You will be able to stop the interview at any point if you do not wish to continue. There will be no consequences for no longer participating.

What are the possible risks and discomforts?

There are no risks to your participation.

What are the potential benefits?

There is no direct benefit to you for participating. However, your participation will help give those students who cannot attend the in person orientation an opportunity to learn about all the resources Delaware Tech has to offer.

How will confidentiality be maintained?

The project manager will make every effort to keep all the information you tell us during the study strictly confidential. All documentation, orientation results and will only be accessible to the project manager. If used in any subsequent reports, documentation such as quiz scores will be reported without anything to identify the participant by. Any documents you sign or where you can be identified by name will be kept in locked storage.
Will there be any costs related to the research?

There are no costs for you to participate in this study.

Will there be any compensation for participation?

Participants who complete the study will be given a $20 gift card.

Do you have to take part in this project?

Participation in this project is completely voluntary. If you agree to participate in this study, you have the right to stop taking part in the project at any time. Not taking part or not completing the project will have no effect on any current or future interactions with the Delaware Tech community.

Who should you call if you have questions or concerns?

You should contact the project manager (Jeff Rose) at 302-454-3944 if you have any questions regarding this project. If you have any questions or concerns about your rights as a participant, you may contact the Dean of Student affairs at 302-454-3999.

____________________________________________________________________________________

Your signature below indicates that you have been informed about the study’s purpose, procedures, possible risks and benefits. You have been given the opportunity to ask questions about the research and those questions have been answered. You will be given a copy of this consent form to keep. By signing this consent form, you also indicate that you voluntarily agree to participate in this study.

____________________________________________________________________________________

Signature of Participant                                      Date

____________________________________________________________________________________

Name of Participant Printed                                Date
Appendix D: Demographic Information Form

Last 3 digits of Students DTCC ID: _________________

Please provide us with the following information:

1. Age: ____________

2. Gender (Circle One): Female Male

3. Ethnicity (Circle One): American Indian or Alaska Native Asian Black or African American Native Hawaiian or other Pacific Islander White

4. Program of Study: ______________________________

5. # of credits currently enrolled in: ________________

6. # of ENG006/007/090/091 courses enrolled in (Circle One): 0 1 2

7. # of MAT005/010/020 courses enrolled in (Circle One): 0 1 2

8. Have you attended any other colleges (Circle One)?: Yes No

9. Are there any possible barriers to you completing the orientation that we may assist you with? (Circle One): Yes No

If yes, please explain:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Appendix E: ONSO Interview Guide

Online New Student Orientation Interview Guide

Spoken to participant: Thank you for participating in the Delaware Tech online new student orientation pilot. This online orientation pilot contains three topics (academic, business, and computer services) with additional topics to be added before a college wide implementation. The pilot orientation should take approximately 30 minutes to complete. While you navigate the orientation, I will complete an observation guide to note how you go through the orientation and to record your responses to specific questions regarding its usability. Please try to talk out loud as you are going through the orientation to tell me what you are thinking. I will make an audio recording of this session as well for further documentation. After all the interviews are completed, I will then examine each participants’ responses to summarize all the thoughts on the online orientation. Please be as open and honest as possible. Interviewee names will not be provided in the final document. Thank you in advance for completing the orientation and we wish you a successful educational experience at Delaware Tech.

Last 3 digits of Students DTCC ID: _______________
Introduction

Tell me what you are doing now (If the participant is going fast, slow or not communicating/Ask as many times as is needed) *(Ease of Use)*?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Why did/didn’t you click _________ (Ask as many times as is needed) *(Design Effectiveness)*? Did you find the content in this section helpful? What would you change regarding the content? Explain *(Design Effectiveness)*.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Did you find this section easy or difficult to navigate *(Ease of Use)*?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**Academic Services**

Tell me what you are doing now (If the participant is going fast, slow or not communicating/Ask as many times as is needed) (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Why did/didn’t you click _________ (Ask as many times as is needed) (*Design Effectiveness*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Was that (modality they were viewing) helpful (Ask as many times as is needed) (*Design Effectiveness*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find the content in this section helpful? What would you change regarding the content? Explain (*Campus Resources*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find this section easy or difficult to navigate (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Was there any point in this section where you got stuck and didn’t know what to do next? (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Business Services

Tell me what you are doing now (If the participant is going fast, slow or not communicating/Ask as many times as is needed) (Ease of Use)?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Why did/didn’t you click _________ (Ask as many times as is needed) (Design Effectiveness)?

