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Faculty Recognition in Online Professional Development

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Abstract

Professional development (PD) and motivational factors for online doctoral faculty is critical when considering institutional changes. In seeking to promote graduation rates at the doctoral level, American College of Education made modifications to the doctoral program. Faculty training implications related to program changes included PD, badging and electronic credentials.

Introduction

When a college seeks to improve graduation or retention rates, modifications may be needed to promote student learning including faculty training. Following board and administrative approval, the process begins to train and update faculty of the revisions. Developing valuable training and creative recognitions are innovative tools to support faculty during the revisions. Issues such as on-boarding, collaborative learning, and motivation are discussed in this paper. This paper seeks to explore program changes, after the approval phase, and prior to the pilot program implementation.

Need for Support

Over the past year, ACE’s Doctoral Program underwent modifications to better meet student needs and promote graduation rates. In the process of making changes to the program, evidence suggested faculty would need training to prepare for student transitions and the impact on classrooms. The need for doctoral faculty training was met with revision of the faculty portal, revision of dissertation committee PD, additional motivators for trainings (badges), and additional social media elements to engage faculty (Yammer).

Universities must consider the impact the changes have on the faculty. People are the most valuable asset in a company. Therefore, investing in the people of an organization and training is invaluable (Bartlett & Ghoshal, 2002). In the doctoral department at ACE, recognition of training and developing faculty is frequently the focus. Investing in the lifelong learning elements critical to our faculty has been a focus, as changes were made during the past year.

Professional Development and Qualitative Feedback

The changes in the program denote a change in facilitation of courses, but for current professors’ professional development is prudent to foster continued growth. Faculty trainings were reviewed to determine what professional development was needed during the transition. Providing faculty with current tools and information was of benefit for all faculty. An opportunity for faculty to leave feedback on the new committee training was available. Faculty were able to express opinions and thoughts in an open discussion forum. See Table 1.
<table>
<thead>
<tr>
<th>Faculty</th>
<th>Feedback</th>
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<tbody>
<tr>
<td>New Trainees for Committees</td>
<td>“Reviewing all the forms and commenting on them was very useful. The rubrics and checklists are so thorough they almost write the dissertation in the sense that if you know the answers to the questions, you know what you need to write.”  &lt;br&gt;  “I really liked the documents and the step by step process of working through some of the tasks. I also liked the practice of working on former students work or older examples. I would like to be able to do more of that in the future, perhaps with someone that is more experienced than me so that I can see what they are looking for and they can guide me on the process.”  &lt;br&gt;  “I thought the course was very thorough and informative. The resources were very helpful, especially the dissertation rubrics and sample documents. Although a qualitative approach is my strength, I would like to see more sample quantitative dissertations.”  &lt;br&gt;  I found the section on Committee &quot;Roles&quot; to be interesting--especially the description of the Chair's role.”</td>
</tr>
<tr>
<td>Experienced Committee Members</td>
<td>“As with the other course, I found it beneficial to see my colleague's ideas and strategies for working with and supporting candidates in this part of the dissertation process. The course is well-designed and has many valuable resources that I now have organized and available for my work with my current and future doc students.”  &lt;br&gt;  “I have almost completed the course but have reviewed all resources, discussion prompts, and assignments. I find the course to be easy to navigate and understand, the resources to be clear, easy to access, and relevant, and the discussions extremely helpful. The course is an excellent refresher for me in the process and for new colleagues is a valuable experience to help them begin. I especially enjoy and find useful the interactions and discussions with my colleagues and the open sharing of ideas and concepts which allow me to validate my procedures and to add new methods and strategies. Thank you for an excellent course.”</td>
</tr>
</tbody>
</table>

The open discussion forum created a collaborative working environment, which led the way for mentorship, collaboration, and further developed colleague friendships within the college. Faculty who utilized the training were positive about the professional development itself, including the information on program changes, and revised committee roles. Faculty also expressed the joy of interacting with experienced and inexperienced committee member trainees.

The facilitators of the PD discovered the interactions, collaborations, and planned presentations and resources supported the group’s effectiveness (Oseland, 2012). The research exploring incentives and motivation for faculty illustrate the benefits of implementing badges (Glover, 2013). Creative badges depict the accomplishment for each training and may be utilized through social media or email. Badging was implemented for each training session to provide additional motivation and illustrate accomplishment. Certificates and virtual badges were awarded upon completion for faculty to include in the IR curriculum vitae.
Conclusion

Adults bring a variety of beliefs to each learning experience, providing a lens to view the information (Mezirow, 1993). Memories, perceptions and ideas permeate each learning experience, so acknowledging and utilizing those for further learning is critical (Knowles, 1978). For these reasons, time was spent creating engaging and appealing training modules catering to doctoral faculty who were both new trainees and experienced members in the same PD. Additionally, the research exploring incentives and motivation for faculty illustrate the benefits of implementing badges (Glover, 2013). Creative badges depict the accomplishment for each training and may be utilized through social media or email. Badging was implemented for each training session to provide additional motivation and illustrate accomplishment.

References


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Evaluating Past Successes and Future Improvements:
Professional Development for Online Faculty and Student Success

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Abstract

This study takes a holistic approach to teaching and learning in an online environment. By evaluating existing literature on this subject, we seek to understand best practices from a burgeoning field of empirical work. Moreover, institutional practices from Wake Technical Community College are evaluated against the existing empirical evidence, and suggestions are made for improvement. By situating our own approaches for improvement within the broader movement to enhance online experiences for faculty and students, we aim to reflect on our limitations and develop strategies to improve our own outcomes. To achieve this, we review the historical development of online teaching and learning professional development strategies at Wake Tech and reflect on future possibilities for growth. Specifically, we discuss data collected from our Quality Enhancement Plan (QEP) related to student outcomes in our online classes. This includes: (1) First in the World Grant Initiative, (2) eLearning Preparedness across the College—EPIC, (3) eLearning Introduction – ELI, and (4) faculty mentoring and EPIC master’s certification.

Introduction

Richard Hofstadter once quipped that neoliberal education policies promote increased access to the public—everyone should be educated—he problematized the issue by positing a tension between access and excellence (Hofstadter, 1963). Hofstadter’s ruminations were prophetic, especially as we continue to see the rise of distance education (hereafter referred to as online education). As the commodification of education increased, institutions of higher education found themselves at a crossroads. Many traditional institutions resisted the move to online education, while others embraced it. In fact, a recent poll of federal data suggests that nearly 6.3 million students attended online courses in the fall of 2016 (Friedman, 2018)—a figure which we suspect will be augmented by increasing competition for student enrollment throughout the United States. Given the current trend, our institution, Wake Technical Community College (WTCC) sought to untangle the proverbial knot in Hofstadter’s prophetic remarks. Namely, WTCC sought to provide increased access along with excellence in content.

Administrators at WTCC soon realized that the largest of our six campuses was the online “campus,” and performance measures were necessary to ensure that the delivery of content was to high standards. Motivated by the Quality Enhancement Plan, WT administrators began to investigate the issue of online content delivery, and through input from stakeholders including faculty, staff, students, and administrators, the E-learning Preparedness Initiative across the College (EPIC) was born. EPIC was the result of considerable inquiry throughout the college, which included focus groups, internal and external data review, and surveys which found that both faculty and students required more professional development and preparation to support student success and retention in online classes. EPIC contains two major components: student preparedness for taking online classes, and faculty preparedness for teaching online classes.

Through EPIC, six initiatives were created: (1) eLearning Intro (ELI), (2) online instructor certification (EPIC 30), (3) EPIC Master Certification, (4) EPIC mentoring for online faculty, (5) EPIC peer review certification, and (6) an online course review process. ELI is composed of three lessons of professional development covering online learning expectations, using a computer, and blackboard (LMS) basics required by students to enter online classes. Students who completed an online class with a grade of “C” or higher were grandfathered in; they were not required to complete ELI training as a result. EPIC 30 is composed of 30 hours of professional development covering
blackboard learning management system (LMS) basics, accessibility, universal design, and best practices for online pedagogy leading to certification in online instruction allowing the faculty member to teach online classes. The EPIC Master Certification course requires faculty to design a course according to EPIC standards, which include universal design standards as well as an adherence to ADA (Americans with Disabilities Act) compliance. Moreover, faculty who have taught online for four or more years and complete both mentor training and their master certifications are eligible to serve as faculty mentors, receiving a small stipend to ensure that junior faculty who wish to teach online receive their EPIC certifications. For those faculty members who have four years of online teaching experience with other colleges or Wake Tech, but who needed to become EPIC certified, the college developed the peer-review certification. In essence, the pathway to EPIC certification is bifurcated, allowing all new faculty members the options that best fit their needs.

For both peer reviewers and course reviewers, eLearning Quality Standards, along with a rubric, was created through collaboration of faculty and staff. This was used along with, and complements, EPIC 30 training. The peer review certification was created for seasoned online faculty to submit their courses for peer review in lieu of taking EPIC 30. EPIC mentoring was created to support new online faculty and to use in case of an urgent, last minute hire to ensure this instructor was paired with an experienced online instructor to ensure quality online teaching. This mentor was required to complete six hours of mentor training covering mentoring program policies and procedures, time management and goal setting, communication and relationship building, and conflict resolution. These mentors were also required to complete the master certification (EPIC 110). This certification paired an EPIC 30 or peer reviewed instructor with an eLearning technologist to ensure their class was EPIC compliant.

**Literature Review**

**Professional Development for Online Faculty**

While professional development is targeted at improving online instruction, research shows positive effects for those who teach in the conventional classroom after they are exposed to the concepts of universal design, proper alignment, and so on. By becoming cognizant of their objectives and delivery methods, instructors who teach online classes report increased awareness of student needs in traditional classrooms, in addition to increased academic performance from students (Roblyer, Porter, Beilefeldt, & Donaldson, 2009). As the diversity of instructors increases the need for more professional development opportunities increases as well (Cohn, Stewart, Theisen, & Comins, 2016). These diverse faculty members need virtual professional development support, online resources, and an online community of other faculty (Cohn, et al., 2016) to increase and maintain their skill set and to serve diverse online students. Baran & Correia (2014) note that professional development approaches are tied to quality in online programs and suggest a positive organizational orientation with rewards and recognition, community that contains learning groups, peer support, peer evaluation, and mentoring; workshops, training, and one-on-one assistance with pedagogy, technology, and content is required for quality online teaching.

Given the different tools and pedagogy used in online instruction, faculty members must become adept at facilitating the learning of their students. We use the term facilitate here because the student shoulders much of the responsibility for their own learning, while the faculty member ensures continuous progress, while providing insight and guiding students to their academic goals. It is precisely due to this new role of the faculty member that they must receive professional development opportunities to enhance their role in the online classroom, and to make them better facilitators. Yet, one of the biggest barriers to professional development is time and cost (Hahn & Lester, 2012) and incentives should be provided to faculty for online course design, delivery, and professional development (Herman, 2013).

To support ongoing and continuous improvement in instructional skill development high quality professional development and mentoring are needed (Vail & Testori, 2012; Dittmar & McCracken, 2012), as well as coaching that is non-evaluative, confidential, and individualized (McDowell, Bedford, & Downs, 2014). Professional development should be self-paced, include self-reflection, and a teaching development improvement plan (Rizzuto, 2016); as well as delivered in multiple modalities to meet the needs of novice faculty and those more experienced in the online environment. Within the online environment professional development should be embedded within the LMS and provide faculty with problem-solving experiences, a flexible structure that includes collective experience, auto announcements, and interaction with the content, other learners, and the facilitator (Rizzuto, 2016). Self-assessment should be a component of professional development (Rhodes, Richter, & Miller, 2017) to allow each
A faculty member to create his/her own improvement plan without feeling threatened or overburdened. They can set one major goal at a time and move toward excellence in online teaching.

In addition to self-assessment, an individualized approach to faculty professional development aligned with policies and institutional priorities is required (Benito-Capa, Green, Popely, Schneiderheinz, & Thai-Garcia, 2017). The creation of a teaching and learning center, communities of practice, a colloquial, and a fellows’ program increases engagement of faculty in professional development (Benito-Capa et al., 2017). The more coordinated and prioritized these initiatives are the more likely faculty will participate. While the main priority is continued improvement and retention of quality teaching faculty, quality mentoring ensures faculty satisfaction with teaching practices and helps to retain these faculty (Dittmar & McCracken, 2012). As the faculty complete professional development and improve their online teaching, mentoring is the mechanism to retain them.

**Mentoring Online Faculty**

Part of professional development for faculty includes a mentoring program. It serves two purposes, providing support for new online instructors to ensure quality teaching, and providing a way for seasoned faculty to give back to others. Both mentor and mentee learn from each other and grow in their journey to teaching and learning excellence. This opportunity for reciprocal learning provided by mentoring requires trust, respect, support, and commitment (Fountain & Newcomer, 2016). Although mentoring itself is both developmental and dynamic, it is also for the purpose of increasing mentee outcomes (Schunk & Mullen, 2013). Conversations that occur during mentoring should focus on evidence-based teaching and pedagogy, collaboration, analytics, and dialogue (Edwards-Grove, 2014).

When mentoring programs have a comprehensive design they influence institutional members’ teaching, learning, professional advancement and growth, and their relationships (Barton & Lari, 2017). Mentoring programs should provide goals, a purpose, processes, and resources (Ghosh, 2014). The EPIC faculty mentoring program provides training, a website, a blackboard class, forms, processes, policies, procedures, mentoring roundtables, ongoing professional development, and on demand support from the mentoring coordinator. This coordinator also conducts orientation for all mentors in person and reviews all requirements, forms, and expectations. In order to effectively mentor, orientation should be provided, along with professional development teaching both hard skills and soft skills (Fountain & Newcomer, 2016). As the program grows online orientation will be created to meet the needs of these faculty members.

Mentoring programs require time and money, as well as ongoing evaluation and assessment through qualitative and quantitative research (Law, Bottenberg, Brozick, Currie, DiVall, Haines, & Yablonskim, 2014). Mentoring programs need structural support (Ghosh, 2014; Law et al., 2014). They need a coordinator or director, policies and procedures, professional development, lines of communication, and clear goals. In order for mentoring to become part of the culture of the organization it must be created with an inclusive design. In addition, mentoring in higher education should be the norm (Bean, Lucas, & Hyers, 2014).

Open communication, accessibility to the mentor, clear goals and expectations, and exchange of knowledge between both mentor and mentee create independence of the mentee and collaboration between the parties, while mentors serve as role models (Eller, Lev, & Feurer, 2014). To ensure retention mentoring is an ideal method for faculty to connect and want to stay with the college. Xu & Payne (2014) showed that when participants in mentoring are satisfied, they are more likely to be retained. Mentoring mediates the relationship between job satisfaction and intentions to leave. Relationship quality is an antecedent to mentoring satisfaction (Xu & Payne, 2014). Mentoring programs increase productivity and organizational stability (Falzarano & Zipp, 2012).

Ensuring a good match between mentor and mentee is important to ensure the mentoring relationship is productive. Humberd and Rouse (2016) found that mentoring match is important to retention of faculty. For this reason, the mentoring program allows mentors and mentees to choose whether to work together or get paired with someone else at the end of each semester. Mentorship supports career development, creating more robust and effective faculty. These faculty are considered experts in their field of practice and are provided with a professional identity (Lari & Barton, 2017).
Faculty adjuncts should be an integral part of faculty mentoring programs in order to teach and sustain institutional beliefs, as well as for these faculty members to become part of the education system (Rogers, McIntyre, Jazzar, 2009). At WTCC, we include faculty adjuncts in EPIC 30 by requiring them to complete the certification within three 16-week semesters while paired with a mentor. The college pays the adjunct rate for them to complete the 30 hours of required professional development. There is also an online adjunct professional development center lead by a director who conducts orientation and provides online resources for these adjuncts. Evaluation of faculty should be separate from mentoring (Schulte, Dennis, Eskey, Taylor, & Zeng, 2012) and not part of the promotion process (Fountain & Newcomer, 2016). When faculty mentoring is mixed with evaluation, it can destroy the mentoring relationship or confuse the mentee. Mentoring and evaluation serve two different purposes: mentoring is developmental in nature, and evaluation is constructive in nature.

Methodology

During the 2016-17 academic years, the EPIC assessment team, composed of staff, faculty, and administrators at WTCC, conducted campus-wide surveys and focus groups with faculty members who teach online, as well as students who take online courses. Survey data was collected using Survey Monkey, and focus group data was recorded and coded for thematic extraction. Faculty perceptions regarding the use of EPIC standards were also collected; these included perceptions of items such as the ‘getting started’ item, used to orient students to the course; faculty information; course resources; lessons; and so on—we discuss these in greater detail in our findings. The assessment team also examined a total of 90 randomly selected courses (taught by EPIC certified faculty) from every department; using a rubric developed by the team, reviewers assessed the courses. Reviewer comments were then used to extract themes, which were then cross-checked with the quantitative data.

Findings

EPIC Standards in the Online Classroom

The assessment team found considerably high compliance rates with EPIC standards in courses selected for the spring of 2017, 64% of courses in the sample were organized according to the Learning Management System (LMS) template that is required by EPIC. The stipulated benchmark for adherence in the spring and fall semesters of 2017 was 95%. Moreover, the 5 standards with the highest adherence rates were: Student Support (98%), Course Policies (94%), Welcome Message (94%), Intellectual Property (89%), and Course Information (89%). Those standards with the highest adherence rates include: Accessibility Compliance (22%), Faculty Information (26%), Course Calendar and Schedule (49%), and Rubrics (50%).

For courses sampled in the Fall of 2017, only 46% were organized according to the LMS template, a significant decrease from the previous semester, as well as a lower score from the anticipated 95% adherence rate. In this sample, the highest percentage of items considered ‘met’ were: Student Support (97%), Intellectual Property (90%), Course Policies (88%), Access (88%), and Welcome Message (85%). Those items with the lowest percentage of adherence were: Faculty Information (27%), Accessibility Compliance (33%), Rubrics/Grading Criteria (43%), and the Navigation Menu (46%).

Faculty Perceptions

Analysis of the survey and focus group data demonstrates that faculty members benefitted from their EPIC certification training. More than 96% of respondents noted a positive change in their teaching practices due to their certification. Among the items that demonstrated a significant increase in adherence were: My Grades, Getting Started, and Lessons (these are menu items in the LMS which require a certain design per EPIC standards). 70% of respondents also noted that they would change the Getting Started menu (used to orient students to the course). Only 28% of the faculty stated that they would not make any changes to the EPIC training program. This may be related to the perception by faculty—derived from the focus group—that EPIC was intended to enhance or alter their subject-matter knowledge.

More focus group data revealed increased awareness of standards, and requirements related to ADA. A third of respondents noted how the EPIC process made them more cognizant of the need to comply with ADA standards, such as the following comment: “I am much more aware of accessibility issues and am trying to incorporate more
creative ways to present information. I have taken several workshops that will help me with this,” “My classes are more ADA compliant. It’s very hard to get them completely compliant and have an active adaptive course,” or “I am more aware of ADA accessibility. However, and I feel bad for writing this, but I have found good content but neglected to show it because it wasn’t accessible.” While the results are mixed, the pattern is clear, faculty members were initially hesitant to undergo the EPIC training—partly due to confusion about its intended goal—however, the data suggests a gradual positive linear progression.

**EPIC Mentoring as a Professional Development Initiative**

For the EPIC faculty mentoring program, the results showed that mentors and mentees enjoyed building trust, working together on course development, learning from each other, receiving help and praise, and creating connections (Barton & Lari, 2017). This interpersonal and supportive relationship created satisfaction and motivation for these participants. Mentors expressed the need for more professional development to counter mentee resistance and more structure for the program, while noting that they really enjoyed their role and felt they were learning as much from the mentee as they were teaching them (Barton & Lari, 2017). This continued to be a theme throughout the mentoring experience and learning patience and trusting themselves was key to maintaining the relationship and helping the mentee move forward.

**Conclusion**

The EPIC initiative was instrumental in creating eLearning Quality Standards helping both online, hybrid, and in-person faculty implement navigation and organization in their LMS portion of their classes, as well as improve communication and collaboration, and create assessments that aligned with student learning outcome measures. The EPIC faculty mentoring program achieved its mission to support new online faculty in earning their EPIC online teaching certifications, while being guided by a qualified experienced online faculty member to ensure the students received quality instruction. While instructor resistance and mentee resistance were minimal, the overall acceptance of the EPIC standards, processes, and programs were successful. Further initiatives to improve professional development for online faculty should include a teaching and learning center with multiple resources in person and online that allow open access for individualized instruction, self-assessment, collaboration, a colloquial, and a fellows program. At this point in time, Wake Tech has these initiatives in the works and should complete their implementation this year.

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Creation of an Online Certification Course: Lessons Learned

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Abstract

Professional development opportunities for faculty to teach and facilitate online are much needed especially those that can tailor to individual institutional needs. This paper describes the challenges and lessons learned in creating an online facilitation certification course for use by various institutions across the University System of Georgia (USG). Contributors from 10 institutions incorporated their best practices in developing course design, encouraging student engagement, and promoting academic integrity to create a positive learning experience for students in an online environment.

Background

Online learning has experienced exponential growth in higher education. According to research, from 2002 to 2014, the number of students taking at least one distance course has tripled from 1.6 million to 5.8 million (Poulin & Straut, 2016). Consequently, the demand has increased for high quality and up-to-date professional development programs for faculty to teach and facilitate online courses. Online training programs are an effective means for sharing the necessary information and for providing instructors an online learning experience from the student perspective (Vo et al., 2017). While many institutions in the state of Georgia have offered local training, a reduction in funding for online training and support could make it difficult to continue these programs. An online certification program made available across the university system would allow training to be consistent across institutions.

