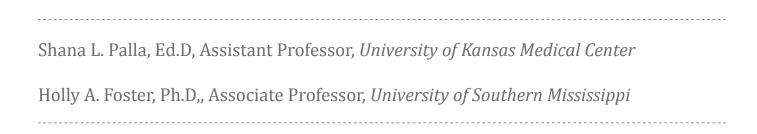
A Guided Orientation Process for Online Adult Learners



Between Spring and Fall 2020, we assessed the effectiveness of a new onboarding process at decreasing student frustration, improving student experiences, decreasing needed assistance, and improving first impressions of the institution, department, and program. Surveys were administered to 66 new students. Old process survey results were compared to the new process surveys to assess the change in students' opinions, experiences, resource usage, and first impressions. Analyses showed no improvements in student opinions or experiences. However, there was a significant improvement in students' first impressions of the institution and increased independence in establishing email and connecting to the department's LinkedIn page.

Keywords: Non-traditional Students; Working Professionals; Graduate School

The time between receiving an offer of admission to graduate school and the first day of class is an exciting time. Students are anxiously awaiting the start of a new adventure, one that is a significant time and financial investment in their future. Logistically, several things need to occur – from setting up an email account with the school to purchasing textbooks and enrolling in classes. The process in which these steps are taken is the first time most students are exposed to the institution, the department, and the program administrators. A smooth, clear, straightforward, and informative process that is not overwhelming will set the stage for a positive graduate experience.

Background

The Master of Science in Applied Statistics, Analytics & Data Science program at the University of Kansas has a unique student population. The graduate students in the program are generally adult learners who are often mid-career working professionals. Unlike the typical undergraduate student, they may have families and social obligations. The average age of students in the program is 36. They are from all over the United States, which adds a challenge of time zone differences with their professors and peers. Adult graduate students are very diverse because they can come straight from undergraduate programs, certificate programs, a related professional career, or a completely unrelated professional career (Hegarty, 2011). While this degree program is entirely online, for many of these students, online education was not prominent when they were in their undergraduate programs. For some, this degree program will be their first foray into online education.

The current process between the time a new student is extended an offer of admission and the first day of class in their starting term involves a welcome email containing a list of all the steps with the necessary information to complete them. There are seven steps that must be completed in a specific order.

Through helping students resolve their orientation issues over the course of 14 consecutive terms, we found that many times their issues stemmed from communication-related behaviors, such as not reading the email, not reading it carefully, or being confused by the instructions, thought they could complete the process in one sitting or did not understand the importance of completing the steps in order or the timing when the steps needed to be completed. As a result, a considerable amount of student resource personnel time is spent helping students through the process, fixing situations where they have not followed the directions correctly and have hit a roadblock, and manually doing the process for them. Some students require more assistance than others. Therefore, the problem is an orientation process that is inefficient, confusing, frustrating and does not provide a positive first experience with the program, department, or institution. Specifically, the orientation process needs to be tailored to the adult learner and the needs of the 100% online student (Jones, 2013; Sutton, 2018).

A new guided orientation process was created to meet this objective. The new guided orientation process utilizes the third-party application vendor CollegeNet with an embedded email system to timestamp when each email is opened and when the recipient accesses links. Each step in the orientation process is communicated in a separate email when the previous step is completed. Within the email are links to videos that provide verbal instructions and screenshot illustrations on how to perform

the step. In addition to the steps of the process, additional pertinent information is disseminated in the emails (i.e., who to contact if assistance is needed for a given step or the difference between learning management systems on each campus).

In the spring 2020 and summer 2020 terms, administrators continued to use the single emailed instructions orientation process, during which time the new guided orientation process was under development. The new students for the fall 2020 term were the first cohort to use the new guided orientation process.

Purpose

The purpose of the study was to develop and assess the effectiveness of a new guided orientation process for online graduate adult learners specifically looking to decrease student frustration, improve student orientation experiences, decrease the amount of assistance students need to complete the orientation process steps and improve the newly admitted student's first impression of the institution, department, and program.

There are seven main steps in this guided orientation process between receiving an offer of admission and the first day of class. The process typically takes new students one to two weeks to complete, spending 15 to 30 minutes on each step spread out over that period. When a student cannot complete a step, it often inhibits further progress through the steps. In our experience, student resource personnel were stretched thin during the few weeks leading up to the first day of a new term. Students often initiate contact, request assistance, and are concerned they have made an error in the process. It is a drain on the system to work through question after question that should be easily conveyed to the students but often is not. New graduate students experience frustration with a process that seems disjointed and archaic. Unfortunately, at an institution the size of the University of Kansas, systems, policies, and processes are often perceived as antiquated (Yavorski, 2019). However, the fact remains that these steps must be completed prior to the first day of class. The guidelines for completing these steps must be followed in the precise order and at the right time. Some systems require overnight processing in order to advance the student's status to the next stage.