________________________________________________________________________
________________________________________________________________________

Was that (modality they were viewing) helpful (Ask as many times as is needed) (Design Effectiveness)?

________________________________________________________________________
________________________________________________________________________

Did you find the content in this section helpful? What would you change regarding the content? Explain (Campus Resources).

________________________________________________________________________
________________________________________________________________________

Did you find this section easy or difficult to navigate (Ease of Use)?

________________________________________________________________________
________________________________________________________________________

Was there any point in this section where you got stuck and didn’t know what to do next? (Ease of Use)?

________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
Computer Services

Tell me what you are doing now (If the participant is going fast, slow or not communicating/Ask as many times as is needed) (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Why did/didn’t you click _______ (Ask as many times as is needed) (*Design Effectiveness*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Was that (modality they were viewing) helpful (Ask as many times as is needed) (*Design Effectiveness*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find the content in this section helpful? What would you change regarding the content? Explain (*Campus Resources*)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find this section easy or difficult to navigate (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Was there any point in this section where you got stuck and didn’t know what to do next? (*Ease of Use*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Conclusion

Tell me what you are doing now (If the participant is going fast, slow or not communicating/Ask as many times as is needed) \((Ease\ of\ Use)\)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Why did/didn’t you click \(\) \((Ask\ as\ many\ times\ as\ is\ needed)\ \((Design\ Effectiveness)\)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find this section easy or difficult to navigate \((Ease\ of\ Use)\)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Summary

Do you feel the design provided a consistent layout? Can you give specific examples (Consistent Layout)?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Do you feel a consistent layout assists in ease of use (Consistent Layout)?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Which campus resources do you feel you learned more about (Campus Resources)?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Which resource content (academic, business, or computer) did you find the most and/or least useful? Why (Campus Resources)?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Did you feel it was distracting or difficult to follow when the web browser opened up during the presentation? Explain (Website Navigation Services).
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Do you feel visiting the DTCC website, My DTCC (the college’s portal), and Blackboard was an effective way to make you aware of the online resources (Website Navigation Services)?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Do you feel visiting the DTCC website, My DTCC (the college’s portal), and Blackboard will help you utilize these resources more in the future (*Website Navigation Services*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did the orientation provide you with enough ways to locate additional information and assistance? Explain (*Inquiry Support and Contact Information*).

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find the pre and post quizzes effective tools to gauge how much you learned during the orientation (*Orientation Assessment*)?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you find any questions on the pre and post quizzes not suitable for the quiz? Would you add any questions to the quiz? Explain (*Orientation Assessment*).

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you for your time and your responses on our new online new student orientation. Is there anything you would like to add to help clarify your thoughts on the subject? Explain:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Appendix F: ONSO Instructions Document

ONSO Instructions

1. Log into MyDTCC with your account

2. Go to the Courses tab and choose DEV_ROSE_NSO-Online

3. Complete the Pre ONSO Quiz Link under My Announcements (5-10 min)
   a. They will need the last three digits of their Student ID
   b. Remind them to just click on a tab when a website is displayed. It will not highlight their answer but it will record their answer
   c. Have them tell you when they are finished

4. Give overview of ONSO and its five main parts (Introduction, Academics, Business, Computer and Conclusion)

5. Go to Learning Materials link on the left a double click on ONSO for FDE
   a. State there are also quizzes after the three main sections to see what they learned from the ONSO
   b. Remind them during the quiz they should answer the questions on the computer and on the paper handout. They should write down their answers before they click submit (Click Submit 1st, then Next!)
   c. Also remind them the volume is located on the sound bar and to adjust the sound on the computer if they still have no sound

6. Make sure all their answers are written down on the paper. Reopen the ONSO and use the timeline to get to unanswered questions

7. Give them one Wawa Gift card and thank them for their time