Items for Consideration: The Course Creation Process

In 2018, eCampus (a service unit of the USG) developed an online facilitation certification course with the goal of providing institutions within the USG a curriculum that captures training needs for online faculty while drawing on the expertise of various faculty across the system. Here are the items considered and the lessons learned during the course creation process.

Course Content

According to a study by Robinson and Hope (2013), even though teaching is one of the first responsibilities of new faculty members, graduate students preparing to become college professors are usually trained to research but not to teach. While hiring institutions are expected to provide training for teaching, especially online teaching, this training may not be available or required at all USG institutions. Faculty are left to figure it out on their own with no guidance in effective pedagogy. This course fills this niche for online teaching.

The USG certification course is structured to cover three essential aspects of current online teaching practices. Because we also wanted this training program to be driven by the needs of faculty across the USG, we created course objectives and asked for feedback regarding additions and deletions to these objectives.
Our final content was organized into three modules:

**Module 1 - Developing an Online Course:**
- This module is organized around Quality Matters Standards and aims to introduce faculty to a systematic way of developing an online course. Major topics are backward online course design, alignment principles, open educational resources, accessibility, and universal design, and initial training on our Learning Management System (LMS) so that faculty could apply what they had learned.

**Module 2 - Improving Student Engagement and Cultivating an Online Learning Community:**
- This module is organized around Chickering and Gamson’s (1987) seminal article, and aims at providing faculty with essential knowledge to facilitate online courses. The module begins with providing faculty with background on engagement theories, then moves on to best strategies to encourage contact between faculty and students in an online environment, to cultivate collaboration in online space, to encourage active learning, and to communicate transparency in assignment expectations and feedback. After covering these pedagogical concerns, we provided further training on the LMS so that faculty could practice applying this knowledge for their course.

**Module 3 - Advancing Online Course Quality:**
- This module explores how to improve an online course through various course review processes and provides other tools for improving online teaching. We promote the use of available course quality assurance rubrics such as Quality Matters, OSCQR, and Course Facilitation Rubrics such as the Penn State model published under the Creative Commons. Time management and academic honesty are also addressed to provide faculty with strategies in their online courses.

Since learning to use tools in the course LMS can be time-consuming (Vo et al., 2017), rather than training faculty about the technology in the last module, we embedded the LMS and tool training inside Modules 1 and 2, with instruction and hands-on activities that tie the module pedagogical strategies with technologies that best facilitate them.

**Considering the Voices of USG Online Faculty and Time Management**

We sent out a call for contributors via the Center for Teaching and Learning listserve. Individuals from 10 of the 26 USG institutions agreed to participate in the development of the course. We asked for respondents to share their areas of expertise and we assigned them based on their responses and our development needs.

Because we wanted the final training program to be useful to all USG institutions, we gave free rein to contributors and SMEs so that their concerns would be reflected in the final course. The SMEs coordinated the development of materials from the contributors for their modules. The Design team provided oversight to ensure deadlines were met.

**How to Maintain Consistency and Quality?**

Contributors had vastly different ideas about the expectations for the length or depth of their submissions. The Design team made adjustments to accommodate these differences. The course then went through several reviews by the design team, selected English majors, SMEs, and a final external review was completed by members of the RACDE group.

**Evaluation Process for Participants**

This self-paced training may be used in different ways (i.e., in whole or in part) across the different USG institutions. Thus, we wanted to create an evaluation process that would make fewer demands on an instructor’s time. To this end, we created quizzes at the end of each section that are automatically graded. Each section also has discussion questions that do not require a moderator. Finally, we wanted the participants to have useful products when they completed each section or module that could be used to create or improve a course that they will teach
online. Thus, we created an ancillary Sandbox course where faculty can post the materials they developed through the learning activities, discussions, and end-of-module activities.

**A Question of Course Delivery: How Many Hours Needed to Complete the Course?**

The course can be completed section by section, module by module, or in its entirety. Faculty receive badges for completing each module. They then receive a final badge for completing the whole training program.

**A Question of Usefulness: How to Distribute the Course to Institutions**

A final version of the course can be exported and shared with any USG institution that uses D2L Brightspace. Each institution can then use portions of the course, adapt it at will, or use the course as is.

**Lessons Learned**

**Everything Takes Longer**

The creation of this course was challenging but doable! Several deadlines were attached to each task; the expectation was that the project would take no longer than two to three months. As the project progressed, it became clear that everything takes longer than expected. Surprisingly, this dilemma is common; research indicates that accurately estimating how long it will take to complete a task is complex (Hofstadter, 1979)

**People Want to be Part of Something Bigger than Themselves**

From the onset, there was an understanding that each participant would have to be actively engaged and open-minded. Knowing that the people involved wanted to be part of something bigger than themselves, it was not difficult for the group of Contributors and the Design Team to be committed to the process of collaboration and to be focused on the goal of completing a quality online facilitation certification course.

**Conflict + Respect = Better Outcomes**

Collaborating on this project illuminated the reality that while the group agreed on the overarching goal, there were differences in opinions and perspectives regarding how to approach certain tasks and topics. Respectfully considering multiple ideas and approaches was a positive aspect of the course development process. Ultimately, those diverging opinions and perspectives led to better outcomes.

**Conclusion**

This training course is just the first for online faculty development, and creation of the Online Facilitation Certification Course was possible through collaboration and contribution from several individuals within the USG. Through identification of items to keep in mind and understanding of lessons learned, the door has been opened for the creation of additional training courses in the future.

**References**


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Full-Time from Afar

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Abstract

With the dramatic increase in the demand for distance learning opportunities in higher education, staffing demands have created a new opportunity for faculty members to teach full-time from remote locations. Previously, a significant portion of online instruction was taught by full-time faculty as part of their regular teaching load or as an economic opportunity for teaching “overload” courses. In addition, online classes are frequently being taught by adjunct, or part-time, faculty members. Increasingly, however, institutions are now found hiring full-time faculty members with the express intent of assigning them to teach fully online. Given the nature of asynchronous delivery, some institutions have begun allowing these faculty members to teach from afar. These non-residential full-time faculty members create a number of issues that affect students, faculty life, and distance learning administrators which must be addressed. Some ready-made solutions for these issues already exist, but other concerns still require attention.

Introduction

Distance learning has evolved from century old correspondence courses through the radio and television-based learning opportunities of the mid 20th century to the emergence of the internet and digital-based learning in the last decade of the 20th century. In more recent years, the spectrum of distance learning has broadened from a unique niche within higher education to an integral part of the educational process. Institutions of higher education have debated – and continue to debate - the pedagogy and the appropriateness of online learning. However, after more than two decades of experience, few institutions have not embraced this new form of learning as part of the learning process. In particular, an increasing number of institutions are offering full programs and degrees completely online.

Education is witnessing the rapid increase in the use of technology in distance learning. In the initial issue of the Online Journal of Distance Learning Administration (OJDLA), Hyatt (1998) noted the potential of a variety of learning formats and teaching strategies necessary for effective distance learning. Among the variety now available, such as Facebook, e-books, Podcasts, none appears more impactful than the evolution of Learning Management Systems (LMS). Learning Management Systems come in diverse forms and today’s higher education institutions are increasingly utilizing them in order to accommodate increased enrollment and varied classes, supporting both student learning and faculty teaching (Dobre, 2015). So much so, that nearly 99% of higher education institutions have adopted an LMS at some level (Dahlstrom, Brooks, & Bichsel, 2014). Not surprisingly, LMS vendors have recognized the increasing demand for their products which has resulted in various forms of LMS such as proprietary LMS, open-source LMS, and cloud-based LMS (Center for Educational Innovation). To further emphasize the expanding role of LMS technology in higher education, an Educause Center for Analysis and Research (ECAR) survey found that 85% of faculty use an LMS in most of their courses, particularly in those delivered online (Berking & Gallagher, 2016; Brown, Dehoney, & Millichap, 2015).

The rapid development of new technology surrounding distance learning has, however, out-paced the pedagogical practices of most faculty. New journals, such as the OJDLA, focused significant effort in providing guidance and information related to how to teach effectively via the online format. Accreditation agencies stressed the importance of providing learning formats that were appropriate and effective (SACS/COC 2018). In fact, for most of the past decade, pedagogy has attempted to catch-up to the ever-increasing sophistication of new learning technologies. Borrowing an analogy from Malthus, whereas technology increased geometrically, pedagogy has increased in a more limited arithmetic manner.
Aside from pedagogy and technology the equation of distance learning has a third component that Turoff (1998) noted in his early look at the future of distance learning. Turoff described this third component as administrative and management choices. While pedagogy trailed technology, administration and management models have been even slower to evolve. In particular, faculty staffing demands have proved sufficiently challenging as to slow the growth and even stifle the potential of distance learning within academic communities.

Online Faculty Staffing Challenges

With distance learning being a rather new phenomena when compared to the long-standing method of classroom and laboratory delivery, one should not be surprised that adoption of this new method comes with several significant challenges for the students, faculty, and administrators. The majority of these challenges have been and remain the topic of numerous studies and research. One area of concern associated with administration that is increasing in its significance involves online faculty staffing.

With the advent of digital distance learning, administrators generally assumed that full-time faculty members would embrace teaching the limited number of online courses that were being developed and offered. These pioneers would do so as part of their regular teaching duties or be compensated for course overloads. However, debates over course size, content rights, the demands of a different pedagogy, along with having to deal with learning management systems, limited the number of regular full-time faculty addressing the growing demand for distance-learning instructors (Lesht and Windes, 2011).

Administrators and public funding agencies saw distance-learning as an economical response to institutional growth. For example, at one time, Virginia legislators threatened to curtail new campus construction until a significant number of students could be served online (SCHEV, 2007). There was a belief that if a faculty member could lecture to a large seated class, then a significantly larger online audience could likewise be served. The economy of scale spurred administrative support for the growth of distance learning.

The growing demand for online faculty, however, did not keep pace with the pool of pioneers who lead the initial wave of online instruction. The traditional structure of academe combined with the generational differences between faculties trained in a pre-digital learning environment, slowed the availability of instructors who were comfortable with the new technology and pedagogies that were being developed in the late 20th and early 21st Century. In addition, many full-time faculty found online teaching to be more burdensome than traditional classroom teaching.

Course preparation, especially the timing of preparation, was different from traditional instruction. In most instances, online preparation needed to be accomplished prior to a semester (Bates, LaBrecque and Fortner, 2016). Furthermore, the development phases of online course construction, the increased need for mechanisms of engagement, and new models of student learning and assessment lessened the appeal for both faculty and, to a lesser extent, administrators, who realized that distance learning was a more challenging environment than previously considered.

With limited tangible incentives given the traditional process of promotion and tenure, some faculty members resisted this type of instruction which resulted in fewer full-time faculty members willing to embrace this form of delivery. However, with the apparent economic benefits and potential budget stresses looming, the support for distance learning continued to expand, forcing administrators to employ adjunct instructors. Adjunct instructors tended to be more willing to pursue online teaching because of their desire for employment and often their more recent experience with the new technology.

Yakobski (2016) noted that among adjunct faculty surveyed, nearly 85% of respondents selected the lack of full-time faculty employment, or associated responses, as the reason for their dissatisfaction. They recognized that a willingness to venture into areas that others resisted could make a positive impression on administrators. Additionally, adjunct instructors were often more recent graduates of programs where some exposure and experience in distance learning existed, or that they were willing to acquire the requisite skills needed to teach online because of their routine exposure to digital technology in today’s environment.
**Full-Time from Afar**

The growing acceptance of online learning and the increased emphasis on it by major universities, coupled with the long-standing goal of tenure track faculty teaching a significant proportion of all instruction, administrators have not given up on full-time faculty substantially participating in distance learning. More and more, faculty job postings stipulate that new faculty should be exposed and equipped to teach in an online environment as component of their requisite skill set. Professional journals, such as the Chronicle of Higher Education, now include job descriptions which identify online learning experience, or at least expectations of early involvement in training, as part of an increasing number of position announcements.

This attention to distance learning capabilities is also beginning to surface in some professional development evaluations for tenure and promotion. Thus, over time an increasing proportion of faculty are becoming more willing to teach some online or hybrid version of online instruction as part of their regular teaching load. However, this leaves an important segment of the faculty, usually tenured senior faculty members, holding fast to their traditional methods and forms of instruction. Because of their seniority, especially on tenure and promotion committees, fully embracing and teaching multiple online course remains a somewhat risky business for many up and coming full-time faculty (Bates, LaBrecque and Fortner, 2016).

The growing success and acceptance of online education has not only provided the impetus for the development of fully online degree programs at many universities and colleges, but it has also resulted in an increasing number of fully online institutions, most of which are for profit. With a central facility, full-time administrators and related support personnel, institutions such as the University of Phoenix, Capella, Independence, Argosy and similar universities emerged as major players in higher education. They joined a growing number of existing colleges and universities which transitioned from smaller traditional schools to rapidly expanding distance learning dependent institutions with multiple learning sites in many cities and communities, again largely staffed by adjunct instructors.

Lesht and Windes (2011) noted that administrative views at the institutional, departmental, and personal levels can significantly influence acceptance and support of greater involvement of full-time faculty in distance learning. Because it is in the best interest of the institution to utilize their most seasoned and experienced instructors across all degree programs - including online programs - administrators continually seek to identify and implement new and more innovative ways of attracting more senior faculty members to participate in distance learning opportunities.

It is in this context that a new thought process is emerging. If the students can function and absorb course material from afar, why then can’t their instruction emanate from remote locations as well? This form of employment has been expanding rapidly outside of the academic regime with positive results in attracting and retaining workforces. In 2013, Amabile & Kramer stated that the option of working remotely offers a number of benefits to the company and the employees at the same time (Amabile, 2013).

Productivity benefits associated with remote employment in industry remain mixed, however. Singh et al (2017) note that the option of working remotely has been gaining acceptance and could prove to be an economic and more feasible option, but cautions that more study is needed regarding some of its challenges before it can be considered an overall success. Likewise, teaching from afar poses both challenges and benefits for its three main constituents: students, faculty, and administrators.

Should institutions allow faculty to teach from a remote location and will students be more challenged to interact with their professor outside of the course itself? Will mentoring, advising and supporting online students become more stressful in such situations? While these are certainly issues that need consideration, the majority of students today have become accustomed to the digital approach to education so they are less likely to stumble when faced with these scenarios. For the student, the benefits vary. With a remote instructor, the student can feel more at ease that he or she is not missing something because, in this case, resident students would not have any more direct interaction with their instructor than they would. In addition, since the instructor is remote, the likelihood that the instructor’s availability will increase because they do not have specific office hours (Benton, 2009).

The benefits of remote instruction for full-time faculty are fairly obvious. People place a premium on where they live. There can be significant tax savings for residing in a state that does not impose income taxes, for instance. As the faculty member ages, family needs often draw otherwise satisfied and effective workers away from their
organizations. Being able to better balance the needs of family and their professional experience is of substantial benefit. Also, some senior faculty who have taught regularly in the distance learning environment are now approaching retirement age. Some of these faculty wish to continue full-time teaching from afar, in lieu of retiring. Though continuing to teach as an adjunct instructor has been an option, such arrangements may not meet accreditation requirements, provide sufficient staffing for online programs, or satisfy the faculty members’ financial needs. Another benefit impacts the ever-expanding requirement for scholarly activity. Research and publishing have long been a large part of full-time faculty’s requirements for advancement and tenure and have often conflicted with the time constraints associated with teaching and administrative duties. The greater flexibility in time management that teaching from afar affords faculty is an attractive option for balancing these duties with continued scholarly efforts.

While the benefits of teaching from afar are more tangible for full-time faculty, the challenges are more subtle. Time zone differences pose logistical difficulties as does the potential loss of inclusion. Collegiality, the exchange of thoughts on various topics as well as pedagogy, occurs naturally in a university environment (Velez, 2009). Keeping this spirit of learning and interaction with colleagues becomes more difficult when teaching from afar. Technology is available to mitigate this challenge however the instructors would need to take the initiative to learn yet another form of technology. Functions such as library access, human resources, and budget and finance, are already available using technology, but most will agree that today’s technology is not yet a perfect replacement for “being there”. Of course, students who learn from afar have had to overcome similar challenges coordinating with the registrar and bursar offices, so it should not be considered a major obstacle for faculty.

The benefits of teaching from afar for administrators are significant. Remote faculty would allow administration to expand course offerings without the normal “brick and mortar”, resulting in significant cost savings. The economics of the process would also allow administration to expand curricula and degree programs. And possibly most importantly, the use of remote workers has been found to positively impact employee recruiting and retention. Often institutions face a knowledge drain because they lose so many experienced faculty, for the reasons previously noted. The cost of replacing faculty is high, both financially and time-wise. In fact, it is not unusual to find that replacing a full-time faculty member can take six months to a year. During that period, course availability would need to be reduced or current faculty would have to agree to course overloads. Clearly, retaining effective, capable and credentialed faculty carries tremendous benefit to administration.

Of course, remote workforces pose challenges to administrators as well. It can be difficult to properly manage faculty members who are not in residence. The process has been described as “trying to be a leader with your hands tied behind your back while you’re wearing a paper bag over your head” (Fisher and Fisher 2001). But with nearly 95% of Fortune 1000 companies participating in virtual work (Hoefling 2003) it is clear that with the proper training and incentives, this hurdle is relatively easy to overcome.

**Future Opportunities for Teaching from Afar**

Within higher education, the type of institution can play an important role in influencing the availability and form of full-time teaching from afar. Most non-profit institutions with established campuses want their faculty to be in-residence. Faculty are expected to teach and be involved in institutional committees, advise or mentor students, and to be active in supporting the missions of their institutions. This also involves scholarship and professional development activities. These expectations and requirements can act as barriers to full-time faculty teaching from afar.

But the rapid growth of online degrees and programs have created a demand for full-time faculty to teach in this environment. Accreditation requirements limit the proportion of courses that can be taught by adjunct faculty members (SACS/COC, 2018). Though many institutions prefer their full-time faculty to be in residence, the availability in certain academic areas is such that having sufficient residential faculty teaching in these areas has created opportunities for full-time from afar faculty. This requires the administration in the non-profit environment to expand their traditional view and evolve some new and innovative solutions. A number of options are available for consideration.

The first option allows an individual to continue in their role as a tenured senior member of the faculty, meeting the full requirements of their position, while teaching remotely. University service, including department meetings,
committees, advising and mentoring can be done online through a variety of electronic options, such as Skype, Face-time and video conferencing. Digital office hours provide regularly scheduled opportunities for student experience and institutional involvement of valued colleagues who can continue to contribute to the professional reputation of the department and university through their scholarship and leadership.

A second option is for a current faculty member to accept a change in their professional status. Specifically, assignment as a lecturer or senior lecturer with a loss of tenure, an increased teaching load and a salary adjustment. In this role, the faculty member does not have any service commitments, committee or advising obligations. This option allows a faculty member to teach from afar, yet continue to support the academic mission of a department as a full-time faculty member. Administratively, this also provides academic continuity and provides some financial savings for the department. On the down-side, service and student support activities must be re-allocated to other members of the program.

A third option is to emulate the for-profit sector of higher education. Full-time from afar teaching opportunities are more abundant in this sector. Institutions, like American Public University and its sister institution American Military University routinely hire full-time faculty members who teach fully online and do not have to be physically located in a campus environment.

In their job descriptions, these institutions stress:

“[a] quality learning experience for students by ensuring coherence in the discipline, rigor in the content, and relevance and currency to the practice ….. and contribute to a range of activities that support student learning outcomes, program quality and discipline integrity, all of which focus on student learning and retention” (APU, 2018).

Though these types of institutions predominantly hire part-time adjunct instructors, they hire full-time faculty to be program leaders and to serve as the foundation of their academic programs. In addition, these faculty members have administrative duties including department and committee meetings (online), professional development expectations and continued training in appropriate online pedagogy.

Summary and Conclusions

Teaching full-time from afar is an increasing option within the domain of distance learning. Consistent with the emerging trend of remote employment in a number of professional environments, full-time teaching from afar offers a number of opportunities and challenges for both administrators and faculty members. Given the growing demand for courses, programs and even complete degrees, institutions of higher education are expanding opportunities for full-time faculty to teach from afar. Administrators are better able to maintain program quality and continuity through full-time faculty. Some of these faculty will be full-time faculty who evolve from their traditional campus roles to remote practitioners of their craft. Others will be hired to teach exclusively as remote faculty as institutions expand their programs or develop new learning opportunities and options for an increasingly digital based market. The management and staffing procedures in these evolving environments will challenge higher education to adjust its views and policies for dealing with a changing professoriate. Similarly, faculty in this emerging learning environment will experience similar demands and opportunities.

Full-time from afar may be a new frontier today, but it is likely to be a more significant component of higher education in the future.

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Student Expectations of Online Faculty Engagement: A Mixed-Methods Study

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Abstract

Institutions offering online courses and degrees often develop requirements for faculty to student interactions; yet, these requirements may not align student preferences for faculty engagement. This research expanded the work on an earlier study by Shaw, Clowes, and Burrus (2017), “A Comparative Typology of Student and Institutional Expectations of Online Faculty.” Using the original typology as a lens, results were grouped into themes including substantive feedback, timeliness, and course expectations. In addition, statistical analysis was conducted to evaluate relationships among variables. Although the model was not found to be significant, the qualitative data was explored to uncover any significant themes from the open-ended responses. Three themes were present—substantive feedback, timeliness, and course expectations—from the original typology, but three additional themes—teacher accessibility, engagement, and grading practices—previously sub-categorized under the original typology, warranted further attention because of their noticeable presence in the response data. Further, the quantitative data supported the predictor of frequent faculty participation. There were several mentions in the data about online classes mirroring the traditional classroom, especially in terms of engagement. Recommendations for further study include conducting a study of the relationship between faculty outcomes and student satisfaction after implementing student performance expectations.