Refining the process to make it more accessible, illustrative, and easy to follow will serve two purposes. It will improve the experience for the student and reduce the resource burden on the system. The research questions guiding this study are:

- 1. How did implementing a more guided orientation process change the opinions of the orientation process for online adult graduate students?
- 2. How did implementing a more guided orientation process impact the orientation experiences of online adult graduate students?

- 3. How did the new guided orientation process impact online adult graduate students' first impressions of the institution, department, and graduate program?
- 4. How did the new guided orientation process impact the utilization of online adult graduate student resources (Success Coach, Office of Student Life, IT Helpdesk, Registrar, Student Health Services, and Financial Aid Office)?

Literature Review

Professional advancement significantly motivates American adult learners to return to graduate school (Lin & Wang, 2015). Whether it is to advance further in their current trajectory, to increase their salary, or to change careers to a more lucrative field, seeking a graduate degree can often prove beneficial. A very appealing option is to return to school for a graduate degree, especially when they can keep their full-time job and attend school from the comfort of their own homes. Online graduate education options have become increasingly popular for this demographic, and programs are designed specifically with these working professionals in mind (Blagg, 2018). Higher education institutions are realizing the untapped market in this arena and are seeing the growth potential.

The demographic of returning students is non-traditional in a number of ways, and, therefore, they introduce unique challenges for the student but also for the institution, department, program, and administrators (Yavorski, 2019). It follows that graduate programs meeting the needs of these unique students must be different. They require an unusually high amount of flexibility to accommodate the life stage and complexity of older, diverse, professionally motivated online students who come from extremely varied backgrounds. This combination of unique students and programs creates formidable complications when assimilating into a higher education mold that has been around for many decades.

Older adult learners differ from traditional students in that they are a very heterogeneous group of students, with each student having a distinctive background, demographic, skill set, and motivation. Their professional experiences shape their views and impact their knowledge and skill sets. And while academically they have expressed a need for a strong sense of a learning community (Dzubinski & Hentz, 2012), establishing a cohesive learning community when students are so diverse is challenging. Graduate instructors do not consider themselves adult educators (Dzubinski & Hentz, 2012). However, it would benefit their teaching approach to consider the differences that adult students bring to the classroom and facilitate the formation of learning communities that appeal to adult learners.

The ability to acclimate to education as non-traditional students can significantly impact their persistence and academic success (Golubski, 2010). Part of that is becoming familiar with the tools needed to engage with peers and faculty. Online students often overestimate their technical abilities to navigate software, hardware, and communication tools (Arrowsmith, 2017). Orientation for online students should automatically mandate online tool training, thereby enhancing the acclimation process. However, some institutional student orientations, such as the one at the University of Kansas, offered the same experience for all new students, online or in person.

ADVISING

Non-traditional students expect to have access to traditional support systems (Alnawas, 2014). They expect their advisor to be knowledgeable (Cross, 2018; Schroeder & Terras, 2015), proactive, timely (Cross, 2018), have good communication skills, be responsive to student needs (Deggs & Kacirek, 2010; Schroeder & Terras, 2015), trustworthy, personalized, and valuable (Schroeder & Terras, 2015). They should also be aware and sensitive to the needs of students of various racial, gender, and sexual orientation identities (Schlosser, et al., 2010). Most online graduate students felt that the connection or interaction with their academic advisor was important or very important (Milman et al., 2015).

Adult learners are complex and have unique needs that require a more holistic advising approach (Schroeder & Terras, 2015). Therefore, a one-stop student service model for online students has worked well. However, it requires centralized communication, problem-solving, relationship management, administrative processing, and tracking, all by a single advisor (Simpson, 2018). The result of the one-stop student service model has increased retention and has been very well received by online students (Simpson, 2018).

In a quantitative assessment of student perceptions of online advising experiences, students found their online advisors to be effective in communication and knowledgeable of support services (Cross, 2018). However, Milman et al. (2015) reported that only 62% of online graduate students were satisfied with their connection or interaction with their academic advisor.

The lack of satisfaction with graduate academic advising could be that adult learners would rather be mentored than advised. The distinction between advising and mentoring is that advising can be positive, neutral, or negative, but mentoring is a positive-only relationship (Schlosser et al., 2010). Advising is a precursor to mentoring (Schlosser et al., 2010). Institutions are recognizing the difference and have started titling the role of academic advisors as Success Coaches, putting a more positive spin on the relationship.

Adult graduate students are often not included in traditional in-person orientation programs (Golubski, 2010), and online students are included even less. This is just one example of non-traditional students not receiving the same student resources available to traditional students. With the growing interest in this student demographic, the increased need for resources for adult and online students is an area in which higher education institutions should invest additional resources.

ORIENTATION

Orientation programs tailored to specific student populations are needed in higher education, especially for non-traditional adult learners. Adult students benefit from a tailored orientation unique to their experience (Sutton, 2018). An orientation directed at first-time online students can potentially remove technical skill limitations, assist with time management, avoid additional frustration, and increase retention (Jones, 2013; Mensch, 2017). Therefore, an orientation program tailored to adult online learners would be beneficial for all.

Understanding what non-traditional students need and expect is paramount in order to modify the orientation and make it more successful. The orientation curriculum should be developed using an outside-in approach, where colleges make decisions based on market demands (Alnawas, 2014). Following up with students is also necessary but after a short delay (Sutton, 2018). These students should be encouraged to socialize with peers, seek needed academic services, and become more integrated with their degree programs (Golubski, 2010).

Technology is one area in which orientation programs must excel, particularly with adult online learners. When asked if technology orientation is important to online graduate students, 88.7% responded that it is important or very important (Milman et al., 2015). Students especially expressed a desire for improved orientation on the e-learning platforms (Dzubinski & Hentz, 2012).

Arrowsmith (2017) came to a rather surprising conclusion: online students generally felt like a mini-course in technology was not relevant to them, despite their personal need to develop these skills. However, in a study by Milman et al. (2015), the conclusion was that students want more training. Only 61.1% of the students said they were satisfied or very satisfied with the online technology orientation they received (Milman et al., 2015).

There are some definite benefits to including a significant amount of technology training in new student orientation programs. The majority of online students in a first-time online student orientation expressed an increased confidence in their technical skills, navigating the Learning Management System (LMS), and managing

their academic plan. Retention increased by 8% (Jones, 2013). Not only did the faculty feel the students were more prepared from a first-time online orientation, but the Online Help Desk experienced a decrease in the number of tickets at the start of the term (Jones, 2013).

Lastly, the quality of the student orientation program has a direct impact on student satisfaction and university reputation (Alnawas, 2014; Benavides & Keyes, 2016). It is imperative that students start the first day of class with confidence, a clear understanding of how to use the tools, solid knowledge of student expectations, and how to go about achieving those expectations. By doing this, students are provided what they need to be successful in their higher education aspirations.

Methodology

The purpose of this study was to assess the effectiveness of the new guided orientation process at decreasing student frustration, improving student orientation experiences, decreasing the amount of assistance students need to successfully complete the orientation steps, and improving the newly admitted student's first impression of the University of Kansas, the Department of Biostatistics & Data Science, and the MS in Applied Statistics, Analytics & Data Science program.

RESEARCH DESIGN

This project was conducted in three stages. The first stage was the single emailed instructions orientation process assessment. The second stage was the development of the new guided orientation process. The third stage was the new guided orientation process assessment and comparison to the original process.

The single emailed instructions orientation process was assessed using two cohorts of newly admitted students. Both the assessment of the single emailed instructions and new guided orientation processes were completed by emailing new students and inviting them to complete a survey about their orientation experience. The survey asked questions about the student's opinion of the process, their experience during it, and their first impressions of the program, department, and institution. The questionnaire included seven opinion statements, six experience statements, four first impression statements, and ten resource utilization statements to which each student rated on a 7-point Likert scale whether they strongly disagreed, disagreed, somewhat disagreed, neither agreed nor disagreed, somewhat agreed, agreed, or strongly agreed with the statement. Standard demographics were also collected.

The two independent samples, Group 1 and Group 2, were then compared with regard to their orientation opinions, experiences, first impressions, and resource utilization.

The sample sizes were relatively small, with 30 students in Group 1 and 25 students in

Group 2. Due to the small sample size, the Likert scale item responses were analyzed using a non-parametric Mann-Whitney test. Visually, the results are displayed in diverging stacked bar graphs that are proportionately divided into Likert response sections based on the proportion of the group who responded with the Likert response. These bars, one for each group, were then put on the scale with the neutral section centered over zero.