Because of the expansion of online programs (Allen & Seaman, 2013), institutional leaders are challenged to develop expectations for faculty around student engagement to ensure best practices and student needs are fulfilled. With student retention closely tied to student satisfaction, studying strategies enhance student experience, engagement, and enjoyment in the online academic setting can have important consequences for institutions. This research study was an expansion of a previous study, “A Comparative Typology of Student and Institutional Expectations of Online Faculty” (Shaw, Clowes, & Burrus, 2017). The original study arose after numerous discussions with online faculty who shared institutional expectations of performance, which often differed from the literature on student perceptions of quality faculty performance. Student satisfaction is an essential element that should drive faculty mentoring approaches (Izadina, 2016); yet, there was a gap in the literature relative to the role of student experience as a driver of faculty expectations. The initial study included an exploration of expectations from a sample of institutions and then experiences of online students without any institution-specific data. This study allowed the researchers to sample a specific group of online students in courses to further validate the original findings.

Engagement theory was used as the theoretical lens for the original typology. Engagement Theory was developed as a framework for technology enhanced teaching and learning (Kearsley & Schneiderman, 1998). Engagement was conceived as a way that students participate in learning activities that are collaborative and interactive. Engagement Theory often requires relational components such as communication and social skills (Miliszewska & Horwood, 2004). As such, it is particularly relevant to the online setting. For meaningful learning to occur, students must be engaged in activities and interaction with others throughout the learning event. While we did not specifically engage
students around the definition of engagement, we recognized that there was value in gathering data from students about engagement knowing their interpretations of this term might vary. As such, this theoretical framework was also the lens through which the quantitative data was viewed in this subsequent study.

**Literature Review**

Technology has altered higher education landscape requiring faculty to use new tools to engage with students (Facer, 2011). Today, online education enrollment continues to grow even in the face of declining overall higher education enrollment (Allen & Seaman, 2016; 2017) with over 6 million students taking at least one online course in Fall 2015 (Allen & Seaman, 2017). One third of all students in higher education are now enrolled in at least one online class and about half of those students complete all of their classes at a distance (Allen & Seaman, 2017).

Given that faculty members are subject matter experts in the classroom, they may not necessarily have the requisite online or technology skills to effectively support student success (Meskill & Anthony, 2007). As institutions adopt online education to support institutional growth and student needs, it becomes essential to provide faculty with effective support to ensure online teaching proficiencies (Vaill & Testori, 2012). Further, higher education leaders need to prepare faculty in areas including technical expertise and pedagogies prior to their first online teaching experience environment. In addition, faculty need to fully understand institutional and student expectations within the online learning paradigm.

There is great interest among many higher education stakeholders regarding the factors that influence online student success and satisfaction. While higher education leaders are expected to produce and administer policies that increase student success (Johnsrud & Banaria, 2004), instructors are typically responsible for conveying instructional content, engaging students, and evaluating student work. In distance education environments, students rely on faculty engagement in either written, audio, or video formats to guide them toward improvement. Often, faculty must develop new skills and practices to effectively engage students (Gallien & Oomen-Early, 2008). Faculty members are presented with unique challenges to teaching in online settings (Anderson et al., 2011) including ensuring faculty-to-student communication supports learning outcomes and student satisfaction.

**Student Satisfaction in Online Courses**

Student perceptions of effective instructor engagement are an important consideration for educators. Student satisfaction is positively correlated with instructor communication, responsiveness, encouragement, accessibility, and professionalism (Bolliger, 2004; Kauffman, 2015). In a study of student perceptions of effective instructor engagement, researchers found that gentle guidance, positive, constructive comments, timeliness, and future orientation were important feedback considerations (Getzlaf et al., 2009). Further, Garrison et al. (2000) developed a community of inquiry framework, linking student engagement to cognitive, social, and teacher presence. Effective faculty feedback and engagement is correlated to positive outcomes for students. Students showed greater levels of satisfaction with the instructor and performed better academically when they received personalized interactions from the instructor on assignments (Gallien & Oomen-Early, 2008).

Student satisfaction has become a high priority among college administrators (Noel-Levitz, 2014). Students who report high satisfaction, defined in large part by their opinions of faculty teaching, tend to persist to graduation, which improves institutional outcomes and contributes to student satisfaction (Noel-Levitz, 2014). Faculty characteristics and behaviors, particularly faculty actions that engage students in distance environments, can directly contribute to student satisfaction (Kuh & Hu 2001). Because student satisfaction is correlated with several outcome measures—such as persistence (Tinto, 2010), course quality, and student success (Noel-Levitz, 2014)—taking steps to improve how faculty engage with students in their online courses has a clear and direct benefit to the institution.

**Faculty Training and Institutional Expectations**

Faculty interaction and student satisfaction are key predictors of student achievement and success (Astin, 1984; Kuh & Hu, 2001; Tinto, 2010). Faculty members can have a critical influence on the students’ academic experience (Gibson & Blackwell, 2011). Faculty described the online environment as positive with regard to faculty-to-student communication, which is a key indicator of student satisfaction (Bolliger, 2004); yet, many felt underprepared to teach online (Johnson et al., 2015). Institutions offering online courses may provide training for faculty, and most
offer a set of faculty expectations to be followed regarding faculty-to-student engagement. Training for faculty is usually required to help ensure instructional quality and is often a primary concern for any higher education leader desiring to maximize student learning. Institutions must work to integrate faculty into the broader academic culture through training and support to ensure instructional quality (Fagan-Wilen et al., 2006). Faculty who are well trained according to university norms perform better overtime (Green et al., 2009). For distance education faculty, universities that focused on professional development, effective communication, fostering balance, and forming relationships tended to have higher student retention and satisfaction (Rogers, McIntyre, & Jazzar 2010).

Many institutions dictate expectations that faculty must meet on a regular basis such as grading timelines, online course engagement, and student communication practices via course expectations. Online faculty members are often expected to comply with these expectations as a condition of continued employment. In the original study by Shaw, Clowes, and Burrus (2017), an exploration of the gap between expectations of the institution regarding faculty-to-student engagement and those of students was conducted. In that research study, a typology was developed whereby institutional expectations for online faculty-to-student engagement were grouped into themes. Then, an analysis of qualitative student feedback regarding their expectations for online faculty was sorted into those typologies to add rich experiential depth to the typology. Based on the findings, recommendations were made regarding the types of expectations institutions should have for online faculty to maximize student satisfaction with faculty engagement. The findings showed students and institutions diverged on several areas of the typology. Table 1 includes the results from the original study prompting this follow up research.

Table 1.
Typology of Institutional and Student Expectations of Online Faculty

<table>
<thead>
<tr>
<th>Theme</th>
<th>Institutional Expectations</th>
<th>Student Expectations</th>
</tr>
</thead>
</table>
| **Substantive Feedback** | • Detailed feedback  
• Personalized comments  
• Rubric utilization  
• Focus on academic growth | • Detailed feedback on work regardless of quality  
• Consistent and clear feedback  
• Personalized, not “canned” feedback  
• Feedback on content, not formatting  
• Share expert knowledge |
| **Timeliness**         | • Grading timelines  
• Frequency of LMS log in  
• Responsiveness requirements  
• Final grade timelines | • Follow or exceed institutional expectations for timelines  
• Grades returned on previous work before next work is due |
| **Course Expectations** | • Required posted content  
• Required student interaction  
• Required contact and/or office hours information | • Relevant, updated and well-functioning courses  
• Consistence across course structures  
• Consistent expectations of faculty across courses  
• Guidance on course content |
Methodology

This study included a mixed methods approach and a convergent/concurrent triangulation design (Creswell & Plano Clark, 2011). An important question for mixed methods researchers to consider, according to McKim (2015), “is: Is mixed methods going to add more value than a single method” (p. 202)? This is an important consideration because, as Turner, Cardinal, and Burton (2015) contend, “All methods individually are flawed, but these limitations can be mitigated through mixed methods research, which combines methodologies to provide better answers to our research questions” (p. 243). In the present study, quantitative and qualitative data were collected simultaneously; similarly, we adopted Cooper and Hall’s (2016) approach, “treat[ing] quantitative findings as complementary to the emergent qualitative themes” (p. 49). See Figure 1 below.

Figure 1.
Convergent/Concurrent Triangulation Design, Creswell (2009)

Therefore, quantitative and qualitative data were weighted equally and integrated to provide “more confidence” in the conclusions drawn from the findings (McKim, 2015, p. 203). As Lee (2010) observed, the convergent/concurrent triangulation design’s strength lies in the mixing of quantitative and qualitative methods to arrive at compelling conclusions.

The Survey

A qualitative research design was used to explore the experiences of college students through a survey and, for further clarification and/or elaboration, open-ended questions. Participant responses to the survey were analyzed using the comparative typology of institutional and student expectations from Shaw, Clowes, and Burrus’ (2017). Survey data and open-ended questions were used to “provide meaningful additional detail to help make sense out of and interpret survey results” (Patton, 2014, p. 230). The survey consisted of seven questions.

The first five questions (Q) probed students’ academic background and preferences, while the final five questions were open-ended.

- Q6. Do you prefer online learning to traditional, face-to-face learning?
- Q7. What year of college are you currently in (freshman, sophomore, etc.)?
- Q8. What is your proposed major of study (art, design, humanities, etc.)?
- Q9. Please use the text box below to describe your expectations of faculty engagement in the online classroom. Please consider any factors you wish to address in your response. Factors may include assignment grading, timely communication, faculty engagement, faculty presence, faculty office hours, etc.
- Q10. What should the institution require of online faculty in terms of student engagement?

Recruitment and Setting

Participants were drawn from two public state colleges in the southeastern United States and one art and design school in the western United States. These institutions grant associate, bachelor’s, and master’s degrees and serve
approximately 50,000 students on-ground and online. Institutional Review Board (IRB) approval was received from two institutions before students were recruited in January 2018 and the third was received in May 2018 of Summer term. The IRB boards approved the recruitment letter used as an online course announcement and the form of an incentive to interested participants—ten bonus points applied to a discussion forum of their choosing.

The recruitment sites were chosen by the authors due to them being the home institutions of one of the co-author’s and because of the diversity and representation of online students in their respective region. The survey was administered using SurveyMonkey. The online course announcement of the recruitment letter was posted in the following eight online course sections in January and May 2018: two “early modern U.S. history” courses, two courses of “History of World Civilizations, ca. 1500-1815”, one course of “History of World Civilizations, ca. 1815-Present”, one course of “Western Civilization II”, and two sections of “English Composition I”. These were all general survey courses and met the general education requirements from all institutions. The U.S. history surveys had approximately 30 students enrolled, the rest of the history courses had approximately 25 students, and each section of English composition had 20 enrolled students for an approximate total of 195 initially-registered students. There was a student response rate \( n = 78 \) of 40%. The surveys were closed in late May 2018.

**Results and Discussion**

Frequencies and percentages were calculated for the independent variables:

1. Student Type: How would you describe yourself as a traditional or non-tradition student?
2. What is your gender?
3. Year in school
4. Age

and the dependent variables:

1. What do students expect from online faculty?
2. What do students expect from institutions relative to faculty performance?

The following table presents the descriptive statistics followed by the hypothesis testing.

**Frequencies and Percentages**

Frequencies and percentages are presented in Table 2 and Table 3.
Table 2.
Frequency Table for Nominal Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Type: How would you describe yourself as a traditional or non-traditional student?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Traditional Student</td>
<td>35</td>
<td>44.87</td>
</tr>
<tr>
<td>Traditional Student</td>
<td>43</td>
<td>55.13</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>What is your gender?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>75.64</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>24.36</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>What do students expect from faculty?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Engagement</td>
<td>27</td>
<td>34.62</td>
</tr>
<tr>
<td>Timely Communication and grading</td>
<td>48</td>
<td>61.54</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>3.85</td>
</tr>
<tr>
<td><strong>Are you a Freshman, Junior or Sophomore?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>30</td>
<td>38.46</td>
</tr>
<tr>
<td>Junior</td>
<td>10</td>
<td>12.82</td>
</tr>
<tr>
<td>Sophomore</td>
<td>33</td>
<td>42.31</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>6.41</td>
</tr>
<tr>
<td><strong>What do students expect from institutions relative to faculty performance?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Engagement and Interaction</td>
<td>10</td>
<td>12.82</td>
</tr>
<tr>
<td>Frequent Participation in Discussion to Ensure Full Student Participation</td>
<td>15</td>
<td>19.23</td>
</tr>
<tr>
<td>Individualized Communication</td>
<td>19</td>
<td>24.36</td>
</tr>
<tr>
<td>Timely Grading and Communication</td>
<td>10</td>
<td>12.82</td>
</tr>
<tr>
<td>Missing</td>
<td>24</td>
<td>30.77</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>45</td>
<td>57.69</td>
</tr>
<tr>
<td>26-35</td>
<td>23</td>
<td>29.49</td>
</tr>
<tr>
<td>Missing</td>
<td>10</td>
<td>12.82</td>
</tr>
</tbody>
</table>

*Note.* Due to rounding errors, percentages may not equal 100%.

Table 3.
Frequency Table of Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What do students expect from online faculty?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantive Feedback</td>
<td>14</td>
<td>11.6</td>
</tr>
<tr>
<td>Timeliness</td>
<td>51</td>
<td>42.1</td>
</tr>
<tr>
<td>Course Expectations</td>
<td>20</td>
<td>16.5</td>
</tr>
<tr>
<td>Teacher Accessibility</td>
<td>14</td>
<td>11.6</td>
</tr>
<tr>
<td>Engagement and Presence</td>
<td>17</td>
<td>14.0</td>
</tr>
<tr>
<td>Grading Practices</td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>What do students expect from institutions relative to faculty performance?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantive Feedback</td>
<td>7</td>
<td>8.6</td>
</tr>
<tr>
<td>Timeliness</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td>Course Expectations</td>
<td>20</td>
<td>25.0</td>
</tr>
</tbody>
</table>
Hypothesis Testing

This research focused on two research questions:

- RQ1: Which student characteristics, such as age, gender, year in school, and student type (traditional vs. non-traditional) predict student’s expectations from online faculty?
- RQ2: Which student characteristics, such as age, gender, year in school, and student type (traditional vs. non-traditional) predict student’s expectations from institutions relative to online faculty performance?

Because the dependent and independent variables were nominal, or categorical, a nominal regression analysis using IBM SPSS was conducted to test each question.

Assumptions - Prior to the analysis, the assumption of absence of multicollinearity was examined.

Variance Inflation Factors - Variance Inflation Factors (VIFs) were calculated to detect the presence of multicollinearity between predictors. High VIFs indicate increased effects of multicollinearity in the model. VIFs greater than 5 are cause for concern, whereas VIFs of 10 should be considered the maximum upper limit (Menard, 2009). All predictors in the regression model have VIFs less than 10.

Quantitative Data

Results from RQ1: Which student characteristics, such as age, gender, year in school, and student type (traditional vs. non-traditional) predict student’s expectations from online faculty?

Results

The overall model was not significant, $\chi^2(5) = 1.78, p = .879$, suggesting that the independent variables did not have a significant effect on the odds of observing the timely communication and grade category of student expectations of online faculty. McFadden's R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.02. Since the overall model was not significant, the individual predictors were not examined further.

Qualitative Survey Data

Research Question 1. What do students expect from online faculty?

Student responses were analyzed using Shaw, Clowes, and Burrus' (2017) comparative typology for student engagement. Three themes were present—substantive feedback, timeliness, and course expectations—from the original typology, but three additional themes—teacher accessibility, engagement, and grading practices—previously sub-categorized under Shaw et al.’s (2017) typology, warranted further attention because of their noticeable presence in the response data. Therefore, we reconfigured the typology to reflect these developments. Table 4 includes a summary of response data according to theme and common and variant response examples.
Table 4.
Summary of Student Expectations of Faculty Themes

<table>
<thead>
<tr>
<th>Original Theme</th>
<th>Total # of participant sources</th>
<th>Total # of references</th>
<th>Common Reference</th>
<th>Variant Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantive Feedback</td>
<td>14</td>
<td>16</td>
<td>“…critiques on assignments that help me grow as a student.”</td>
<td>“I think some teachers do an excellent job providing feedback, but that many also give next to no feedback which would be nice.”</td>
</tr>
<tr>
<td>Timeliness</td>
<td>51</td>
<td>63</td>
<td>“Teacher response time is a must.”</td>
<td>“…maybe a hello to the class once a month just to the teacher is looking at our stuff.”</td>
</tr>
<tr>
<td>Course Expectations</td>
<td>20</td>
<td>35</td>
<td>“Online courses must include…clear explanations of assignments and expectations.”</td>
<td>“An online class should be nearly the same as an in-classroom class.”</td>
</tr>
</tbody>
</table>

New Theme

<table>
<thead>
<tr>
<th>New Theme</th>
<th>Total # of participant sources</th>
<th>Total # of references</th>
<th>Common Reference</th>
<th>Variant Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Accessibility</td>
<td>14</td>
<td>17</td>
<td>“…office hours are very reasonable to me.”</td>
<td>“I don’t like being forced to make contact with my teacher every week…”</td>
</tr>
<tr>
<td>Engagement and Presence</td>
<td>17</td>
<td>26</td>
<td>“I just like the interaction of faculty…”</td>
<td>“Faculty doesn’t have to be engaged at every single moment…”</td>
</tr>
<tr>
<td>Grading Practices</td>
<td>5</td>
<td>7</td>
<td>“I expect to have a very clear grading system…”</td>
<td>“I’ve had a lot of assignments that met given requirements, had points taken off, and the only response from the teacher is ”Good Job”,”</td>
</tr>
</tbody>
</table>

Substantive Feedback

Substantive feedback ($n = 14$) was the least significant finding amongst the major themes considered—substantive feedback, timeliness, and course expectations—in this study. Feedback, generally, was seen as a positive experience that students recognized as an integral part of the learning process. Many responses did not make a distinction between “substantive feedback” and “feedback,” however, and often used “feedback” without the “substantive” modifier. Though “substantive” was rarely paired with “feedback,” student responses imply the substantive nature of feedback. Student 11 shared that substantive feedback, for them, meant “…critiques on assignments that help me grow as a student,” a sentiment seconded by another student who observed that feedback should point out “what areas could be improved upon during assignment feedback” (Student 28). Similarly, a student referenced the word “critique” in their response, noting “…feedback is the only direct critique the student is getting to help make improvements” (Student 29). Students 42 and 54 used the descriptive phrase “constructive feedback” to communicate the positive association between feedback and learning.
One student, who self-reported as new to online learning and a non-native English speaker, summarized why narrative feedback was important for their success in the course:

“I also like when he grades my paper and he explains my weak points, so I can do better on the next paper, which is very important for me because my grades are very important to me. Another reason why the professor's feedback on the weakness/strength of the paper important to me is that English is not my first language, and I really am on top of my toes when my professor is addressing something about his expectations about our paper.” (Student 60).

Several responses praised past and present professors and the high quality of their feedback. Student 30 observed, “I think some teachers do an excellent job of providing feedback…” and, relatedly, Student 1 commented, “I also really enjoy reading the instructors comments during discussions and feedback on assignments.” But, there is room for improvement, as Student 30 continued, “…many also give next to no feedback, which would be nice [to receive]”. The responses discussed are consistent with the literature and demonstrate that substantive feedback is an essential component in the student-faculty relationship and facilitates meaningful learning (Baldwin & Trespalacios, 2017; Gaytan, 2015; Lundberg & Sheridan, 2015). In a pilot study conducted by The Pennsylvania State University’s Online Campus, 2,296 students were surveyed from the Bachelor of Science in Business program (Bigatel & Williams, 2016). A significant finding was that students associated faculty engagement with timely and substantive feedback, a similar finding Palmer and Holt (2012) found in their quantitative, multi-year (ca. 2004-2011) study exploring student perceptions (6800 responses) relative to online course satisfaction at a leading online university in Australia. The theme of substantive feedback, though the least referenced numerically in response data in the present study, was still acknowledged as an important consideration relative to faculty engagement.

**Timeliness**

This theme (n = 51) was the most frequently cited in student responses. In several instances, responses included additional references to timeliness. In addition to “timeliness,” other key descriptors included “prompt” and “quick.” Timeliness was widely recognized as an important aspect of faculty engagement in connection with student-professor communications and grading turnaround times.