INSTRUMENT

The survey was crafted to collect information on the opinions, experiences, first impressions, and resource utilization needs of incoming new students to the online master's program. Participants who experienced the single emailed instructions orientation process and participants who experienced the new guided orientation process were sent the same survey to complete. It consisted of a question about the start of the term, four sets of Likert scale questions, one open-ended question, and a set of demographic questions. The first set of Likert scale questions explored the opinions of the survey process and how it made them feel. The second set of questions collected information on the student experience as they went through their orientation process. The third set of questions examined how the orientation process impacted their first impressions of the process, student resources, department, and institution. The last set of Likert scale questions assessed the need and usage patterns of the academic resources available as the participant went through the orientation process. The open-ended question simply gave the participant an opportunity to share any other information about their experience that they felt was relevant.

ASSUMPTIONS/LIMITATIONS

Sample size was a limitation. In order to ensure enough student questionnaire data was collected to be able to make meaningful conclusions, the response rate needed to be exceptionally high. The invitation to participate came from the Program Director for the MS in Applied Statistics, Analytics & Data Science. Having the invitation come from a person of authority within the Department of Biostatistics & Data Science helped encourage participation.

Lastly, there are no established tools for assessing orientation processes from the student's perspective. All the tools used in the evaluation were newly developed for the purposes of this study, and therefore do not have established validity or reliability. While an established tool would have been ideal, customizing a tool for the collection of new guided orientation process opinions, experiences, resource utilization, and resulting first impressions of the degree program, department, and institution served the purpose of this study due to some of the unique features of this degree program.

Results

The survey responses were divided into four major constructs. The first construct was the emotional construct, as it relates directly to the participant's feelings towards the orientation process. Questions in this construct were related to whether the participant felt welcomed, respected, valued, comfortable, frustrated, confused, or confident. The second construct was participant behaviors as they progressed through the orientation process. These questions were comprehension, independence, efficiency, and preparedness. The third construct was on participant impressions of the orientation process, student resources, department, and institution as a whole as a result of the orientation process. Lastly, questions were asked regarding their resource usage throughout the process and which of the steps posed the greatest level of difficulty.

PARTICIPANT DEMOGRAPHICS

Basic student demographics were collected to ensure a balance between the analysis groups. Participants were asked to self-report gender, race/ethnicity, the duration of time since the last time they were a student at a university, and whether they had ever participated in a 100% online graduate program in the past. Using a Fisher's Exact test, it was determined that none of the demographics were significantly different by participant group. Approximately 76% of the participants identified as non-Hispanic white, 64% identified as male, and over 84% had never been in a 100% online graduate program in the past. The categories for the time since a university student were < 2 years (49%), 3-5 years (13%), 6-10 years (24%), and more than 10 years (13%). One participant chose not to respond to the question. Since none of these demographics were statistically different between the participant groups, no additional analysis adjustments were required.

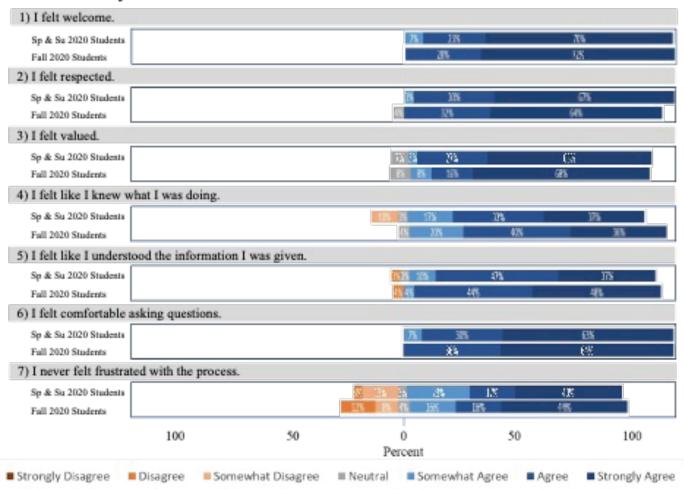
EMOTIONAL RESPONSE TO ORIENTATION PROCESS

Among the seven questions that addressed the participants' emotional responses, four received only neutral, somewhat agree, agree, or strongly agree responses from both participant groups. In the question "I felt like I knew what I was doing," 10% of Group 1 (Spring 2020 and Summer 2020) students who experienced the single emailed instructions orientation process responded that they somewhat disagreed with the statement. However, no students from Group 2 (Fall 2020) who experienced the guided orientation process responded with any level of disagreement. The statement "I never felt frustrated with the process" received 16% disagreement with Group 1, and 20% disagreement with Group 2. None of the group responses to the seven statements yielded statistically significant differences using the Mann-Whitney test for Likert responses (Figure 1).

Figure 1

Likert agreement responses to Emotions statements by Group

EMOTIONS: During the period between being extended an offer of admission and when my first course started...



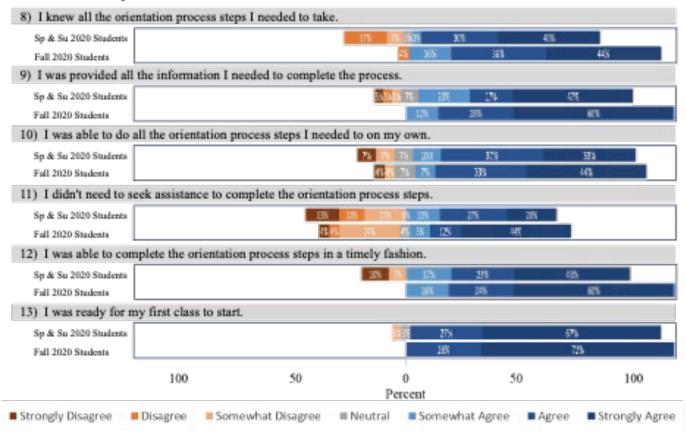
BEHAVIORAL RESPONSE TO ORIENTATION PROCESS

There were six behavioral response statements on the assessment tool. All statements yielded fairly positive responses, with at least 75% of participants expressing agreement with the statements, except for one statement. The statement "I didn't need to seek assistance to complete the orientation process steps" yielded 40% of participants in Group 1 disagreeing and 32% of participants in Group 2 disagreeing. While none of the behavior responses showed statistically significant differences by group, clearly, at least a third of students required assistance, even after the more guided orientation process was implemented (Figure 2).

Figure 2

Likert agreement responses to Behavior statements by Group

BEHAVIORS: During the period between being extended an offer of admission and when my first course started...

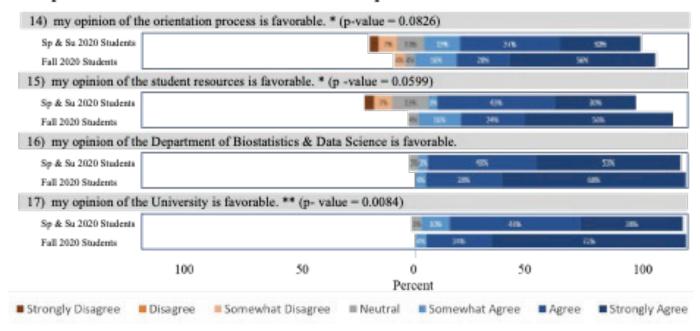


FIRST IMPRESSION RESPONSE TO ORIENTATION PROCESS

Some statistically significant group differences were detected in the participants' first impressions as a result of the orientation process. There were four statements in this category. The statements "my opinion of the orientation process is favorable" and "my opinion of the student resources is favorable" both had marginally significant group differences with Mann-Whitney test p-values of 0.0826 and 0.0599, respectively. In both cases, Group 2 participants responded more positively than Group 1 participants. The most significant group difference in this category was in response to the statement, "my opinion of the University of Kansas is favorable." While none of the responses in either group showed any disagreement with this statement, the Strongly Agree category went from 38% in Group 1 to 72% in Group 2. The change from the single emailed instruction orientation to the guided orientation had a significant impact on how strongly students favored the institution (Figure 3).

Figure 3
Likert agreement responses to Impression statements by Group

Impressions: As a result of the orientation process...



RESOURCE USAGE RESPONSE TO ORIENTATION PROCESS

Ten resource statements were presented to participants to examine the need for assistance for participants by group. There were four statements that showed statistically significant or marginally statistical significance between groups. The statement with a marginal difference was "I was able to take the institution's online orientation and quiz without assistance." In Group 2, no students disagreed with this statement, whereas 12% of students in Group 1 disagreed. The Mann-Whitney p-value for this comparison was 0.0706.

Statistically significant differences were observed between participant groups in the resource statements: "I was able to set up and access my email without assistance," "I was able to connect on LinkedIn and to the department student's group without assistance," and "I was able to log into Enroll & Pay and register for classes without assistance," with p-values of 0.0072, 0.0036, and 0.0463, respectively (Figure 4). The statement about LinkedIn really just showed that 57% of participants from Group 1 were neutral, and only 24% from Group 2 were neutral. This step is not required for students, as it is an opt-in situation, so this difference is not crucial. However, the observed differences in being able to set up email and register for classes are very critical. In Group 1, nearly 30% needed assistance with email access, while in Group 2, only 4% needed assistance. Similarly, in Group 1, 23% needed assistance to register for classes and only 4% in Group 2 needed assistance. These improvements alone

show the value of the new guided orientation process as an alternative to the emailed instructions orientation process.