**Timeliness in Communication**

This was referenced (n = 47) numerous times by respondents with several respondents mentioning it more than once. Students 4 and 17 confided that timely communication was imperative in facilitating the best possible learning experience, otherwise, an unanswered inquiry could result in “confusion” or “falling behind” in course work. As Student 34 explained, “Timely communication is very helpful when taking an online class. That is the only way for an online classroom to flow smoothly.” A few students provided parameters of what they considered to be “timely” communication with a range of 24-72 hours (Student 47). Student 76 perceived timely communication to be an indicator of professionalism: “If I have a question about an assignment, it often slows down or completely stops the progress of my submission. As a result, quick replies or replies within 24 hours often shows a professional professor.” In contrast to this explicit expectation, several students used vague language to describe timeliness. Student 66, for instance, simply requested responses “as soon as possible” from faculty was satisfactory, while Students 19 and 39 added, “in an adequate amount of time” and “…in the shortest time possible.” A few responses praised faculty excellence in responsive communication. Students 10 and 15 were pleased with their experiences-to-date regarding expedient communications with their professors, gushing, “Both of my teachers are awesome as far as responding to any question I have…” while several students expressed frustration around lack of timely communication with their professors. Student 29’s experience is revealing: “I believe that teachers must be prompt in everything that they do.” The findings related to timely communication suggests several things: (1) timely communication could facilitate the learning process and promote student engagement (Berg, Shaw, Burrus, & Contento, in press; Bigatel & Williams, 2015; Gaytan, 2013), (2) students appreciate and value open lines of communication with professors (Martin & Bolliger, 2018), and (3) a lack of timely communication could be a barrier to active student engagement and performance, a hindrance to building relationships with students (Orcutt & Dringus, 2017), and, potentially, a factor in student attrition (Gaytan, 2015).
**Timeliness in Grading Turnaround**

Timely grading turnaround ($n = 18$), however, seemed to be of secondary importance amongst respondents with timely communication taking precedence. Responses that elaborated upon grading turnaround times often voiced frustration about delayed grading that, in their opinion, adversely affected their performance in the course. This was especially true when it came to weekly assignments, such as discussion board forums, where the passage from one week to the next came and went with no feedback, leaving students feeling disconnected, discouraged, and lost. Some students took slow grading turnarounds in stride, saying, “the only thing that would bother me a little would be how long the grading would take, but everything else was amazing” (Student 73). Others were not so forgiving: “Waiting weeks to have an assignment graded is unacceptable” (Student 29).

Student 1 explained why timely grading turnaround is important:

> “Sometimes it is hard to know if I am doing the assignment correctly if the exercise, due earlier in the week, is not graded before the project is due.”

An interesting difference between the timeliness findings is that responses suggested possible timeframes, such as 24-72 hours, for communication responses yet none were given for grading turnaround. Most responses recorded generic descriptions, such as “grade assignments in a timely manner” (Student 1) or the commonplace “timely manner” (Student 20). The literature supports the findings of the present study associated with student expectations concerning reasonable grading turnaround (Berg et al., in press; Shaw et al., 2017; Stott, 2016).

**Course Expectations**

Course expectations ($n = 20$) was a theme that resonated with respondents, but the findings range from “clear instructions” (Student 3), to holding regular “office hours” (Student 21), to “clear explanations of assignments” (Student 31), “a clear schedule” (Student 32), “a well laid out syllabus” (Student 35), and “example assignments” (Student 7). What many students desired were clear guidelines about the courses they take, e.g., updated syllabus, assignment deadlines, office hours and the like, so they know what is expected of them (Hew, 2016; Palmer & Holt, 2012). The implication here is that many of these students feel that faculty underappreciate the importance of having current and up-to-date online courses and, by presenting a disorganized or incomplete classroom, convey a poor message to students (McGahan, Jackson, & Premer, 2015).

Student 39’s expectations suggest previous poor experiences where ambiguity, inconsistency, and lack of faculty engagement and oversight affected the quality of the learning experience:

> “Assignments fully scheduled prior to class opening – Class expectations fully and simply outlined – Text books and other material requirements list completed well prior to class opening – Proctored tests available for scheduling by class opening…No faculty political biases presented in class…."

When courses are inconsistent in their organization and structure and vary from professor to professor, this can be distressing to students. Student 54 revealed:

> “I am currently taking an online science with a lab and the teacher has yet to grade our introduce yourself discussion board or any other assignment. I believe that I am struggling in the course because I dont [sic] know what is expected of me in my labs or any of the coursework.”

Having “clear cut instructions,” as one student replied (Student 51) and “a schedule so I know what to expect and when assignments are due” (Student 75) simplifies and streamlines the online learning experience. Because, “its not helpful when a course syllabus is inaccurate and outdated” (Student 68) and every effort should be made to review course shells and update their content at the beginning of each term. The findings support the literature on the correlation between course expectations, faculty engagement, and student satisfaction (Berg et al., in press; Hew, 2016; Shaw et al., 2017). Two recommendations made by Bawa (2016), however, could improve particular aspects of how course expectations are understood and deployed. One suggestion is that “live” interaction, whether through virtual office hours or lecture, might establish connection in an otherwise self-regulated learning environment. A second suggestion is that professional development opportunities, such as learning management system training for
new faculty and/or continued support, could effectively address many concerns and grievances that students expressed frustration over in the present study (Bawa, 2016; Russo-Gleicher, 2014-2015).

**Teacher Accessibility**

A notable number of respondents (n = 14) discussed the important role the professor made in the overall learning experience. For many, this meant holding virtual office hours and open access, when needed, to the professor by the student. “Office hours are reasonable to me,” Student 10 explained, but, as Student 18 added, “Office hours should be convenient to both parties.” And, when office hours are posted, a professor should be available, or, at the very least, respond during those hours. “Office hours,” according to Student 18, should be “open when said.”

In the case of Student 29, office hours should be flexible and not restricted to email or telephone communication:

> “Sort of like instant messenger, may be [sic] available in a chat room so the whole class can benefit.”

Another student envisioned that faculty should be available “to perform their duties similar to a 9-5 job,” meaning they “should be readily accessible during these hours as well as in case any situations should arise” (Student 50). Similarly, Student 71 extended faculty accessibility beyond normal business hours, stating, “I would expect that the professor be available during weekend and evening hours.” Other students, however, were less concerned about office hours and more about frequent “check-ins” throughout the course, as Student 72 was, through the course messaging system. The present findings align with the literature on the importance of accessibility in promoting student engagement (Dixon, 2010; King, 2014; Martin & Bolliger, 2018; Revere & Kovach, 2012).

**Engagement and Presence**

Responses (n = 17) exploring engagement used language such as “involve,” “interact,” and “presence” to describe student perceptions and understanding of engagement. Students believe that online classes should maintain a commensurate degree of engagement with traditional, face-to-face courses (Students 13, 45, 50). Active engagement in discussion board forums, for example, only elicited one response (Students 5) while most affirmations were vague generalizations and called for “great interaction” (Student 13), “more student-teacher interaction” (Student 24), “really engage more with students” (Student 45) and, “there needs to be reasonable time of engagement with faculty” (Student 64).

One respondent’s response touched on key words a total of five times and provided a cogent set of expectations for faculty engagement:

> “I think my biggest expectation for faculty during online courses is that they are involved. I took one online class that I did not do well in since the teacher was not involved very often. The class was very self directed [sic] and instructor was not readily available for questions or concerns... Having the professor be present in class makes it feel less distant and prevents the feeling of being disconnected, as online learning can sometimes be. With instructor involvement and support it feels more like a traditional class.”

The response not only used the word “involve” or a derivative thereof five times, but the student also described the negative outcomes, such as feeling “distant” and “disconnected,” that resulted from absentee faculty. Student 14 shared that “It is hard to develop the ideas of class online, especially when there are no emotions involved…the professor's point of view are all [sic] appreciated.” Interestingly, one student offered this reaction: “I would expect the same engagement teachers want in a student, as students want in a teacher” (Student 39). This rationale is supported in the literature as engagement (Baldwin & Trespalacios, 2017; Nortvig, Peterson, & Balle, 2018). But, an interesting study by Campbell (2014) challenges scholarship on perceived versus objective benefits of increased teacher presence in the online classroom. Campbell found that increased teacher presence (through personalized communications by his teaching assistant) had no significant effect on course outcomes, such as grades. Campbell suggests that frequent testing has greater bearing on learning outcomes, a conclusion supported by the literature (Holmes, 2018).

Responses have touched on areas where increased engagement and/or teacher presence would be beneficial, but several responses lauded individual students’ experiences with exemplary faculty. “I feel that the faculty engages as
best as they can especially in an online setting. I'm so glad I have the 2 teachers I currently have as my first set of teachers. I have no real complaints,” Student 15 gushed; another added, saying, “I feel engagement has been good” (Student 69) and one more agreed, commenting, “Impressed with engagement” (Student 44). Relatedly, Student 16 shared, “I think that it must be hard for a teacher to engage in faculty/student relations all the time with online courses. However I think Dr. Berg does a good job so far anyway. He seems to be very engaging…” Teacher presence and emotional engagement are an important dimension of online learning and student satisfaction (Nortvig et al., 2018; Orcutt & Dringus, 2017; Redmond, Abawi, Brown, & Henderson, 2018).

Grading Practices

The least number of responses \( n = 5 \) addressed grading practices, specifically, fair grading facilitated through the use of rubrics and/or transparency. Student 22 indicated “fair rubrics” as a desirable expectation while Student 27 described “fair grading” as an essential quality of faculty engagement. In addition to fair grading, students required “a very clear grading system” to know what is expected of them (Student 32). McKinney (2018) echoed the thoughts of some respondents who shared that unclear expectations or instruction that “lacks clarity” can lead to “confusion” for students (p. 290). Student 68 criticized the prevalence of subjective grading practices, saying, “I'm also not a fan of professors abusing their near-total power over the student’s grades whenever they deem appropriate. Subjective grading is a clear culprit in this regard, but if academic institutions could use several graders for tests and papers, the average should be more fair.”

This student’s past experience with questionable grading practices left them doubtful of the accuracy and legitimacy of the grades they received, believing they were unduly influenced by other factors. Bernstein and Isaac (2017) argue that “a 21st-century challenge for educators is to promote meaningful engagement for students in online classes…” and this cannot occur if students harbor an unhealthy skepticism towards their professors concerning inconsistent grading (p. 1). Rubrics are one method to combat subjective grading practices. Dryden (2017) boldly claimed that “rubrics should be included in all classrooms: especially those that are online” (p. 67) because it makes instructor expectations explicit for the student. Haught, Ahern, and Ruberg (2017) conducted an end-course survey with graduate students \( n = 50 \) and found that making the rubric’s presence visible early on with the express intent to facilitate greater learning, rather than merely assess a single assignment, brought meaningful learning opportunities. A dynamic rubric, the authors contend, could transform the learning experience.

In a related mixed-methods study of graduate students, Wyss, Freedman, and Siebert (2014) found a statistically significant relationship between rubric assessment and improved end-of-term grades. Furthermore, the positive effects of rubric utilization can, by extension, smooth the induction process for students new to online learning (Wyss et al., 2014). In a multi-year (2011/2012), intervention study of 653 respondents relative to five instructional activities, Jones, Allen, Dunn, and Brooker (2017) discovered that rubrics led to an increase in self-reported student confidence and statistically significant improvement in grades. The presence of a rubric, however, does not mean that students will not misunderstand its stated aims and purpose; Jones et al. (2017) suggest reviewing the rubric with students as a best practice. “It is noteworthy that when learning outcomes match clearly outlined expectations, student satisfaction is increased” (McKinney, 2018, p. 291). The literature on grading practices demonstrate the efficacy of rubrics but also describes best practices in implementation to encourage greater student receptivity and engagement.

Quantitative Data

Results from RQ2: Which student characteristics, such as age, gender, year in school, and student type (traditional vs. non-traditional) predict student’s expectations from institutions relative to online faculty performance.

Results

The results of the nominal regression model were significant, \( \chi^2 (15) = 31.34, p = .008 \), suggesting that student type, gender, year in school and age had a significant effect on the odds of observing at least one response category of the dependent variable, students’ expectations on institutions relative to faculty performance. McFadden’s R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit.
(Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.30. Since the overall model was significant, each predictor was examined further.

Examining Predictors

The regression coefficient for student type in response to the category, “frequent faculty participation on discussions to confirm that students are active in class” was significant, $B = 3.45$, $\chi^2 = 5.53$, $p = .019$, suggesting that a one unit increase in student type, specifically for traditional students, would increase the odds of observing the frequency of “faculty participation in discussions might confirm that student are active in class”. The regression coefficient for student type in response category “individualized communication” was not significant otherwise. Moreover, the regression coefficient for gender was significant in response to the category “frequent participation in discussions to confirm that students are active in class”, $B = 5.90$, $\chi^2 = 7.98$, $p = .046$ and gender was also a significant predictor for “institutions requiring individualized communications”, $B = 2.14$, $\chi^2 = 7.98$, $p = .046$. For both predictors, females were more likely to report the need for increased faculty participation in discussions to ensure student engagement and the need for increased individualized communication. “Year in school” and “age” did not predict any categories within the dependent variable.

Qualitative Survey Data

Research Question 2. What do students expect from institutions relative to faculty performance?

This research question was addressed through an open-ended interview question to gauge institutional standards and mandates for faculty to promote student engagement. The comparative typology developed by Shaw et al. (2017) guided the coding process and data analysis. Five themes (grading practices were not mentioned) were used again to categorize institutional requirements: substantive feedback, timeliness, course expectations, teacher accessibility, and engagement and presence. Table 5 includes a summary of response data according to theme, common, and variant response examples.

Table 5.
Summary of Student Expectations of Institutional Engagement Themes

<table>
<thead>
<tr>
<th>Original Theme</th>
<th>Total # of participant sources</th>
<th>Total # of references</th>
<th>Common Reference</th>
<th>Variant Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantive Feedback Timeliness</td>
<td>7</td>
<td>8</td>
<td>“feedback on all major student work.”</td>
<td>“good feedback…just wasn’t enough.”</td>
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<td></td>
<td></td>
<td></td>
<td>“…timely communication…timely grading…”</td>
<td>“A minimum two hour response time.”</td>
</tr>
<tr>
<td>Course Expectations</td>
<td>20</td>
<td>22</td>
<td>“Submit assignments when scheduled, participation, communication.”</td>
<td>“…institutions should require professors to record their own lessons…at least one video per week.”</td>
</tr>
<tr>
<td>New Theme</td>
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<tr>
<td>Teacher Accessibility</td>
<td>6</td>
<td>7</td>
<td>“Be readily available.”</td>
<td>“Online faculty members should be able to communicate easily and efficiently on a mobile or other electronic [device].”</td>
</tr>
<tr>
<td>Engagement and Presence</td>
<td>29</td>
<td>33</td>
<td>“…engagement is a top priority…”</td>
<td>“The requirement should be the same as classroom student engagement…”</td>
</tr>
</tbody>
</table>
Substantive Feedback

A considerable decrease in responses \( n = 7 \) relative to institutional expectations, substantive feedback did not elicit as much attention as it did relative to student expectations of faculty engagement \( n = 14 \). This noticeable shift between student and institutional expectations aligns with the findings of Berg et al. (in press). Most responses were generic in their verbiage, including descriptions such as “giving feedback,” “grading with feedback comments,” and “comments on assignments” (Student 13; Student 36; Student 55). About half of the comments, however, provided fuller descriptions of what students expected institutional expectations to require of faculty: “Short, constructive comments on assignments,” Student 41 suggested, but, as a bare minimum, according to Student 16, faculty should offer a “little piece of either constructive or encouragement for each of the students [sic] assignments. I feel that’s the least a teacher can do.”

Timeliness

Responses \( n = 18 \) to this theme were the most affected by the positionality of institutional expectations of faculty engagement. The key word “timely” \( n = 9 \) was referenced often in student response data. While responses relative to student expectations of faculty engagement were less vociferous in suggesting timeframes, the findings from an institutional perspective were more concrete. Faculty should “always respond to the students within 24 hours every time…,” Student 64 argued. Student 35 agreed, saying, “…institutions should require a 24-48 hour response time,” as a reasonable amount of time. Some responses were more stringent: Student 4, who said, “…I think that there should be a standard 24 hour required response times from faculty and students.” Two responses shared dissatisfaction with timely grading. “The only issue that I have with the faculty is teachers who do not grade paper in time. I think that if there is a due date than within a week to two weeks the paper should be graded” (Student 47). Student 1 expressed a similar frustration, noting, “It can just be a little frustrating not knowing if I am making progress before an assignment is due, one week’s assignments were not graded until two weeks later.” In spite of these two cases of dissatisfaction, students were, generally, more satisfied with the engagement of their professors and the overall learning experience. A lack of timely grading influenced Student 47 and Student 1’s responses but, speaking to the overall experience, Student 1 concluded, “Other than that [lack of timely grading] I think everything else has gone well.” The findings, especially the diminished frequency relative to institutional expectations, are consistent with those from the literature (Berg et al., in press).

Course Expectations

The findings associated with course expectations \( n = 20 \) remained consistent from student and institutional perspectives relative to faculty engagement. In Berg et al.’s (in press) replication study examining 57 undergraduate students from two diverse public colleges in the southeastern United States, the authors found a significant rise in the number of responses related to course expectations from an institutional perspective relative to student expectations. In the present study, factors that had previously been sub-categorized under the thematic umbrella of course expectation warranted individual, rather than corporate, analysis because of the large number of responses. Course structure, weekly contact, and open channels of communication figured into many of the responses. An emergent sub-theme \( n = 6 \) was that students believed online courses should recreate, insofar as possible, the traditional classroom experience. The standard, essentially, in terms of course expectations should remain unchanged. Student 5 suggested, “faculty should make an effort to reach out to students individually and check how they are doing with their assignments, ask if any assistance is needed. This is usually seen in on campus courses, and I would like to see it practiced in online courses as well.”

And, incidentally, students held themselves to the same bar, arguing, “Students should be as dedicated as in an in-class course” (Student 37). A second sub-theme was the inclusion of videos \( n = 6 \) into the course materials. Student 71, for instance, remarked, “I think institutions should require that professors record their own lessons. I also think that it is important for the institution to require the instructor to do at least one video per week to either begin or wrap up the week. So far I have had one Professor do this and I felt more connected to this course than other courses I have taken.”

Another student found that videos and other ancillary materials “make up for the lack of face-to-face teaching” in online classes (Student 59). The data suggests a connection between differentiated learning modalities and aspects of the traditional classroom appreciated by students as desirable features of online learning.
Teacher Accessibility

All responses (n = 6) desired accessible and responsive professors. Students 39 and 65 defined accessibility as “being [be] readily available” while Student 18 requested “accessible office hours” where students could have “easy access in case of questions or concerns,” according to Student 12. Student 2, however, shared that, in their experience, professors have been accessible: “I can not [sic] vouch for the office hours but have not had any trouble getting in touch with instructors when needed.” Respondent descriptions were simple constructions that lacked a serious consideration of “how” professors should be accessible and “why” it was important to student engagement and satisfaction. The findings demonstrate a lukewarm regard for teacher accessibility by respondents who tended to favor engagement, presence, and timeliness (Berg et al., in press).

Engagement and Presence

The most significant theme relative to institutional expectations was engagement and presence (n = 29). This theme rose dramatically from student expectations response data (n = 18). But, interestingly, many responses understood the question to mean institutional requirements for “student engagement” rather than “faculty engagement.” Responses that emphasized faculty engagement touched on weekly email communication (Student 10), frequent smaller assignments (Student 26), increased participation in discussion board forums (Student 27; Student 32; Student 43), and “more real time engagement,” (Student 23). An area where there is a degree of consensus on engagement is in the discussion board forum (n = 11). Student 7 said, “I believe that the weekly discussions format works well for student engagement.”

One response unpacked the discussion board forum and how the structure facilitated greater student engagement:

“I like how our professor designed the student engagement in our course because it's a way of taking class online but there is still interaction among us even if we don't see each other physically. The rule of replying on at least two of our online classmates' discussion made me read most of their discussion and select whom I would reply to, at the same time, while I am reading their discussion, it also give [sic] me idea what they think. I also support his rule in being polite on replying on someone's post especially if a student is against the idea of the other. My student engagement experience in my history class is amazing as all of us engaged harmoniously even if some has different view from the other.” (Student 61).

Others were dissatisfied with instructor engagement:

“The institution should require more engagement with the teachers would be easier for us” (Student 74). Student 62 chided professors’ tendencies to leave the class unattended for extended periods of time, observing:

“The institution should require the online faculty to engage with their students a certain number of times per week. I am currently in a course where work has not been graded since the beginning of March and there has been no word from the professor. This makes it frustrating when you are approaching the end of the semester with no time to improve your grade. I do not see this as beneficial for any student. Therefore, making professors engage should be a crucial part to any online course.”

Conclusion

The quantitative findings for RQ1 revealed that that model was not statistically significant. McFadden’s R-squared, at 0.02, indicated that the model was not a good fit. Therefore, individual predictors were not examined. Although the model was not found to be significant, the qualitative data was explored to uncover any significant themes from the open-ended responses. Three themes were present—substantive feedback, timeliness, and course expectations—from the original typology, but three additional themes—teacher accessibility, engagement, and grading practices—previously sub-categorized under Shaw et al.’s (2017) typology, warranted further attention because of their noticeable presence in the response data. Of the themes noted, the most significant in response-rate was timeliness; course expectations and engagement and practice were also significant themes. The qualitative data suggests that students value timeliness, course expectations, and engagement and practice relative to faculty engagement even though student characteristics, e.g., age, gender, etc., might not predict student expectations of online faculty engagement. While the quantitative data, as a whole, showed an insignificant result, the qualitative data
demonstrated that respondents appreciated timeliness as well as clear and consistent course expectations and active engagement and practice.