The remaining six statements, while not even marginally significantly different between participant groups, showed at least the trend in the direction of more independence and unassisted achievement of the step by participants in Group 2. This was seen, in particular, with the statements "I was able to request an Online ID and log into Blackboard without assistance" and "I was able to access the department bootcamp course in Blackboard without assistance." Both steps are complicated and often confuse students in the program.

Figure 4
Likert agreement responses to Resource Usage statements by Group

Resource Usage:

Sp & Su 2020 Students Fall 2020 Students

18) I was able to set up and access my email without assistance. ** (p-value = 0.0072) Sp & Su 2020 Students Fall 2020 Students I was able to take the institution's online orientation and quiz without assistance.* (p -value = 0.0706) Sp & Su 2020 Students Fall 2020 Students 20) I was able to request an Online ID and log into Blackboard without assistance. Sp & Su 2020 Students Fall 2020 Students 21) I was able to read, sign and return the Honor Code, Tech Standards, and the Program Handbook without assistance. Sp & Su 2020 Students Fall 2020 Students 22) I was able to request, download, and install SAS or rStudio without assistance Sp & Su 2020 Students Fall 2020 Students 23) I was able to apply for the JCERT Scholarship without assistance. Sp & Su 2020 Students Fall 2020 Students 24) I was able to arrange an initial advising appointment without assistance Sp & Su 2020 Students Fall 2020 Students 25) I was able to access the department bootcamp course in BlackBoard without assistance. Sp & Su 2020 Students 19 29 25 26) I was able to connect on LinkedIn and to the dept student's group without assistance. ** (p -value = 0.0036) Sp & Su 2020 Students Fall 2020 Students

VOLUME 30 NUMBER 2

27) I was able to log into Enroll & Pay and register for classes without assistance.** (p -value = 0.0463)

Discussion

Participants did not experience significantly different emotional or behavioral responses as a result of the new guided orientation process as opposed to the previous emailed instruction list. However, participants did experience some improved impressions of the orientation process, student resource options, and the university. Participants were also more likely to be able to complete some of the key orientation steps independently, such as setting up their email account, completing the institution's online orientation module and quiz, connecting with the department's LinkedIn page, and registering for classes in Enroll & Pay. This outside-in approach was successful (Alwanas, 2014). All tests conducted were two-sided tests (Figures 1-4), so any negative impacts would have been detected if present. This lack of adverse impact is supported in the diverging stacked bar graphs, where most construct items appear to show the shift between Group 1 and Group 2 was in the direction of increased agreement. So, while the change was not statistically significant, this indicates that the new guided orientation process was an improvement from the previous process. Returning to graduate school after being in the workforce can be overwhelming and risky. The orientation process is the first opportunity for new students to become reacquainted with academia and can set the stage for the new journey they are about to undertake. Experiencing challenges getting access to the systems, getting enrolled, using the LMS, installing needed software, and scheduling with an advisor could, understandably, impact student success from day one (Jones, 2013). Providing an orientation process that is accurate, complete, thorough, timely, easy to understand, and well thought out is key to giving new students a positive impression of the institution in which they have chosen for their graduate education.

Adult online graduate students appreciate a more guided orientation process (Sutton, 2018). Frustration remains with the magnitude of preparation required between receiving an offer of admission and the first day of class. Being sent and watching step-by-step videos on how to get through the process benefits not only the student but also the department administrators and, hopefully, the institutional student resource personnel. Follow-up changes to the guided orientation process based on student feedback will be experimentation on the delivery of the steps. Some students voiced recommendations to change how many steps were provided at a time, indicating that only providing one step at a time was too slow and made the process very drawn out. Future work will be to experiment with being more strategic in providing several steps at a time while spacing out the steps that require overnight systems processing to prevent students from attempting to go on to the next step prematurely.