The quantitative findings for RQ2 were significant, \( \chi^2 (15) = 31.34, p = .008 \), suggesting that student type, gender, year in school and age had a significant effect on the odds of observing at least one response category of the dependent variable, students’ expectations on institutions relative to faculty performance. McFadden’s R-squared was calculated to examine the model fit, where values greater than .2 are indicative of models with excellent fit (Louviere, Hensher, & Swait, 2000). The McFadden R-squared value calculated for this model was 0.30. Since the overall model was significant, each predictor was examined further. The regression coefficients for student type, e.g., traditional or non-traditional student, especially for traditional students, and gender were significant relative to participation in discussions. Gender was also significant in terms of institutional expectations of individualized communication. The qualitative data supports the quantitative findings with the theme engagement and practice being most frequently cited in the response data. The themes course expectations and timeliness were strongly represented. Several participants explicitly desired online courses to maintain the same level of engagement as on-ground courses. This finding aligns with the quantitative data.

The qualitative findings showed that the model was not significant in regards to RQ1 but was significant relative to RQ2. The qualitative data was used to explore and, where appropriate, extend and support our understanding of the quantitative findings. While student characteristics might not be statistically significant in RQ1, the qualitative data revealed that timeliness was a significant theme in the response data. Further, three additional themes, once characterized as sub-themes in a previous study by Shaw et al. (2017), emerged and warranted consideration. The quantitative findings in RQ2 were significant and the qualitative data corroborated that student type, specifically traditional students, sought to recreate the traditional, on-ground experience in online courses. This is a strong indicator that online course facilitation could improve in terms of faculty engagement, though, there were equally several responses that lauded the performance of professors. It is recommended that this phenomenon be explored in future studies.

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Course Review vs. Faculty Evaluation for Personal Continuous Improvement

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Abstract

As online offerings increase, many institutions struggle to maintain online course quality. By separating course reviews from faculty performance evaluations, Wake Tech has created a process of confidential course review, providing faculty an invulnerable environment to self-identify improvement needs and targeted professional development. The result is continuous improvement as a personal endeavor.

Introduction

Due to growing demand for online educational offerings, and like many institutions adapting teaching workloads from the brick and mortar environment to one of online teaching, Wake Tech needed to prepare faculty rapidly. Through Wake Tech’s eLearning Preparedness Initiative across the College (EPIC) initiative, the institution developed a set of quality standards, assessment instruments, training, and a review process to ensure quality in online courses. By having this process separate from the faculty performance evaluation, this practice has provided faculty the knowledge and tools to guide their own development in order to prepare quality online courses.

EPIC Initiative Framework

When Wake Tech was developing the process to improve the quality of online education, through the EPIC initiative, it was part of the Quality Enhancement Plan and a multi-faceted initiative. As part of the EPIC initiative, faculty are required to successfully complete 30 hours of professional development to earn the EPIC 30 Online Teaching Certificate. After faculty have completed EPIC Online certification, there are multiple, optional opportunities for additional training available. These include both training for self-development in online instruction and for serving the institution’s goals in the EPIC initiative. The EPIC Course Reviewer training is one of many options available to EPIC-certified instructors. The course review training consists of extensive instruction in the use of the online assessment tools used to appraise courses, as well as training on how to effectively write actionable, specific feedback for faculty going through review. Faculty members who choose to complete Course Review training along with additional accessibility training are eligible to serve as reviewers in course review teams.

Course Review Process

To ensure the plan’s success, Wake Tech created a course review process. The course review program is intended to ensure course quality, gain insights and data into the EPIC initiative’s effectiveness, and provide information to the faculty member about adherence to the standards. The course review process is one in which, after faculty members receive certification, a team of three trained peer reviewers randomly selects courses for review. Under the direction of a Course Review Coordinator, this review is confidential, with the reviewer signing a confidentiality agreement prior to the review. Further, reviewers do not review faculty within their own department. Currently, courses under review are chosen from a pool of faculty who have been EPIC certified for at least one semester. Faculty who have been selected for review are not informed until after the review is complete, at which point the results of the review are shared with them directly and confidentially. To maintain currency of the data, teams review archived courses
taught in the prior semester. The number of courses selected from each division of the college is proportional to the size of the division within the college and represents approximately ten percent of the total online courses offered in a given semester.

These peers assess the course based upon a standardized EPIC Course Checklist, which aligns with a set of EPIC Quality eLearning Standards developed by the institution. The criteria reviewed include categories within guidelines for course design, communication and collaboration, assessments, and accessibility. Subsequently, the faculty member receives a confidential report regarding adherence to the guidelines in these areas. Reviews performed through the EPIC initiative are not part of an employee’s performance review, but rather, are delivered directly and confidentially to the faculty member. This information is shared in aggregate with the college at the end of each academic year. Note, the categories in this review do not include an assessment of a faculty member’s quality of teaching of the subject matter. The process is separate from the faculty member’s subject matter review, which is often conducted within the department, either by the department head or by an assigned lead online instructor.

**Subsequent Process for Faculty Training and Development**

The EPIC Online Certification and course review processes are integral parts of helping faculty self-identify additional training needs and areas for improvement. Often, after faculty members have completed these elements of the certification program, they choose to pursue other avenues of improvement. One of these ways is through participation in the EPIC Master Certification program. This program requires completion of the initial online certification as well as additional training in accessibility and course review, new faculty mentoring, or other advanced instructional topics.

The EPIC Master Certification program allows faculty to be partnered directly with instructional designers, who act as consultants and mentors over a semester or academic year to update one of their existing online courses to achieve an exemplary status. Participation in this program provides faculty with access to a number of specialists to help improve their courses, including, but not limited to, accessibility and assessment support. The unique dynamic created in this instructional designer-faculty relationship is one that allows faculty to bring their subject-matter expertise into a partnership with someone who has expertise in delivery and design; the result of which is pedagogically sound, diverse, and engaging online courses.

**Benefits of Course Review External to Performance Evaluation**

There have been many benefits of having the institutional course review process separate from the faculty’s performance review. One is that it provides self-directed development. When results are shared with faculty following a review, the course review coordinator provides additional resources to support faculty in course design and delivery. To align resources with faculty needs, the coordinator attempts to provide information about resources that may be relevant to shortcomings or deficiencies identified in the review process. Additional resources may include information about available trainings offered through eLearning support and instructional design, updated standards or requirements, accessibility guidelines, or contact information for eLearning support staff or faculty who are available to work individually with faculty. When faculty members are provided with a thorough course review and specific opportunities for support, they have clear direction for improvement. This feedback also motivates them to seek out training in an invulnerable environment.

In addition to this type of direction provided to faculty, Wake Tech has also included the EPIC Course Construction Playbook. This hard-copy reference is an excellent resource for faculty to consult when developing or updating courses for online delivery. The playbook contains a brief summary of best practices standards, including navigation, communication, collaboration, and assessment. The playbook also contains a checklist that details the expectations to which courses are held in the course review process. The development of these resources has gone a long way in providing transparency to the course review process by providing faculty with an exact copy of the assessment tool used to review courses. The availability of such resources makes it easy for faculty to self-identify needs for improvement and training.

As is commonly the case with educators, who generally select this field to “make a difference” over extrinsic factors like compensation or title, providing them the tools to improve student success is often the key to job satisfaction.
By providing faculty with the tools to do their jobs more effectively, they see student success rates increase, giving them a greater sense of satisfaction and often praise from their supervisors.

In an arena where the outcry for academic freedom is often levied against standardization, course reviews that are not tied to performance evaluation allow the subject matter expert to work within a prescribed set of course guidelines and to leave the subject matter quality under the direction of the departmental supervisor. Some institutions have opted for “canned courses” to ensure quality. In his much-discussed article, “Digital Diploma Mills: The Automation of Higher Education,” Noble (1998) painted an ominous view that automation results from a commercialization of education and “is not a progressive trend towards a new era at all, but a regressive trend, towards the rather old era of mass production, standardization and purely commercial interests.” His vision about online education need not be a reality. Giving faculty a prescribed set of guidelines in a supportive environment, detach itself from the problem of pure automation. The institution maintains quality courses, while faculty members can provide instruction in their subject matter within the established framework.

Another benefit of online course reviews that are not tied to performance evaluation is the positive culture and an environment of continuous improvement that results. In an invulnerable environment, faculty can openly ask for assistance from their colleagues, supervisor, and institution. According to Marek (2009) in “Learning to Teach Online: Creating a Culture of Support for Faculty,” institutional support ranks high on the list of faculty needs in both her literature review and her quantitative and qualitative analysis of online ALA-accredited Master’s program faculty. She presents “A Model for a Culture of Support for Online Teaching,” encompassing many of the same benefits that result from the EPIC initiative’s process like “a culture of support for innovation” available in the EPIC Master Certification program. Innovative instructors who take a step beyond certification can elect to achieve recognition as an EPIC Master-Certified instructor.

Conclusion

While it was not the original intent of the EPIC initiative, the course review process being separate from faculty evaluation has created a collateral benefit. It has allowed faculty the ability to chart their own development as online educators, created a culture of self-driven continuous improvement, reduced the need for “canned courses,” and motivated faculty to strive higher to create master-level courses, as well as to learn new technologies.

References


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Engaging Students Through Support Services

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Background

Distance learning administrators in higher education are experiencing increasing pressure to address retention and academic success of the online students. Currently, measuring the quality of distance education programs revolves around review of courses based upon national scorecards such as: Quality Matters and OSCQR, by Open SUNY, or locally designed measures. Both Quality Matters and Online Learning Consortium are offering quality evaluations for degree programs as well. Even with these efforts to validate the quality of online courses and degrees, faculty continue to question the quality of distance education offerings (Allen, Seaman, Poulin, & Straut, 2016). Other factors could be contributing to the belief of lower quality beyond the classroom.

Online students continue to report feelings of isolation in their online coursework. In the past, many strategies have been introduced to address these feelings. In 1997, Gunawardena and Zittle identified social presence within a class as important to predicting student satisfaction with computer mediated instruction. By encouraging student social presence, the student became part of a community to promote the development of inter-personal relationships (Garrison, Anderson, & Archer, 2000). From the resulting body of work, faculty members became responsible for engaging the students within the class. The community of inquiry became the framework for which to engage the students with the faculty member, fellow classmates, and the content (Garrison, Anderson, & Archer, 2001). Even with an emphasis on engagement within courses throughout the field, students indicated they feel written communication limits full expression of one’s self, creates barriers in establishing relationships, and writing is an effective median for communication (Symeonides & Childs, 2015). With the limitations in online courses, what can an institution do to facilitate a feeling of community beyond social presence in the classroom?

A second issue that continues to challenge administrators of online degrees involves the retention and success rates of online students. The number of chief academic officers reporting concerns about student retention in online programs increased to 45% in 2014 as compared to 27% in 2004 (Allen & Seaman, 2015). Data is emerging from colleges that indicate a greater likelihood of failing or withdrawing from online courses, and students less likely to earn a GPA high enough to transfer to a four-year institution. Additionally, a correlation exits between a greater number of online courses taken and a lower likelihood of degree completion (Protopsaltis & Baum, 2019).

Is it possible that an important missing link exists beyond the courses which can be attributed to both the feeling of isolationism and academic success? That link could be with the ecosystem beyond classes. On-ground students have access to a wide range of support as they attend classes on campus. Tutorial support centers, health and wellness service, mental health support, and advising centers are examples of services available. Destination institutions often focus on providing a campus experience with clubs and organizations for students to join. Often, the institution provides community building experiences with learning communities and events for students to attend. In other words, the on-ground faculty member functions within a larger institutional ecosystem which offers a range of services designed to engage and support the student creating a campus experience.

Recognition of the importance in providing additional support for online students is emerging with the addition of online student advocates and academic coaches. Providing support for distance learning students requires the same thoughtful exploration of strategies and tools as the design and delivery of online courses. The individuals that are providing the support may need additional training in how to engage the students with their respective offices, through social media, how to use communication tools, and how to manage appointments online.
As the distance education programs grow, the role of the distance education leader changes and distance learning begins to permeate throughout the organization. A sense of belonging to an institution is directly correlated to a positive impact on students’ grade point averages (KIPP, 2017). When a sense of belonging to an institution is important for the success of campus students, the same should also apply to online students. Since the distance learning leader often is not within the reporting line for the student support services organization on campus student services personnel may not be knowledgeable about the number of online students attending the institution or aware of the need to support these students. Distance learning leaders need a way to influence the student support offices to provide the critical services for online students.

Multiple models exist for how institutions provide the services for students. One model is to stand-up a separate support unit for the online students. However, that model can be expensive particularly for an institution with a small online enrollment. Also, the model requires the staff to overcome a learning curve about the culture and the processes and systems at the institution. An alternate model of using the current offices with the experience and expertise allows the online students to gain quicker access to those services. It may be easier and less costly to train existing student services personnel in best practices for supporting online students, than to integrate a separate unit into the institution.

Online administrators often need a framework with which to approach departments outside of their reporting structure, especially when requesting changes be made to their established practices. The Online Student Support Scorecard becomes a tool which distance learning administrators can use to promote inclusion of online students into the services provided for on-campus students, through those offices. The tool’s design promotes the conversations needed to stimulate improvement of the online student services offered by the institution. The scorecard addresses 11 major categories with 51 quality indicators. It encompasses the entire life cycle of the student from the first inquiry contacts with the institution until graduation. The goal is to encourage the offering of services equivalent to those typically offered by an institution for the campus students.

Methodology

The idea for the Online Student Support Scorecard emerged as part of the quality indicators developed for the 2025 Online Education Strategic Plan for the Florida State University System (Board of Governors, 2015). The teams that participated in the development of the scorecard were aware of the administrative structures in which the distance learning administrators work within. Therefore, the goal was to develop a tool to promote the conversation across the institutions. Two groups were important in the design of the scorecard. The first group included student support personnel from the various college and university state institutions across the state. The student support personnel brainstormed the different services to include in the evaluation tool and created the initial indicators. The second group consisted of distance learning administrators from the college and university state institutions, who had been working on a parallel project and folded their efforts into this one. This group confirmed and modified the indicators. Both groups formed a consensus, resulting in the final version of the scorecard.

Case Study

The purpose of the scorecard was to measure the number and types of services offered across the state university system. Therefore, the initiation of the statewide data collection prompted the use of the scorecard to begin conversations around online student support services at one of the large region universities with an enrollment of 3500 online only students each semester. Socialization of the scorecard occurred by introducing the scorecard at very high-level meetings at the university. At the same time, expansion of the governance board for the distance learning office occurred to include leaders from student support service units across the campus. The expansion coincided with the renewal of the distance learning office strategic plan. At the first meeting, the subgroup of student support services received a charge to develop goals promoting support of online students in offices across the campus.

The work of the subgroup of leaders from the student support services moved the availability of online student support services forward.
Below is a list of accomplishments attributable to this group of individuals.

1. The group decided they were responsible for the health and well-being of all students regardless of the delivery mode of instruction. The leaders committed to providing services for the online students.
2. The group committed to developing an online student experience that includes the students as much as possible into the activities on campus. This included signature events and clubs.
3. Strategic plan included a student advisory group to provide a student perspective of activities by the distance learning office.
4. Strategic plan created a student support advisor group to give direction as to how to support the offices providing student services.
5. The development of a professional learning community for staff working within the student services offices. The community kickoff was a training session on communication strategies for student services offices.
6. A commitment by the distance learning office to provide instructional design and video support for the development to training or informational movies to provide just-in-time support.

The work of this group continues to evolve. As a result of their work, a one-stop website displays the range of services available for the online students. Not all services are equivalent, however. The services provider improves the availability of the support to students.

**Implication for Future Exploration of Online Student Services**

The Online Student Support Scorecard accomplishes the goal of promoting the discussion about the availability of services for online students. As online students receive increased access to the services designed to meet their needs, with the expansion of student services and a campus experience designed for online students, they may feel more connected to the institution. As a result of access to a full campus experience, students may feel less isolated and more likely to be retained, with higher rates of academic success. Although many variables impact the success of students, future research around the scorecard could document student success correlated to the increased availability of the services.

The Online Student Support Scorecard is currently available through the Online Learning Consortium Quality Scorecard Suite.

**References**


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Predictors of Online Doctoral Student Success:  
A Quantitative Study

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Abstract

Online doctoral education is expanding; however, there is a paucity of research on the predictors of student success in these programs. Institutional leaders struggle to provide the academic environment and interventions to help online doctoral students make continual progress and complete their doctoral research, especially in open enrollment environments. In this study, a primarily online doctoral-granting institution undertook significant financial and philosophical investments, in the form of modified processes and interventions, to support student success in completing their doctoral research. To better understand the impact of these investments, this study used student intervention and progress data to analyze which interventions were predictors of online doctoral student success as measured by accelerated progression. Specifically, both the shift from a dissertation to an applied research study and student participation in an intensive, research focused workshop supported student success. Future research should be conducted to determine if these results are generalizable to other programs and also to determine if an in-person or a virtual intensive workshop is more conducive to student success.

Predictors of Online Doctoral Student Success: A Quantitative Study

In primarily doctoral-granting institutions, it is critical to have provisions to ensure high rates of student success to promote institutional viability (Shaw, Burrus, & Ferguson, 2016; Shaw, Thorne, Duffy, Fore, & Clowes, 2015). Non-traditional doctoral candidates present unique challenges including life constraints that hinder program completion (Yasmin, 2013), but also bring motivational characteristics that can increase program completion (Gonzales-Moreno, 2012). Non-traditional programs also present an opportunity to emphasize a key predictor in student completion; faculty-student engagement (Berry, 2018; Gonzales-Moreno, 2012). Researchers have explored reasons why students leave online education, including those enrolled in doctoral programs (Zepke & Leach, 2010; Shaw, Burrus, & Ferguson, 2016). Researchers have also presented solutions that encourage student retention and bolster academic quality through faculty engagement in online contexts (Zepke & Leach, 2010). More research is needed, however, on predictors of online doctoral student success so a multifold strategy can be adopted by institutions to better promote online doctoral student progress and completion.

Online doctoral education is rapidly growing; however, there is a paucity of research on the predictors of student success in these programs (Burrus, Bradley, Shaw, & Ferguson, 2017). At the same time, universities struggle to provide the academic environment and interventions to help online doctoral students make continual progress and complete their doctoral research, especially in open enrollment environments. While this issue was not unique to the online institution used in this research, the institution did undertake significant financial and philosophical investments to support student success. Following these investments, the institutional leaders identified a need to better understand doctoral student progression and completion. Based on institutional data used in an initial evaluation to identify supportive student strategies, the university found graduates struggled to complete the doctoral research phase of their program.
Thus, a comprehensive plan to address this issue was developed and approved by the Provost in the Fall of 2017.

This comprehensive plan included the following components:

1. Taking measures, including waiving tuition and fees, to encourage student participation in an optional in-person or virtual intensive workshop specifically designed to diagnose barriers to progression and develop an academic plan designed to improve progression and path toward completion;
2. Providing an applied research study, or Applied Doctoral Project (ADP), option for doctor of psychology (PsyD) students instead of completing a dissertation;
3. Enhancing ADP courses to encourage progression by including weekly milestones;
4. Hiring and training new Chairs with focused experience with at-risk populations and reassigning students to these new faculty; and
5. Improving the Methodological Review process.

This current study examines whether and to what extent the components of three components of this initiative (e.g., participation in the intensive workshop, Chair reassignment, and moving to the ADP) facilitated progression and completion of the dissertation or Applied Doctoral Project.

As such, the following research questions were asked:

- RQ1. Which components of a doctoral completion intervention predict student progression?
- RQ2. To what extent does participation in a doctoral completion intervention predict progression?

Literature Review

Researchers (Shaw, Thorne, Duffy, Fore, & Clowes, 2015) uncovered best practices that leverage strategies used by certain faculty to reduce student complaints, increase retention, and decrease time to completion rates. These approaches included situated doctoral research advising, especially suited for the doctoral research phase of a doctoral program. Such advising leads to Chair efficacy, higher quality mentoring skills, and more collaborative communication between the Chair and doctoral candidate. Collaborative communication extends to the committee, including the reviewer. An additional element to this advising model is deepening both faculty and student engagement. A side benefit to deeper student engagement is leveraging student motivation, which is a proven predictor of student success.

Shaw, Blyler, Bradley, Burrus, and Rodriguez (2016) found that the use of learning contracts for at-risk dissertation learners resulted in students completing their dissertation in an average of 316 days at a rate of 62% within the time to completion window. The same students, all of whom were at-risk for not completing their dissertation and being dismissed from their program, were also assessed for levels of satisfaction on learning contract, the review process, leadership support, their dissertation Chair, and committee and all areas were found to be satisfied at a statistically significant level. Moreover, student milestone completion and degree completion were tracked from 212 students over a two-year period and found that 80% of students engaged in a comprehensive situated advising model where the review process was transparent successfully completed their doctoral degrees (Throne, Shaw, Duffy, Fore, & Clowes, 2015).

Doctoral programs should provide substantive administrative support for students failing to make adequate progress, including close monitoring of the supervisor and supervisee relationship (Leijen, Lepp, & Remnik, 2016). Online doctoral students are less satisfied with their Chair than doctoral students in other programs and often feel isolated and abandoned (Erichsen, Bolliger, & Halupa, 2014). Inadequate support from students’ primary advisors can negatively impact motivation and progress towards completion (Locke & Boyle, 2016). In addition, doctoral students need direct instruction to develop academic and professional competencies (Godskesen & Kobayashi, 2016). In person or virtual intensive residencies or workshops provide students with individualized instruction focused on the student’s particular research project to support competencies needed for progression.