Providing a sound orientation process for online degree programs will continue to be challenging as institutional systems and processes are continuously changing. Inperson programs have the advantage of holding orientations with students in the room and with undivided attention from participants. They can demonstrate the processes in real time and address any challenges on the spot. Online programs do not have that luxury, so providing materials that leave the student with a good impression and a positive experience is critical. While the student population in this study was adult online graduate students, other online populations would likely have similar needs. Younger undergraduate students starting online education would likely be more technically capable, but using step-by-step guided instructions should not detract from the experience at all. The speed at which they can advance through the steps would perhaps be increased, which would allow administrators to provide more steps at a time. Having processes that provide more guidance, screenshots, demonstrations, and troubleshooting tips than minimally necessary is prudent for new students entering online education programs.

Limitations

Several factors could have impacted the participant experience. Students who engaged in the orientation process in the spring 2020 cohort went through the process pre-COVID-19. The summer 2020 and fall 2020 cohorts would have had their orientation process during COVID-19. It is unclear if or how this could have impacted their experience. Secondly, there was significant turnover in the Registrar's Office during the evaluation period. The Registrar has a direct impact on the timing and accuracy of entering new students into the systems, triggering email account creation, enrollment availability, etc. A new registrar was named in March 2020, but the office remained with only two employees, down from four original employees, for the duration of the evaluation period. Processes, accuracy, timeliness, and responsiveness from the Registrar's Office were all impacted and quite possibly could have impacted the participant experience.

Author Note

FUNDING

This research received no funding from the public, commercial, or not-for-profit sectors.

DISCLOSURE STATEMENT

The authors report there are no competing interests to declare.

References

- Alnawas, I. (2014). Student orientation in higher education: Development of the construct. *Higher Education*, 69(4), 625–652. doi: 10.1007/s10734-014-9794-1
- Arrowsmith, H. (2017). Design and implementation of an orientation to online learning mini course with undergraduate and graduate students with varying levels of online course experience. [Doctoral Dissertation, University of Kentucky]. doi: 10.13023/ETD.2017.008
- Benavides, A. D., & Keyes, L. (2016). New-student orientations: Supporting success and socialization in graduate programs. *Journal of Public Affairs Education*, *22*(1), 107-125. Retrieved from https://digital.library.unt.edu/ark:/67531/metadc1010748/
- Blagg, K. (2018, December). *The Rise of Master's Degrees*. Washington, DC: The Urban Institute.
- Cross, L. K. (2018). Graduate student perceptions of online advising. *NACADA Journal*, 38(2), 72–80. doi: 10.12930/nacada-17-015
- Deggs, D., Grover, K., & Kacirek, K. (2010). Expectations of adult graduate students in an online degree program. *College Student Journal*, *44*(3), 690–699. Retrieved from https://www.learntechlib.org/p/109103/.
- Dzubinski, L., Hentz, B., Davis, K., & Nicolaides, A. (2012). Envisioning an adult learning graduate program for the early 21st century: A developmental action inquiry study. *Adult Learning*, *23*(3), 103–110. doi: 10.1177/1045159512452844
- Golubski, P. M. (2010). Virtually onboarding and supporting adult students in college using Web 2.0 Technologies. *Encyclopedia of Information Communication Technologies and Adult Education Integration*, 1013–1030. doi: 10.4018/978-1-61692-906-0.ch062
- Hegarty, N. (2011). Adult learners as graduate students: Underlying motivation in completing graduate programs. *The Journal of Continuing Higher Education*, *59*(3), 146–151. doi: 10.1080/07377363.2011.614883
- Jones, K. R. (2013). Developing and implementing a mandatory online student orientation. *Online Learning*, *17*(1). doi: 10.24059/olj.v17i1.312
- Lin, X., & Wang, C. (2015). Factors that Affect Returning to Graduate School for International and American Adult Learners. *Institute for Learning Styles Journal*, 1, 40–53. Retrieved from https://www.auburn.edu/academic/cla/ilsrj/Journal%20Volumes/Fall%202015%20Vol%201%20PDFs/Lin%20Wang%20Factors%20Affecting%20Grad%20Students.pdf
- Mensch, S. (2017). Improving distance education through student online orientation classes. *Global Education Journal*, *2017*(1), 1–6. Retrieved from http://www.aabri.com/OC09manuscripts/OC09092.pdf