Finally, choosing a dissertation topic that holds intrinsic task value to the student predicts self-regulated learning needed for dissertation completion (Kelley & Salisbury-Glennon, 2015). Offering students in a practitioner-based doctoral program, such as PsyD, the option to conduct an Applied Doctoral Project instead of a traditional...
dissertation may increase the likelihood the student will find intrinsic value in the endeavor. While student interest provides an important touchstone for self-regulation, personalization seems to be equally important. Students showed greater levels of satisfaction with the instructor and performed better academically when they received personalized interactions from the instructor on assignments (Gallien & Oomen-Early, 2008).

Student perceptions of effective instructor engagement are an important consideration for institutions. Student satisfaction is positively correlated with instructor communication, responsiveness, encouragement, accessibility, and professionalism (Bolliger, 2004; Kauffman, 2015). Students who report high satisfaction, defined in large part by their opinions of faculty teaching, tend to persist to graduation, which improves institutional outcomes and contributes to student satisfaction (Noel-Levitz, 2014).

Methodology

This quantitative correlational study required logistic regression analysis and paired sample t-tests to understand the predictors of student success in online doctoral programs and the extent of progress. This method and design were appropriate because quantitative data is needed to understand how the predictors (e.g., dependent variables or components of the intervention) relate to outcomes (e.g., independent variables). The population for this study included all students who participated in the intervention outlined by the university. Archival data was collected and evaluated. As such, the sampling occurred post-hoc. SPSS was used to draw the random sample and conduct the analysis. Data for this study was collected from the university student information system.

Variables included the following:

- **Participation in the ADP** – This independent dichotomous variable was measured as “yes” if students migrated to the Applied Doctoral Project from the dissertation or “no” if they remained in the dissertation.
- **Participation in Chair Change** – This independent dichotomous variable was measured as “yes” if the students migrated to a new chairperson hired specifically to support at-risk dissertation students or “no” if they remained with their previously assigned chairperson.
- **InRes** – This independent dichotomous variable was measured as “yes” if the student participated in an in-person or virtual intensive workshop designed to support students who were at-risk for program dismissal or no if the student did not participate.
- **Progression** – This dependent dichotomous variable was measured as “yes” if students demonstrated post intervention progress by moving past a subsequent research milestone and “no” if students did not.

Results

RQ1. Which components of a doctoral completion intervention predict student progression?

Prior to predictive model creation, the dataset was analyzed for missing and outlying data points, and there was none in this particular sample. Data was also analyzed for normality and was found to be normally distributed (See Table 1). Variables are defined as Participation in the ADP (Intervention: ADP, values 1=yes; 0=no); Participation in Chair Change (Intervention: Chair, values 1=yes; 0=no); Participation in the intensive workshop (Intervention: INRES, values 1=yes; 0=no); and Progression (values 1=yes; 0=no).

Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention: ADP</td>
<td>262</td>
<td>.35</td>
<td>.479</td>
<td>.610</td>
<td>-1.641</td>
</tr>
<tr>
<td>Intervention: CHAIR</td>
<td>262</td>
<td>.62</td>
<td>.486</td>
<td>-.507</td>
<td>-1.757</td>
</tr>
<tr>
<td>Intervention: INRES</td>
<td>262</td>
<td>.23</td>
<td>.419</td>
<td>1.323</td>
<td>-.251</td>
</tr>
<tr>
<td>Progression</td>
<td>262</td>
<td>.53</td>
<td>.50</td>
<td>-.92</td>
<td>-2.007</td>
</tr>
</tbody>
</table>

Valid N (listwise)262
As stated, the dependent variable, which measures whether students made any progress in doctoral research milestone achievement is dichotomous, measured “yes = 1” and “no=0.” Since the dependent variable is discrete, the ordinary least squares regression can be used to fit a linear probability model. However, since the linear probability model is heteroskedastic and may predict probability values beyond the (0,1) range, the logistic regression model was used to estimate the factors, which influence progression.

The results indicated that students who participated in the intensive workshop or changed to the Applied Doctoral Project (ADP) option from the dissertation were more likely to progress. The coefficient on the intensive workshop variable has a Wald statistic equal to 15.546, which was significant at the .01 level (99% confidence level) and ADP has a Wald statistic of 6.406, which was significant at the .01 level (99% confidence level). The overall model was significant at the .01 level according to the Model chi-square statistic. The “odds ratio” for the intensive workshop coefficient was 4.683 with a 95% confidence interval and for ADP, the “odds ratio” was 2.39 with a 95% confidence level. This suggests that those who participated in the intensive workshop were more than four times more likely to progress to the next research milestone in the program and those who migrated to the ADP option were more than two times more likely to progress to the next research milestone (see Table 2).

Table 2.
Variables in the Equation

<table>
<thead>
<tr>
<th>Step 1a Intervention: ADP</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention: CHAIR</td>
<td>.332</td>
<td>.352</td>
<td>.888</td>
<td>1</td>
<td>.346</td>
<td>1.393</td>
</tr>
<tr>
<td>Intervention: INRES</td>
<td>1.544</td>
<td>.392</td>
<td>15.546</td>
<td>1</td>
<td>.000</td>
<td>4.683</td>
</tr>
<tr>
<td>Constant</td>
<td>-.744</td>
<td>.374</td>
<td>3.961</td>
<td>1</td>
<td>.047</td>
<td>.475</td>
</tr>
</tbody>
</table>

a Variable(s) entered on Step 1: Intervention: ADP, Intervention: CHAIR, Intervention: INRES.

Discussion and Conclusion

The results from this study indicated that a comprehensive approach to addressing the needs of students in non-traditional online doctoral programs may facilitate student progression toward completing their doctoral research. Specifically, increased faculty engagement through participation in specialized intensive workshops may predict progression and reduce time between research milestones. Moreover, when applied doctoral students are allowed to focus their research in a way that is aligned to the applied nature of their degree, progression is improved. While reassigning students to a dedicated Chair trained to support at-risk students did not reach statistical significance as a
predictor of success, the odds of progress did increase and the time to milestone was decreased to a point that does reach statistical significance. The next step for future research includes examining whether participation in an “in-person” versus a “virtual” intensive workshop results in different outcomes.

Universities may want to build on this knowledge by including specialized programming or curriculum for students struggling to complete their online doctoral degrees. Leaders of doctoral programs may also want to consider how to acculturate, prepare, and support students to the doctoral research phase of the program through synchronous video teleconferences, methodologically focused webinars, a platform that encourages ongoing community building, and potentially “bundling” doctoral research students within one course with their Chair and other students. Overall, universities should build on these results and what is demonstrated as best practices in online doctoral education to further facilitate student success.

References


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Breaking the Textbook Cartel Results in Gains for Online Students

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Introduction

It is well-known that American students and their families struggle with the cost of attending college. News reports and higher education commentaries frequently discuss rising tuition costs and burgeoning student loan debt. One factor among those costs that is getting more attention is the cost of college textbooks.

College textbooks are one of the largest out-of-pocket expenses for students, with the average student spending about $1,200 annually on textbooks and supplies (Baum, 2014). For students attending community college, this equates to 39% of the cost of tuition and fees and for four-year public institutions, it’s about 14%. When students are barely able to afford the cost of tuition, high-priced textbooks often push them beyond what they can reasonably manage, forcing students to make detrimental choices once admitted.

Clayton State University (CSU) is a primary black institution, where 57% of the students are Pell Grant recipients and many are attending as first-generation college students. The Department of Interdisciplinary Studies offers the Bachelor of Applied Science (B.A.S.) degree program to students that have earned a career associate degree, enabling them to bridge smoothly into a bachelor’s degree program. Nearly all of the students in the B.A.S. program are nontraditional, adult students that typically work while attending school. The high cost of textbooks hits this population particularly hard since these students often are their only source of financial support, where college textbooks are just one item in a long list of expenses.

The B.A.S. faculty began to notice during recent semesters that some students had not purchased the required textbook well into the semester. Faculty were concerned that these students would either fall behind while they waited to have money enough for the textbook or would decide to forego the textbook altogether and risk failing the course. This scenario happened often enough that when the B.A.S. faculty became aware of the Affordable Learning Georgia (ALG) grant to support a no cost/low cost textbook transition, they decided to pursue the grant to help their students in the program.

Literature Review

According to the College Board (Baum, 2013), textbook costs have more than quadrupled over the past 25 years and they continue to rise faster than inflation. The average introductory-level course book costs $175 with many in the $200 to $300 range, making it common for students to spend as much as $1,200 in a single semester on books and fees alone.
In a typical market where consumer demand impacts supply and cost, the textbook industry operates using a different model. Faculty select the textbook, often without knowing how much it costs, and make the book a requirement for students to purchase. Students are a captive audience, without an alternative to select a more affordable option, short-circuiting normal market forces pushing against the publisher.

While the recreational book market has decreased by more than 35% since 1998, the textbook market has increased exponentially by 90% (Perry, 2016). One reason cited for this dichotomy is that purchasing textbooks is underwritten by the student debt industry. Students use financial aid and loans to cover the cost of their books and fees, adding to the publisher’s insulation against market forces.

Another contributor to high textbook costs is publishers’ practices. It is fairly common for publishers to release a new edition every three to four years regardless of changes in the subject, with prices that are 12% higher on average (Student PIRGs, 2004). A new edition on the shelf makes it harder for students to obtain the previous (cheaper) edition. It also limits students’ ability to earn money by selling their used book, particularly as textbook bundles with online pass codes packages (10-50% more expensive) have become commonplace (Senack, 2014).

**The ALG Project: Adoption, Adaptation, and Enhancement**

The core goals of the ALG project focused on improving the success of nontraditional students through the integration of no-cost and low-cost textbooks into selected Department of Interdisciplinary Studies courses. The team approached these goals by focusing on textbook adoption, materials adaptation, and materials enhancement.

**Adoption** - The no-cost and low-cost textbooks consisted of comprehensive open educational resource (OER) materials to support the learning outcomes of the four courses. These are required courses within the Bachelor of Applied Science (B.A.S.) program at Clayton State University. Each instructor reviewed the quality of resources utilizing ALG measurement criteria of clarity, comprehensibility, readability, content and technical accuracy, adaptability, appropriateness, and accessibility. Where needed, additional supplementary learning materials were created taking into account existing copyright policies. In 2017, 534 BAS students enrolled in the targeted courses, and paid an aggregate cost of between $69,960.75 and $93,900.21, depending on whether used or new textbooks were acquired. Following the adoption of the OER textbooks in Summer 2018, those textbook costs were reduced to $0.

**Table 1.**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>New</th>
<th>Used</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 3101</td>
<td>$76.99</td>
<td>$57.75</td>
<td>195</td>
</tr>
<tr>
<td>TECH 3104</td>
<td>$167.99</td>
<td>$126.00</td>
<td>144</td>
</tr>
<tr>
<td>TECH 3111</td>
<td>$296.97</td>
<td>$217.75</td>
<td>96</td>
</tr>
<tr>
<td>TECH 4115</td>
<td>$264.52</td>
<td>$198.50</td>
<td>99</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$806.47</strong></td>
<td><strong>$600.00</strong></td>
<td><strong>534</strong></td>
</tr>
</tbody>
</table>

**Adaptation** - OER materials were adapted with an emphasis on learning environment optimization for the nontraditional student. The use of multimodal instructional content (e.g., graphics, images, tables, and web resources) provides students with an engaging learning experience, and the review and selection of multiple resources maximizes the alignment of learning objectives. Nontraditional learners are more self-directed and goal-oriented (Knowles, 1984), so the instructional materials were designed to support learner motivation and the content aligned with the learning outcomes. Customized materials support the unique needs of the nontraditional student, improving the probability of student success.

**Enhancement** - Learning materials and curriculum were not only adopted and adapted, but were also enhanced to provide additional support for the individual needs of nontraditional students. Taking into account the OER content, course learning objectives, and curriculum standards, audio-visual instructional content was embedded into the courses. Instructors had the option to develop or locate this content and implemented a variety of options including video lectures, instructional audio-visual resources, and narrated PowerPoint lectures. These resources were learner-centered and encouraged students to be active and engaged. Other instructional content and specific course
components such as quizzes, exams, and discussions were also created, updated, and organized as a complement to the OER implementation. Finally, these materials were then embedded within the selected electronic textbook or in the appropriate course learning management system (Brightspace), creating an interactive and stimulating experience for students.

**ALG Transformation Process**

As discussed, B.A.S. instructors adopted various OER textbooks into four existing courses with the goal of reducing or eliminating textbook costs while enhancing the overall course outcomes. Because the previously used traditional textbooks provided both subject content and a readily-made course structure, all instructors found it necessary to reconstruct their existing online courses. They reviewed the old course content and learning/assessment tools, and decided what concepts and which resources would remain. The instructors quickly realized that instructional aids provided by OER textbooks were limited in many cases. For instance, several of the adopted OER textbooks did not have question banks or the questions did not effectively match the course content. Many OER textbooks did not include supplemental PowerPoint presentations. As a result, the instructors dedicated significant time to create customized quizzes, tests, and PowerPoint presentations, as well as developed or adopted 125 individual video lectures.

In conjunction with the development of the four OER courses, the B.A.S. faculty have also dedicated efforts to assist other instructors in pursuing OER resources for their courses, by increasing awareness and by mentoring individual faculty members. The B.A.S. faculty is also considering expanding the use of OER student resources throughout the degree program in place of the fee-based textbooks in order to expand the cost-savings further.

**Results**

Given some of the limitations associated with OER textbooks, monitoring student performance using these resources was critical. Results comparing the number of students who dropped, failed, or withdrew (D/F/W) from each course in the pre- and post implementation semesters, were compiled and tabulated. The table below indicates that the D/F/W rates decreased for two of the four courses (TECH 3101 and TECH 3111). However, the D/F/W rates slightly increased for the other two courses (TECH 3104 and TECH 4115). With only one semester of OER as a basis, more analysis is needed, with Fall 2018 and Spring 2019 data forthcoming. To compound the issue, the comparison data in Table 2 utilizes a Spring semester and a Summer semester. D/F/W rates are typically higher in the summer than Fall or Spring due to the abbreviated schedule.

**Table 2.**

*D/F/W Rates Before and After OER Implementation*

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Pre Implementation (Spring 2018)</th>
<th>Post Implementation (Summer 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECH 3101</td>
<td>35.8%</td>
<td>26.3%</td>
</tr>
<tr>
<td>TECH 3104</td>
<td>5.2%</td>
<td>7.7%</td>
</tr>
<tr>
<td>TECH 3111</td>
<td>25%</td>
<td>12%</td>
</tr>
<tr>
<td>TECH 4115</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Grade distribution was also compared between the pre-implementation semester and the first semester of implementation. For TECH 3101, the average final exam score was higher in the post-implementation semester (82.5 vs. 74.6). For TECH 3104, a higher percentage of students earned an “A” in the pre-implementation semester (53.8% vs. 38.5%). However, a higher percentage of students earned a B in the post-implementation semester (46.2% vs. 28.2%). The percentage of students that earned a C are identical. For TECH 3111, a higher percentage of students earned a grade of A or B in the post-implementation semester. Additionally, the grade data for TECH 3111 revealed that the average pretest score at the beginning of the post-OER semester was higher (55% vs. 48%), indicating that students in the post-implementation semester may have been better prepared for the course content, which could have influenced the final grade difference. For TECH 4115, the raw data indicates an improvement in performance outcomes.
Table 3.
Grade Distribution Before and After Implementation of OER Textbooks

<table>
<thead>
<tr>
<th>Grades</th>
<th>TECH 3104 Before</th>
<th>TECH 3104 After</th>
<th>TECH 3111 Before</th>
<th>TECH 3111 After</th>
<th>TECH 4115 Before</th>
<th>TECH 4115 After</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>53.8%</td>
<td>38.5%</td>
<td>50%</td>
<td>68%</td>
<td>25%</td>
<td>52%</td>
</tr>
<tr>
<td>B</td>
<td>28.2%</td>
<td>46.2%</td>
<td>19%</td>
<td>20%</td>
<td>60%</td>
<td>36%</td>
</tr>
<tr>
<td>C</td>
<td>7.7%</td>
<td>7.7%</td>
<td>6%</td>
<td>0%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>D/F/W</td>
<td>5.2%</td>
<td>7.7%</td>
<td>25%</td>
<td>12%</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

While the quantitative results are encouraging, student satisfaction is an extremely important factor regarding program success. Students in each affected course were surveyed to evaluate their satisfaction with the traditional (previous) textbook as well as the OER textbook. This survey was not a direct comparison as no student surveyed used both textbooks. When queried whether the textbook selected for the course was sufficient for their needs, a significant majority of the students using the traditional textbooks found them to be satisfactory (ranging from 76.92% to 92.5% satisfied). Likewise, students surveyed that utilized the OER textbook found that textbook to be satisfactory as well. The number satisfied was actually greater than the traditional textbook (96.6% to 100%) but those numbers could have been influenced by zero cost of the book. While it is difficult to make a judgement about which was considered better, clearly the students were not dissatisfied with the content of the OER textbook.

**Alternative Solutions to OER**

Not surprisingly, the evolution of Open Educational Resources (OER) has spawned a reaction from the traditional textbook publishing houses. Not only has OER expanded the availability of resources, thereby increasing competition, it has done so with a “free” product. To combat this new “competitor”, publishers have adjusted their tactics and strategies.

Their first reaction was to label the OER resources as “undervetted” – similar to the way academics view Wikipedia - and essentially ignored them (Feldstein, 2014). Research data in those infancy years indicated that There was little evidence traditional publishers were losing meaningful sales to OER (Feldstein, 2014).

Once the size and scope of OER grew, however, publishers could no longer ignore them and implemented a more aggressive approach. They did what most strong businesses do when faced with increasing competition: they streamlined their costs, developed new product offerings, and eliminated warehousing and distribution costs. The outcome resulted in new offerings such as loose-leaf formats, textbook rental, digital textbooks, inclusive access programs, and partnerships with OER providers.

Increasingly, the major publishers have begun to recognize the longevity of OER and are working together with OER to combine resources and products in order to deliver an intuitive, outcomes-based platform, at affordable prices (AAP, 2018).

**Summary and Conclusions**

College textbooks have become one of the largest out-of-pocket expenses for students in recent years. The B.A.S. faculty at Clayton State University noticed a trend over the last few semesters, that several students had not purchased the assigned textbook well into the semester and attributed this mainly to textbook cost. It happened often enough to convince the faculty to experiment with OER resources in conjunction with Affordable Learning Georgia.

While the results of the research and adoption are encouraging, student performance must be continuously monitored. Because there are so many components associated with student performance, isolating free textbooks and their impact is challenging at best. However, with the continued development and adoption of these materials, there is indication that the financial burden, as well as some enrollment and material access challenges taken on by students who typically purchase traditional textbooks, can be minimized or reduced simply by faculty incorporating OER into their courses.

This alone is reason enough to participate.
References


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Five Year Trends in Distance Learning Enrollment by Institution Type

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Abstract

One of the key tools in strategic management is trend analysis; a practice of looking at what has happened over time in an industry or sector to make predictions about what is likely to happen in the future. This paper examines distance learning enrollment by sector in higher education over a period of five years, from 2012-2016, based on Integrated Postsecondary Education Data System (IPEDS) data to identify possible trends in growth by sector, as well as an investigation of the overall growth of distance education enrollments across sectors.

Introduction

There is a general consensus that higher education is changing in many ways. In particular, the increasing access to distance education has transformed higher education into a global marketplace, bringing with it new competitive forces and a more a more rapid pace of change (Pucciarelli & Kaplan, 2016). While there are definite challenges in this new environment, there is also great promise for distance learning to continue expanding access to higher education, particularly for populations who may not have had educational opportunities in more traditional models (James, Swan, & Daston, 2016). With these market changes in mind, this study seeks to identify the growth trends of higher education distance learning in the United States.

Purpose of the Study

The purpose of this study is to examine distance learning enrollment over a five-year period from 2012-2016 to determine if there is a significant shift in students enrolling in any distance course or enrolling in only distance courses. Deming, Goldin, Katz, and Yuchtman (2015) noted differences in the size of distance enrollments by institution type, with for-profit institutions having the highest enrollments and selective public institutions having the lowest levels of online enrollment, discovering in their research that there was some evidence of lower overall pricing for schools with higher distance learning enrollment. Complimenting this finding that distance learning enrollments can lower overall cost to students James et al. (2016) found that there was not a decrease in retention rates for students taking some distance courses.

With distance learning potentially lowering the cost of access while also not reducing retention, it is reasonable to question if the higher education industry in the United States is taking advantage of this opportunity. To do this, enrollments in higher education as a whole are examined to test for significant growth over time, as well as looking at growth by sector. This was done based on two hypotheses.

Hypotheses

The study is guided by the following hypotheses:

- H1o: The change in enrollment of students taking any distance course from 2012-2016 was zero.
- H1a: The change in enrollment of students taking any distance course from 2012-2016 was non-zero.
- H2o: The change in enrollment of students taking only distance courses from 2012-2016 was zero.
- H2a: The change in enrollment of students taking only distance courses from 2012-2016 was non-zero.
Data Collection and Analysis

Data was collected from IPEDS for the 5 most recent reporting years, which were academic years ending 2012-2016. The data was for six institution types and two categories of distance courses: Public 4 Year, Public 2 Year, Private Non-Profit 4 Year, Private Non-Profit 2 Year, Private For-Profit 4 Year, and Private For-Profit 2 Year. Categories for all six institution types were the percentage of students taking any distance courses and the percentage of students taking only distance courses. Initial data is presented in Tables 1 and 2.