- Milman, N. B., Posey, L., Pintz, C., Wright, K., & Zhou, P. (2015). Online master's students' perceptions of institutional supports and resources: Initial survey results. *Online Learning*, 19(4). doi: 10.24059/olj.v19i4.549
- Schlosser, L. Z., Lyons, H. Z., Talleyrand, R. M., Kim, B. S. K., & Johnson, W. B. (2010). Advisor-advisee relationships in graduate training programs. *Journal of Career Development*, *38*(1), 3–18. doi: 10.1177/0894845309358887
- Schroeder, S. M., & Terras, K. L. (2015). Advising experiences and needs of online, cohort, and classroom adult graduate learners. *NACADA Journal*, *35*(1), 42-55. doi: 10.12930/NACADA-13-044
- Simpson, R. (2018). Changing how we think about advising online students: One-stop student services advising model. *College and University*, 93(1), 2–6. Retrieved from https://www.aacrao.org/docs/default-source/c-u-.pdfs/vol93issue1. pdf?sfvrsn=82a3fe9e_0.
- Sutton, H. (2018). Preparing adult learners for collegiate success starts at orientation. *Recruiting & Retaining Adult Learners*, 20(11), 1–5. doi: 10.1002/nsr.30373
- Yavorski, K. (2019). Your typical college student has changed why haven't college policies? *Higher Ed Connects*. Retrieved from https://higheredconnects.com/college-student-policy-changes

APPENDIX A – Orientation Student Survey

Orientation Student Survey

Thank you for your help!

Thank you for participating in this study. I am collecting data for a University of Southern Mississippi research project. By participating in this survey, you are affirming that you are at least 18 years old. All of your responses are anonymous.

You were recently admitted to the MS in Applied Statistics, Analytics & Data Science program at the University of Kansas. Between when you were extended an offer of admission, and the first day of class in your starting term, you underwent an orientation process. Below are questions about this process.

Shana Palla									
What was your starting term	in the MS	in Applied S	Statistics, Ana	alytics & Da	ta Science pr	ogram?			
O Spring 2020 or Summer 2020									
○ Fall 2020									
Please indicate the extent to which you agree or disagree with the following statements:									
During the period between being extended an offer of admission and when my first course started									
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree		
1) I felt welcome.	0	0	0	0	\circ	0	0		
2) I felt respected.	0	\circ	\circ	\circ	\circ	\circ	\circ		
3) I felt valued.	0	\circ	\circ	\circ	\circ	\circ	\circ		
4) I felt like I knew what I was doing.	0	\circ	\circ	\circ	0	\circ	\circ		
5) I felt like I understood the information I was given.	0	0	0	0	0	0	0		
6) I felt comfortable asking questions.	0	\circ	\circ	0	\circ	\circ	0		
7) I never felt frustrated with the process.	0	0	\circ	0	\circ	\circ	\circ		

During the period between being extended an offer of admission and when my first course started...

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
8) I knew all the orientation process steps I needed to take.	0	0	0	0	0	0	0
 I was provided all the information I needed to complete the process. 	0	0	0	0	0	0	0
10) I was able to do all the orientation process steps I needed to on my own.	0	0	0	0	0	0	0
11) I didn't need to seek assistance to complete the orientation process steps.	0	0	0	0	0	0	0
12) I was able to complete the orientation process steps in a timely fashion.	0	0	0	0	0	0	0
13) I was ready for my first class to start.	0	0	0	0	0	0	0
As a result of the orienta	ation process	 3					
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
14) my opinion of the orientation process is favorable.	0	0	0	0	0	0	0
15) my opinion of the student resources is favorable.	0	\circ	\circ	\circ	\circ	0	\circ
16) my opinion of the Department of Biostatistics & Data Science is favorable.	0	0	0	0	0	0	0
17) my opinion of the University of Kansas is favorable.	0	0	0	0	0	0	0

Resource Usage	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
18) I was able to set up and access my KU Med Center email without assistance.	0	0	0	0	0	0	0
19) I was able to take the institution online orientation and quiz without assistance.	0	0	0	0	0	0	0
20) I was able to request an Online ID and log into the KU Blackboard without assistance.	0	0	0	0	0	0	0
21) I was able to read, sign, and return the Honor Code, Technical Standards, and Page 2 of the Program Handbook without assistance.	0	0	0	0	0	0	0
22) I was able to request, download, and install SAS or rStudio without assistance	0	0	0	0	0	0	0
23) I was able to apply for the JCERT Scholarship without assistance	0	0	0	0	0	0	0
24) I was able to arrange an initial advising appointment with the Program Director without assistance.	0	0	0	0	0	0	0

26) I was able to connect on LinkedIn and gain access to the department students and alumni group without assistance.	0	0	0	0	0	0	0
27) I was able to log into Enroll & Pay and register for classes without assistance.	0	0	0	0	0	0	0
Is there any other inforr	mation about	your experie	ence in the or	ientation pro	cess that you	u would like t	o share?
Please complete the fol demographics of online program.							
Are you Spanish, Hispa	ınic, or Latino)?					
O None of these							