Table 1.
Percentage of Students Taking Any Distance Course

<table>
<thead>
<tr>
<th>Year</th>
<th>Public 4 Year</th>
<th>Public 2 Year</th>
<th>Private NP 4 Year</th>
<th>Private NP 2 Year</th>
<th>Private 4 Year</th>
<th>Private 2 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>22%</td>
<td>27%</td>
<td>18%</td>
<td>8%</td>
<td>70%</td>
<td>12%</td>
</tr>
<tr>
<td>2013</td>
<td>23%</td>
<td>28%</td>
<td>20%</td>
<td>6%</td>
<td>70%</td>
<td>11%</td>
</tr>
<tr>
<td>2014</td>
<td>25%</td>
<td>29%</td>
<td>23%</td>
<td>8%</td>
<td>72%</td>
<td>13%</td>
</tr>
<tr>
<td>2015</td>
<td>27%</td>
<td>29%</td>
<td>25%</td>
<td>32%</td>
<td>75%</td>
<td>12%</td>
</tr>
<tr>
<td>2016</td>
<td>29%</td>
<td>31%</td>
<td>27%</td>
<td>40%</td>
<td>81%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 2.
Percentage of Students Taking Only Distance Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Public 4 Year</th>
<th>Public 2 Year</th>
<th>Private NP 4 Year</th>
<th>Private NP 2 Year</th>
<th>Private 4 Year</th>
<th>Private 2 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>7%</td>
<td>10%</td>
<td>12%</td>
<td>2%</td>
<td>61%</td>
<td>6%</td>
</tr>
<tr>
<td>2013</td>
<td>8%</td>
<td>10%</td>
<td>13%</td>
<td>2%</td>
<td>61%</td>
<td>6%</td>
</tr>
<tr>
<td>2014</td>
<td>8%</td>
<td>11%</td>
<td>15%</td>
<td>3%</td>
<td>64%</td>
<td>7%</td>
</tr>
<tr>
<td>2015</td>
<td>9%</td>
<td>12%</td>
<td>17%</td>
<td>2%</td>
<td>66%</td>
<td>4%</td>
</tr>
<tr>
<td>2016</td>
<td>10%</td>
<td>12%</td>
<td>18%</td>
<td>18%</td>
<td>70%</td>
<td>5%</td>
</tr>
</tbody>
</table>

An upward trend was noted in percentage enrollment across institution types and forms of enrollment from 2012 to 2016. In order to test for statistical significance of the growth over time for the industry as a whole, a paired t-test was used for both categories of enrollment, comparing 2012 and 2016 enrollments across all categories. Because the enrollment data from different years for the same category of institution are matched pairs, the paired t-test is appropriate (Xu et al., 2017). Alpha was set at .05 for both paired t-tests to yield a 95% confidence interval. Following the paired t-test, the difference in enrollment percentage of each institution type was calculated for both enrollment categories. Descriptive statistics were calculated for the differences to calculate confidence intervals. These tests were run twice for the data, once with all categories included and a second time with Private Non-Profit 2 Year institutions excluded from the calculations. This was done because the Private Non-Profit 2 Year Institutions showed a substantial jump in enrollment numbers over time, particularly in 2015 and 2016, when compared to other institutional types. Because these institutions were outliers for the population as a whole, tests for significance were run with the outlier excluded to determine if there was a true statistically significant growth for the industry as a whole or if overall results were being skewed by the high growth shown by a single sector.

Results

The results from the paired t-tests are provided in Tables 3 and 4.

Table 3.
Paired T-Test Results for Students Taking Any Distance Course

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Mean Change in Percentage Enrollment</th>
<th>Two-tail P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Population</td>
<td>0.26</td>
<td>0.07</td>
</tr>
<tr>
<td>Population with Private 2 Year Omitted</td>
<td>0.16</td>
<td>0.08</td>
</tr>
</tbody>
</table>
Table 4.
Paired T-Test Results for Students Taking Only Distance Courses

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Mean Change in Percentage Enrollment</th>
<th>Two-tail P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Population</td>
<td>0.30</td>
<td>0.02</td>
</tr>
<tr>
<td>Population with Private 2 Year Omitted</td>
<td>0.19</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Figures 1 and 2 display the difference in percentage enrollment for students taking any or only distance courses from 2012-2016. Results of the descriptive statistics for the four population samples are presented in Table 5.

Figure 1.
Difference in Percentage of Students Taking Any Distance Courses: 2012-2016

Figure 2.
Difference in Percentage of Students Taking Only Distance Courses: 2012-2016
Table 5. Descriptive Statistics for Mean Differences

<table>
<thead>
<tr>
<th>Population</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Taking Any Distance Courses</td>
<td>0.11</td>
<td>0.11</td>
<td>6</td>
<td>0.01, 0.23</td>
</tr>
<tr>
<td>Population with Private 2 Year Omitted Taking Any Distance Courses</td>
<td>0.06</td>
<td>0.02</td>
<td>5</td>
<td>-0.01, .011</td>
</tr>
<tr>
<td>Population Taking Only Distance Courses</td>
<td>0.06</td>
<td>0.03</td>
<td>6</td>
<td>0.01, 0.13</td>
</tr>
<tr>
<td>Population with Private 2 Year Omitted Taking Only Distance Courses</td>
<td>0.04</td>
<td>0.04</td>
<td>5</td>
<td>0.01, 0.08</td>
</tr>
</tbody>
</table>

At a 95% confidence interval the difference in means for growth in distance courses was non-zero for all but the population with private 2 year omitted taking any distance courses, with both tested populations taking only distance courses returning confidence intervals of non-zero.

Conclusion

Based on the results of the tests, H1a is confirmed with the change in enrollment of students taking any distance course being non-zero. This is a narrowly decided confirmation as zero was within the confidence interval of the population with private 2 year omitted, but was not within the confidence interval of the full population. Because zero was only near the end of the total confidence interval distribution in the population with private 2 year omitted, the decision was made to confirm the alternate hypothesis based on the slightly mixed results. H2a is also confirmed, with zero not appearing in the confidence intervals of either population that was tested.

While this study is focused on the higher education sector as a whole, the overall growth of distance learning enrollment raises interesting questions for the industry. While private, for-profit institutions certainly serve the largest percentage of distance-only students, public institutions are also seeing growth in students learning only by distance, with 10% or more of their students in that category, and over 25% of public institution students are taking at least one distance course. This shift to distance learning across all sectors of higher education may indicate a need for institutions to make additional investments in that modality, which could include faculty training and support as well as dedicated staff to author courses and create digital media to support the distance learning classrooms.

Future work that examines more granular details about shifts in demand by institution type may be helpful to better direct institutions in what they may expect based on their sector. There are obviously substantial differences among institutions in each sector, with some public and private institutions benefitting from ten or eleven figure endowments, while others struggle to maintain seven figures of investments. The selectivity of institutions and institutional focus, such as by Carnegie classification, may also yield interesting information about where students are or are not increasingly demanding distance learning access, and which institutions feel the need to shift to distance delivery. The relative weight of institutions based on enrollment as a percentage of total enrollment in higher education may also be a valid perspective to consider. Private For-Profit 2 Year institutions actually saw a drop in the percentage of students taking only distance courses, the only sector to see a negative measure, but this is a very small sector of the industry as a whole and may have unique features driving that decrease that are not indicative of other sectors.

This initial examination of enrollment trends provides some interesting insights, but it also sheds light on how much potential research there is to do on enrollment changes by sector, even within the broad categories that are reported by IPEDS. The data is available on an institutional basis in IPEDS, and as such different category data could be compiled and analyzed to perform a deeper dive into these trends. This approach may be of particular interest to researchers examining future trends and directions that may impact their own institutions and the specific category in which that institution competes.

References


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Abstract

Teaching and learning has long been at the core of many faculty development centers in higher education. This is especially true for research-intensive universities in which the majority of faculty members never receive training on how to teach. Despite this, they are expected to be successful teachers soon after they arrive on campus. To complicate matters, more and more of the workforce is comprised of part-time faculty who are largely unable to attend the normally on-campus offerings most centers offer. This paper describes how and why one university tackled these problems and transformed its primary programming in teaching and learning from traditional workshops to a flexible reflective teaching certificate, and most recently to an online certificate program.

Faculty Development in Teaching and Learning

Higher education has seen a shift over the years away from a teacher-centric model to one that is more student-centered (Benito-Capa, Green, Popely, Schneiderheinze, & Thai-Garcia, 2017). The use of evidence-based teaching methods practice supporting student-centered teaching has been shown to have direct impact on student learning (Condon, Iverson, Manduca, Rutz, and Willett, 2016, Jankowski, 2017).

For the most part, doctoral programs that prepare faculty for jobs at research-intensive universities lack formalized training in pedagogy, and many graduates may have never experienced these pedagogies as learners (Baker et al, 2014). To complicate matters, once employed, faculty report not having time to focus on critical reflection or further development of their teaching skills (Calkins & Harris, 2017). “In larger or more traditional institutions, where the premium has been on discipline expertise rather than on teaching, faculty can place a low priority on participating in development” (Benito-Capa, et al., 2017, p. 3).

Faculty Development in the Online Realm

Faculty development has traditionally been a largely face-to-face endeavor. However, with a greater proportion of the higher education workforce in the part-time or adjunct realm and increasing demands on faculty time, face-to-face professional development is not sufficient to reach this population. Dailey-Hebert, Mandernach, Donnelli-Sallee, and Norris (2014) found that the greatest barrier to professional development for adjunct faculty was the scheduling of programming. The literature shows that online learning for faculty development suffers from low participation rates (Cook & Steinert, 2013) and that people persisted because they felt it did not take too much time and it accommodated their schedules (McCourt et al., 2017).

Faculty Certification

Training faculty members in pedagogy seems to yield positive outcomes. Baker et al. (2014) and Calkins and Harris (2017) found that most faculty trained in a pedagogy training program actually made changes to their teaching. But the research has also shown that the adoption of new pedagogical practices was more likely when the faculty had less experience in teaching (Ebert-May et al., 2011 & 2015).
Background of Certificate Programming

In 2011, the Office of Faculty Development (OFD) established the Certificate in Reflective Teaching (CRT), which required faculty to attend an orientation, three core workshops (assessment, course design, and creating a student-centered learning environment), two elective workshops, and one intensive experience, and undertake a capstone project accompanied by a one-to-two page essay. Faculty members had up to two years to complete the program. Sixty-one faculty members completed the program since its inception, an insufficient number on a campus with over 2300 full time faculty members. The certificate itself was found to have several drawbacks, including dropouts and a constant need to track progress, poor flexibility for the faculty’s varied teaching schedules, and part-time and off-campus faculty’s inability to participate.

Development of the New Certificate Program

Prior to the development of new programming, OFD developed a four-phase run-of-show for sunsetting the current certificate program while creating a new certification. This run-of-show guided the program planning by establishing actionable items, necessary resources, persons responsible, and target dates within a realistic timeframe (two semesters). It also provided a collaborative space for commenting on progress and task completion throughout each phase.

Phase One began with the development and implementation of a survey to all CRT participants, past and present, to elicit feedback that was then used to inform program planning.

The data uncovered challenges and opportunities for improved programming, prompting changes to the CRT in Phase Two, including:

- Rebranding and redesigning to improve the quality and perceived value of the CRT;
- Shifting to new modalities—a hybrid model (<50% face-to-face) and 100% online;
- Utilizing the university’s learning management system and scheduling systems;
- Developing and implementing a communication plan to timely completion;
- Offering multiple sessions on different dates, at different times;
- Promoting incremental, strategic course design/redesign in lieu of a final capstone project;
- Providing clear faculty learning outcomes in alignment with the program objectives; and
- Embedding optional elective offerings.

In Phase Two, OFD established the brand for all new teaching and learning certificates, Reflective Educational Design (RED). The first RED certificate planned and developed during this phase was named the Core Teaching Certification (CTC). Comprehensive in scope and designed sequentially to address five essential competencies (Figure 1), the CTC affords faculty a collaborative space to design/refine a course of their choice facilitated by OFD. Designed for all NC State faculty dedicated to improving teaching and learning in their face-to-face courses, this multi-module, self-paced course became available in a hybrid format (face-to-face sessions with online reflective activities) and a fully online modality, providing flexibility and choice in scheduling and topic focus, in the spring of 2019. Upon completion of the certification, faculty are recognized with their choice of a certificate, a digital badge, or both.
The online space for the CTC was developed in Moodle. The first part of the main page included a Chat Cafe discussion forum, welcome message, a video screencast overview of the program, the Moodle space, registration instructions, the CTC syllabus, a syllabus confirmation esignature, and an activity in Flipgrid in which faculty participants introduce themselves in a brief video. All introductory activities/resources were set with activity completions—relying on learner action—and access restrictions to ensure that faculty participants move through the activities/resources sequentially, completing one action in order to move to the next ones.

The second section of the main page was established for reflective enrichment. Enrichment opportunities for the CTC were special topics that develop knowledge of learning contexts as well as skills in content building/delivery. Faculty participants chose one session to attend, online or face-to-face, and then completed a reflection activity in order to fulfill the enrichment expectation for completion of the CTC. The next five sections were named for each essential competency with various modules, their respective faculty learning outcomes, and the dates offered (Figure 2). Faculty participants selected one module from each of the five essential competencies in order to fulfill the certification requirements. Each online module session has its own Moodle page with activities, multimedia content, and resources. An online catalog for the modules offered that semester was created in Flipsnack and embedded on the CTC website, along with other information, a link to the online registration, and a Frequently Asked Questions section.
Phase Three involved planning and implementing branding and communicative strategies in order to build buy-in and enthusiasm for the new program. OFD was presented to all University Department Heads by distributing copies of the brochure and playing a video overview of the CTC at our monthly Lunch and Learn. Information was shared via University email to OFD Newsletter subscribers. Applications were accepted online using a Google Form. As part of the communication plan, an email template was built and utilized for weekly communications with faculty participants. Ongoing feedback was provided to faculty participants, guiding them through the activities in the modules. Online discussions, active listening activities, and pre-/post-assessments model effective strategies for online activity/interactivity. Feedback and weekly communication kept faculty participants apprised of what was happening in the cohort and what was upcoming.

**Results and Evaluation**

The first cohort for the CTC in spring 2019 consisted of 68 faculty members. Already in its first semester, the CTC has more participants than the CRT had graduates. When applying, 51% of the 68 faculty participants elected to complete the certification online, citing both choice and convenience in scheduling along with their desire for continuous instructional improvement as their reasons for participating. Ongoing program evaluation and planning is embedded into the certificate structure and data collection. At the conclusion of each module, all faculty participants must complete an online survey. In the survey, faculty participants identified the module completed, the modality of the module, and self-reported their perceived rate of knowledge of the module topics both before and after attending the session. Overall, there has been a positively perceived growth; Out of the fifty-one responses to date, forty-four indicated a positive change in their knowledge rating after attending the session. Responses have been positive about the program materials, multimedia components, and facilitator interactivity/responsiveness. All responses indicated that participants gained the knowledge/skill(s) that they had hoped to acquire.
Prior to their final activity, faculty participants must provide anonymous post-program feedback via an online survey in which they reflect on their experiences throughout the certificate. This is designed to inform planning and implementation of this and other RED certifications. In addition to participation statistics, participant reactions, formative feedback and summative knowledge increase measurements, and a comprehensive program evaluation is planned to address the program value and impact. Initially, the plan is to look at the impact of the certificate program in terms of changes in practice, changes in attitude, and ultimately, changes in student outcomes.

**Implications and Conclusion**

Initially, the Reflective Educational Design (RED) certificate has addressed the deficiencies associated with previous programming in teaching and learning. Specifically, the certificate reduces the time commitment on the faculty, provides a standardized core foundation of knowledge and skill, allows participation of part-time and off-campus faculty, and provides flexibility in scheduling. It is anticipated that RED certificates will continue to be developed to support faculty in various facets of teaching and learning and engage faculty through the evolving stages of their pedagogical careers. The RED certificates and the framework established through its development will guide development of all future certificates. The flexibility of this certificate model and its initial focus on core competencies provides the OFD with a foundation upon which to build future programming while modeling more learner-centered approaches for the faculty.

**References**


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Abstract

To create consistency and higher quality online courses, Wake Tech developed a set of standards entitled EPIC eLearning Quality Standards, with an associated rubric and a checklist. These tools were developed by a team of faculty and eLearning staff based upon research and through collaborative conversations of best practices. The intention was to establish standards relating to course design, interaction and collaboration, assessment, learner support, and accessibility in order to ensure the provision of a high-quality learning environment to promote student success and retention.

Introduction

The explosion in online enrollments in the 2000s led to colleges rushing to fit seated class expectations into an online format with little direction or established best practices. Evaluation of these new online courses was often done with an instrument more suited to the seated classroom. Quality Matters was one of the first organizations to address the issue of how to “measure and guarantee the quality of a course” by developing “a rubric of course design standards and creating a replicable peer review process.” Wake Tech’s faculty and administration also recognized the need for quality control measures unique to the online environment.

To remove learning barriers and better support online student learning, persistence, and success, in 2015, Wake Tech launched a Quality Enhancement Plan (QEP) initiative entitled EPIC (eLearning Preparedness Initiative across the College). EPIC’s goal is to remove learning barriers and better support online student learning, persistence, and success. One of the initiative’s objectives is to develop a set of standards to help faculty design and deliver high-quality online courses. According to Baldwin (2017), “standards serve to guide instructional design and delivery by providing a clear understanding of what is expected to attain success. This is a useful practice for course designers and instructors endeavoring to design effective online courses.” Sener (2004) further stated, “While commonly accepted standards sets are highly useful as a superstructure of principles or guidelines, they often lack sufficient detail for use as specific indicators of quality. The development of more specific tools (e.g., instruments, protocols, and rubrics) and criteria to indicate how the standards are met is warranted, and several institutions have taken that step.” Therefore, at Wake Tech, a team of faculty and staff developed an associated rubric and checklist designed as evaluation tools that accompany the standards.

Online Instructor Certification—A Faculty Preparedness Strategy

The EPIC Online Teaching Certification programs provide faculty with the additional training they want and need in pedagogy and technology. EPIC eLearning Quality Standards and an associated rubric for evaluating online courses were developed based on research into best practices, including Quality Matters (2015). These tools provide the framework for the certification program. While Quality Matters and other assessment processes informed the course review process, Wake Tech’s innovation was to certify faculty, rather than courses, in order to better prepare faculty to teach online to meet rapid enrollment growth.
Certification includes 30 hours of professional development training (referred to as “EPIC30”), which concentrates on online teaching pedagogy, universal design for learning (UDL) principles, and using a Learning Management System for the delivery of online courses. The EPIC30 training aligns with EPIC eLearning Quality Standards. The EPIC Online Teaching Certification is earned when a faculty member has successfully completed training. The training covers best practices in course navigation and design, online communication and collaboration, online assessments, UDL, accessibility, and LMS skills training, culminating with a capstone course that requires mastery-level demonstration of design and delivery skills described in the EPIC eLearning Quality Standards.

Beginning fall 2015, the EPIC30 training and certification process was implemented. As of fall 2017, all online faculty have earned their online teaching certification. A total of approximately 600 faculty and staff have earned their online certification, which includes approximately 400 faculty who teach online. The high numbers of those who do not teach online earning their certification speaks to the value placed in the training.

Course Evaluation Tools

Wake Tech’s EPIC eLearning Quality Standards serve as the basis for two instruments used to gauge the quality of online instruction and delivery at the college. The standards cover best practices for navigation, communication, collaboration, and assessment in online courses. The associated rubric and checklist are intended to provide consistency across the college and to make it easier for faculty to self-evaluate an existing course or to use during the development of a new online course.

The standards, rubric, and checklist are divided into five parts:

- Part A – Menu, Getting Started, Faculty Information, and Tools
- Part B – Course Resources and Student Support
- Part C – Lessons
- Part D – Accessibility
- Part E – Grade Center and Faculty Presence

Part A – Menu, Getting Started, Faculty Information, and Tools

Part A requires that the overall course design is clear to the student at the beginning of the course. The ability for a student to find a logical path through the course that is responsive to intuitive thinking is critical because course navigation, structure, and technology help to facilitate student learning. The standards require a specific, simplified menu for all online courses to provide students with a smooth transition between each of their online courses. All courses should include a welcome message, information on how to get started in the course, and accurate faculty contact information with options for multiple forms of communication, including clear instructions on the preferred method of communication for the fastest response time. In addition, a posted faculty bio/introduction assists in building community and creating a sense of connection between faculty and students by presenting the faculty member as professional, friendly, and approachable.

Part B – Course Resources and Student Support

All course-related resources and support, except those contained in individual lessons, are required to be posted under the Course Resources menu item. This area becomes a “one-stop shop” for information related directly to the course and course content. Examples of content are the syllabus, course calendar, supplemental course material, course polices, and communication expectations, including netiquette.

The Student Support menu items are pre-populated by the college into each online course shell. The content of Student Support includes information on college-wide support services for students, such as help desks, Disabled Student Services, and tutoring services. A Student Help Forum is required to be available in all online courses, specifically for participants to discuss course-related questions with their instructor or fellow classmates.

Part C – Lessons

All course instructional content should be contained in the Lessons menu item. Part C requires that navigation in course lessons be consistent and structured, and that expectations and learning outcomes are clearly stated. This section also covers important information related to communication and collaboration in the online setting, as well as guidelines on
assessment and grading. This portion of the checklist and rubric includes a large portion of the instructional content and assessments in online courses, where it is important that expectations are clearly communicated and that content is structured, varied, and easy to navigate.

**Part D – Accessibility**

Part D emphasizes the need for courses to be designed with accessibility in mind. Course design should facilitate readability and minimize distractions for students using assistive technologies. Accessibility training and an accessibility checklist are provided to instructors to be used when developing online courses. This section of the checklist emphasizes the need for structured accessible documents, accessible fonts, accessible multimedia, and accessible course navigation.

**Part E – Grade Center and Faculty Presence**

Part E contains course components that, from an assessment point of view, are best reviewed after a course has ended. This section emphasizes the importance of adhering to stated grading expectations and the availability of grading information. Faculty presence is also assessed in this section, as it is important that faculty maintain a regular presence, provide helpful feedback to students, and are responsive to student inquiries and questions.

**Uses of the Evaluation Tools**

At Wake Tech, the evaluation tools are used for varying purposes. To start, they are used as the primary evaluation tool in the data collection initiative of our quality enhancement plan, EPIC. Secondly, the rubric is used by groups of reviewers to determine whether online faculty members are applying the principles they learned in the EPIC training program in their online classes.

Supervisors or online lead faculty members also use the rubric and checklist for departmental review or evaluation processes. In order to reinforce the EPIC principles and standards in the online course development, some departments have adopted these tools for departmental review and performance evaluation tools for faculty.

Lastly, faculty can use these tools to perform a self-assessment to easily identify the items they need to include or update in their courses. Specifically, the checklist is designed as a streamlined version of the rubric to simplify the self-evaluation process. A “playbook” was developed for online faculty which includes the checklist and other tips to be successful teaching online.

**Benefits of the Evaluation Tools**

The development of these evaluation tools has resulted in numerous benefits for faculty and students in online classes at Wake Tech. Firstly, the standards have provided a transparent set of guidelines for faculty to use when developing or updating online classes. Faculty are aware from the outset of the expectations for the design and delivery of online courses, and they know what items from which they may later be reviewed or assessed. Secondly, faculty can also use these tools as a method of self-assessment/reflection before or after a course is offered. Lastly for students, the consistent structure and navigation for each Wake Tech online course has resulted in a reduced learning curve when navigating course material, allowing students to focus immediately on the course content.

The checklist and rubric have also resulted in more consistent assessment on the part of course reviewers or other parties that may be responsible for course review, therefore, making it easier to identify areas of strength and improvement in our online course offerings.

**Summary**

Wake Technical Community College’s EPIC Initiative interventions and strategies relate directly to students’ online learning skills and their online learning needs. Providing faculty with standards and self-evaluation tools will ensure consistency and quality in online courses across the college.
References


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Wide Open Voices: Experiences of OER Course Developers

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Abstract

As the affordability of higher education dominates the spotlight, open educational resources (OER), low cost, and free-to-student materials are widely offered as a solution. This paper outlines the experiences of course developers who contributed to a large-scale OER initiative, including training, knowledge, effort, and satisfaction of course development support services.

Introduction

The high cost of textbooks is significantly affecting college access to students and jeopardizing their overall potential for academic success (Griffiths, et al., 2017). This is particularly true for underserved populations such as first generation, low-income, immigrant, and minority students. According to the National Center for Education Statistics (2018), students paid $2,833 for two years of “books and supplies” which is approximately 29.44% of the total Cost of Attendance for two-year institutions in the United States during the 2014-2015 and 2016-2017 academic years (p. 5). Further, a recent study conducted at University of Georgia, Atlanta found that rates of grades of D, F, or Withdraw (DFW rate) went down by one-third among minority and Pell-eligible students in gateway courses that switched from commercial textbooks to OER (Colvard, et al., 2018).

Founded in 1998, Colorado Community Colleges Online (CCCOnline) is the online consortium of the thirteen colleges in the Colorado Community College System (CCCS). CCCOnline offers online courses on behalf of CCCS colleges. CCCS, and CCCOnline, in particular, have been on the cutting edge of initiating and implementing course developments that include a range of OER resources in order to address higher education affordability and access. CCCOnline currently offers more than 70 OER courses, with more in development. CCCOnline’s goal is to create high quality OERs to eliminate the burden of costly textbooks while improving curriculum and andragogy. By eliminating the textbook costs, providing immediate access to course materials, and aligning the course content to course competencies, the OER courses have the potential to reach more students including rural, women, and students from under-represented populations. In Academic Year 2018, 14,740 students enrolled in a CCCOnline OER course and the OER initiative saved students $770,203 in textbook or digital material fees.

Course Design Model

All courses developed by CCCOnline align to the Colorado Community College System’s Common Course Numbering System (CCNS) for consistency of courses across CCCS colleges and CCCOnline. Courses with common content carry the same prefix, number, title, credits, description, outcomes, and outline. CCCOnline courses use a Master Course Template, which enhances the student experience through ease of navigation, accessibility, and provides a standardized format across courses. The Master Course Template uses Quality Matters™ methodology to align course content to competencies. CCCOnline uses Universal Design for Learning (UDL) principles by offering multiple options for learning to support the varied learning preferences of the students. Further, the course design process integrates interactive learning objects, readings, videos, case studies, discussion forums, authentic assessments, intentional peer-to-peer learning, and active learning experiences.
CCCOnline SMEs possess expert knowledge and practical experience in their chosen disciplines. This unique combination is instrumental to the implementation of the OER initiative. To prepare for OER course development, CCCOnline employs an issue-tracking platform, which triggers an alert for the Librarian about the desire to utilize OER materials in the course development. The Librarian uses the CCNS as a guide to curate OER content, which the SME reviews for currency and appropriateness of topics and competencies covered by the course. The SME ultimately creates the course content by selecting from existing OER, adapting and remixing OER, and by writing their own content. The SME also creates the narrative voice, which connects concepts of the various OER resources to create a complete picture for the students as they are learning from a variety of resources. Instructional Designers work with SMEs to design courses that are relevant, contemporary, and innovative.

Institutionally, there is a SME Orientation course designed specifically to address best practices and challenges to OER development. As most SMEs are also CCCOnline instructors, they receive additional training, which includes: Getting Started at CCCOnline, Teaching with D2L, Managing Discussions, and Applying the Quality Matters(TM) Rubric.

**Methodology**

This study addressed the following research questions:

1. What are the experiences of subject matter experts who develop online open educational resource and zero textbook courses?
2. What perceptions about the level of effort needed to develop OER courses do subject matter experts report after developing open educational resource and zero textbook courses?
3. What level of satisfaction with the design process do subject matter experts report after developing open educational resource and zero textbook courses?
4. What additional training do subject matter experts who develop online open educational resource and zero textbook courses want?

The authors administered a survey to 65 SMEs to determine the experiences of the subject matter experts who developed online open educational resource and zero textbook cost courses for CCCOnline between 2011 and 2018. The number of study participants differs from the total number of open educational resource offered at CCCOnline for three reasons: (1) two SMEs are no longer employed by CCCS; (2) seven courses were redeveloped more than once between 2011-2018, and (3) several SMEs developed multiple courses. The survey included multiple choice and one open-ended question and had a 38% response rate (n=25).

**Quantitative Findings: Course Development**

Of the 25 respondents, 92% reported that they were “very familiar” or “extremely familiar” with online course development. 68% (n=17) had previous experience developing a non-OER course using traditional publisher materials for CCCOnline. In terms of experience with OER materials, 44% reported being “very experienced” or “extremely experienced” working with OER, 48% reported being “moderately experienced,” 8% reported being “slightly experienced,” and zero reported having no experience working with OER.

All CCCOnline courses are based on the Master Course Template, which is designed to support Quality Matters(TM) standards thou. When asked if they perceived that the course that they designed meets Quality Matters(TM) standards, 58.33% responded “yes,” 25% responded “mostly,” 4.17% responded “somewhat,” 4.17% responded “no,” and 8.33% responded “I have not taken any Quality Matters(TM) training.”

Respondents reported that a variety of OER content was used in the courses: curated (linked) content 60%, open textbook 60%, adapted OER content 56%, and SME-created OER content 56%. Most (92%) of the respondents reported that they created their own assessments for the course. Those who created their own assessments reported a varying level of difficulty: 17% reported that writing the assessments was “somewhat difficult,” 48% reported that writing the assessments was “moderately difficult,” 13% reported that writing the assessments was “very difficult” and 22% reported that writing the assessments was “not difficult.”
Quantitative Findings: Time Investment

Most of the respondents (n=20) reported that the amount of time spent on the OER course exceeded their expectations for time it would take to develop an OER course: 48% reported it took “more time” and 32% reported it took “much more time” than expected. No respondents reported that it took less time than anticipated.

Quantitative Findings: Knowledge and Level Support of Course Development Team

When asked about the perception of OER knowledge and level of support, 76% of respondents perceived their instructional designer possessed “moderate” or “expert” levels of knowledge and was “very supportive” or “extremely supportive” of OER during the course design process. While 68% of respondents perceive their program chair as knowledgeable about OER, 92% expressed their program chair as “very” or “extremely supportive” of OER. Similar trends exist regarding the perception of knowledge and level of support for OER of the associate deans, where 60% of respondents felt their associate dean was knowledgeable of OER, and 76% indicate their associate dean was “very” or “extremely” supportive of OER efforts (Figures 1 and 2).

Figure 1.
Perceived Level of OER Knowledge from the Following Roles

![Perceived Level of OER Knowledge from the Following Roles](image1)

Figure 2.
Perceived Level of OER Support from the Following Roles

![Perceived Level of OER Support from the Following Roles](image2)
Although not required to work with the librarian during the course development process, 64% of respondents reported they did work with the librarian. Of those that indicated they worked with the librarian, 62.5% (n=10) indicated the librarian was “very” or “extremely” helpful, 37.5% (n=6) indicated the librarian was “somewhat” or “moderately” helpful, and no respondents indicated the librarian was “not helpful.”

**Quantitative Findings: Training**

8 out of 25 respondents reported that they completed the CCCOnline SME training. One reported that they completed training in course development, but not by CCCOnline. Many (n=22) of the SMEs also reported that they completed at least one Quality Matters\(^{TM}\) training: 80% completed the Applying the Quality Matters\(^{TM}\) Rubric training, 13% completed the Higher Education Peer Reviewer course, 36% completed the Designing Your Online Course training, and 4% completed the Master Reviewer training. Only 12% of respondents reported that they have completed no Quality Matters\(^{TM}\) training.

**Qualitative Findings: Coded Responses**

One question contained qualitative responses from respondents, which asked, “Is there anything you would like to share regarding your experiences as a subject matter expert for an OER course at CCCOnline?” and allowed for open-ended responses. Of the participants, 76% (n=19) provided additional information about their experiences, though two participants wrote they did not have anything to share “at this time.” The authors coded and categorized the qualitative responses in order to reflect themes.

**Table 1. Frequency of themes found in open-ended responses from SMEs**

<table>
<thead>
<tr>
<th>Qualitative Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty Working with Team, External Instructional Designers and/or Vendors</td>
<td>5</td>
</tr>
<tr>
<td>Preferred Previous Publisher Content</td>
<td>5</td>
</tr>
<tr>
<td>Questioned Appropriateness of OER in Discipline</td>
<td>5</td>
</tr>
<tr>
<td>Challenging but Positive Experience</td>
<td>4</td>
</tr>
<tr>
<td>Interested in and/or Enjoyed Working with Variety of Materials</td>
<td>4</td>
</tr>
<tr>
<td>Request Additional Training</td>
<td>4</td>
</tr>
<tr>
<td>High Level of Effort for Compensation</td>
<td>3</td>
</tr>
<tr>
<td>Appreciated Knowledge and Experience of Team</td>
<td>2</td>
</tr>
</tbody>
</table>

Open-ended comments from respondents suggest difficulties arose when working with external instructional designers and vendors whose processes diverged from the processes explained in the Subject Matter Expert training. A common theme emerged regarding the sciences, with respondents (n=5) mentioning they preferred their original publisher content for a variety of reasons, including the availability of ancillaries, assessments, cohesiveness, and the alignment with state learning objectives. Yet, respondents (n=5) also indicated they found the process of working with OER to be an interesting or enjoyable process, and that adapting existing materials was “fairly easy.” Not all respondents found developing OER courses to be positive. One respondent indicated they would not participate in developing an OER course again, others (n=3) indicated OER course development was more work than expected and (n=2) compensation should be revisited.
Discussion

Griffiths, et al. (2017) purported that instructors’ satisfaction with OER training eliminates the barriers to implementation. Respondents in our study overall reported that the training and support provided by the librarian and instructional design were helpful. Based on the feedback from respondents, CCCOnline plans to enhance the existing SME training to include guidance such as creating a narrative voice throughout the course, fostering a student-friendly online environment, and writing original content to support the course elements. In addition, CCCOnline will continue to operate in the context of a multidisciplinary team to encourage and support optimal course design.

Our findings align with the survey of faculty performed by Martin, et al. (2017). They found that the majority of faculty were open to using OER materials and it was contingent on it being “suitable” and “at least equal quality to what they are currently using (p. 85). Respondents (n=4) in the qualitative response section reported concern about finding suitable materials, particularly in the sciences. One respondent wrote, “I feel using OER resources for the hard sciences is unwise. The publisher content is so rich with applications that the LMS we are using will never reach that level.” According to Jung, Bauer, and Heaps (2017), 55% of respondents indicated that the availability of ancillary materials is “extremely” or “very” important when considering the characteristics of open textbook quality (p. 136). Additionally, the customization of open textbooks is necessary for widespread adoption, according to Jung, Bauer, and Heaps (2017), because of “…reluctance from faculty who need supplemental material” which coincides with our findings (p.138).

Further, 69% in Martin, et al., (2017) reported not being aware of specific OER alternatives to the materials and 53% reported they would appreciate help in finding OER alternatives. While SMEs surveyed felt they were supported by the CCCOnline Librarians and their Instructional Designer, our survey findings support Martin, et al., (2017) with 76% of respondents indicating that they would appreciate training in locating OER, 80% in using (adapting or remixing) OER, and 60% in writing their own OER (Figure 3).

Figure 3.
Topics for Additional Training
Conclusions

Two of the respondents provided significant feedback about their experience working with the instructional design vendors, which merits future research involving subject matter experts who have worked with vendors to develop experiential case studies. Additional research of librarians and subject matter expert collaborations should be conducted to ensure best practices are developed and followed.

In January 2018, CCCOnline launched redesigned SME Orientation and SME Refresher courses, but in accordance with continuous improvement efforts, CCCOnline intends to reevaluate their training to ensure existing training materials cover topics requested by SMEs. Supplementary trainings will be developed where needed, such as writing assessments and utilizing OER. Similarly, CCCOnline reevaluated compensation for OER SMEs in early 2018; however, many comments indicated dissatisfaction with workload and compensation rates. Due to the stated dissatisfaction, CCCOnline intends to study OER workload and compensation best practices.

As part of a broader zero-textbook-cost degree (Z degree) initiative in History and Early Childhood Education, some of the OER courses addressed in this study were developed. Further inquiry is warranted to explore the development of OER courses within the context of a Z-degree curriculum project.

While experiences varied from “fairly easy” to “challenging, but fulfilling” to “very stressful,” it is important to note that all respondents in the Wide Open Voices study were experienced online instructors, online course designers, and were successful in developing an OER course. Further, CCCOnline has been successful in 100% of their attempts in taking course OER. The experiences of the SMEs surveyed have taken place over a period of seven years, which infers that the respondents may have had many different experiences with training versions, members and knowledge of development support team, and course development processes. Regardless, OER is an investment in resources, including time, training, and support.

Survey questions are available upon request.

References


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Online Reflections: Moving Students from Basic Summaries Towards Transformative Internalization

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Abstract

Usually, faculty get only the basics: what happened, regurgitating what the student did or read when asking them to “reflect”. There are ways to incorporate critical reflection methodology, creative prompts, and innovative alternatives to written submissions that can make a course more transformative for students and re-energizing for the faculty member.

Why do Students Summarize Instead of Provide Internal Reflection?

The American educational system traditionally focuses on learning content to pass tests. With the focus and emphasis on passing a test to pass a class, the message students tend to receive is “I need to know this exact information and I must present it in the way the instructor wants to hear it for the test, then I will receive a good grade, pass this test, pass this class, and I will move on.” Since the stakes of their grade for many years in schooling are presented this way, students become conditioned to presenting information in a regurgitated fashion without their own personal reflection in the way educators hope to receive it. It does not necessarily mean students cannot reflect or are not learning. Peet (2019) presents the way to get students to respond with the deep, rich, internal reflection the way instructors want is to change the way the questions are being asked and the way assignments traditionally are asked to be completed.

Review of Critical Reflection Methodology

Most higher education course or program goals include critical thinking skills and wanting students to be reflective in their work. Kember, McKay, SinClaire, and Kam Yuet Wong (2008) provide a solid review of reflection in contemporary educational methods, citing Schön (1983) who argued becoming an expert in a field means honing reflection on practice, especially in unfamiliar and complex territory; King and Kitchener (2004) relayed building students’ ability for reflective judgment prepares students to identify and work through ill-defined or “ill-structured problems (p. 5);” and the idea of incorporating reflection in formal American education is not new, many attributing its contemporary history origins to Dewey (1933). The group then says the challenge with many discussions on reflection is that what constitutes “reflection” itself is often ill-defined, discussed too broad, too often, and perhaps too loosely, with many things under the sun called “reflection” leading to confusion and lack of depth of how to facilitate deeper internalization with students.

Weimer (2012) cites the group above’s work (Kember, McKay, SinClaire, & Kam Yuet-Wong), listing four areas that better define levels of reflection:

1. **Habituation action**, where students: follow steps provided with little deliberation on what they are doing; look to plug in the book or instructor provided “right answer” to the question; usually summarize, paraphrase, or even plagiarize without depth of understanding; and, if asked, cannot explain what they wrote.
2. **Understanding**, an attempt to: begin to understand the idea; start looking for meaning; and identify theory rather than personal introspection or application to real-life. In this stage, students get better at stating course content more accurately, but remain instructor-reliant and do not provide a personal connection.
3. **Reflection**, or the beginning stages of actual personal reflection, involves students: accurately discussing course content while starting to relay their own experiences and real-life application in correct, personal context that goes beyond theory.
4. **Critical reflection** is what many instructors are looking for when students: show a transformation in perspective; recognize their own held beliefs and assumptions; and either change their existing perspective or shift beyond their past experience to a new level. Weimer says instructors should not expect this level early on or as often as students start developing reflection skills. Many times, evidence of critical reflection comes after a process over time in the course or multiple courses.

Stephen Brookfield, author of the *Critically Reflective Teacher* (2017) and *Teaching for Critical Thinking: Tools and Techniques to Help Students Question Their Assumptions* (2012) lists four critical thinking processes. 1. Contextual awareness in deciding what to observe and consider. Relevant questions include: what influences outcome, what else is needed to know or missing, what is familiar, what is different, and what is relevant. 2. Exploring and imagining alternatives including imagining multiple alternative ways to view a situation. Related questions: what are possible explanations, what else is there to know, and are there other people who could help look at the situation from other angles. 3. Assumption, recognition, and analysis including examining underlying beliefs. Questions involved: what values or shapes shaped assumptions, what assumptions affected the situation, what questions are supported around the situation. 4. Reflective skepticism/deciding what to do: the critical thinking stage includes all of the prior, in addition to: what rationale exists for decisions made, what aspects need the most attention, and what would one do differently looking back on the situation.

**Integrative Knowledge and Learning**

Melissa Peet, Founder and Director of the Generative Knowledge Institute (2019) spent multiple years conducting interviews with University of Michigan students in a well-recognized program that rebuilt their curriculum and program with the best known practices in cross-curricular, cohort-based, experiential education, service-learning, and several other of Kuh’s High-Impact Practices (2008) with high alignment across goals and experiences for students including lengthy and well-built on-site practicums (Peet, Reynolds-Keefe, Gurin, & Lonn, 2011). Students were asked to engage in critical reflection often and throughout their program requirements. According to the on-site supervisors, these students were rock stars, showing signs as high-performing, well-prepared, with professors and administrators ticking off all the usual higher education indicator boxes when assessing student work. However, in the interviews with students, Peet found overwhelmingly, the students could not articulate in their own words what they were learning, most felt overwhelmed, and many saw themselves as failures. In other words, while they were completing some of the best known critical reflection methodological practices, the transfer of knowledge from situation to future situation was not occurring and students lacked a fundamental belief that they were prepared. Peet sought to discover what was going on and worked to develop her Integrative Knowledge Portfolio Process (IKPP), a method to overcome this stark manifestation of cognitive dissonance (Peet, 2019). Peet’s method has since been used across the U.S. and internationally in medical schools, MBA and entrepreneurship programs, STEM fields, liberal arts programs, teacher education prep, change management, professional development in higher education, and with business executives (Peet, 2019).

However, in most higher education settings far less evolved than the best practices listed above, students often seem like they are not connecting to academic knowledge. They look more like the apocalyptic zombies of Apple’s famous 1984 Macintosh commercial, marching on until someone like the sprinting track-and-field runner throws a hammer into the screen of their minds (Hayden, Clow, Thomas, & Scott, 1984). Students march on like those zombies--in and out of classrooms, online discussion boards, submitting their online quizzes and assignments with little to no personal connection to the material or class. Are they actually not learning? Or, is it that they have trouble answering questions the way most assignments ask them to respond? Even in the best attempts, most higher education prompts tend to focus on cognitive learning when neuroscience shows much of what humans “know” goes much deeper below the surface than cognitive (Peet, 2019). Peet says most adults shift their mindset, gain a new perspective, or develop a deep sense of connection to a topic not based on surface, cognitive facts, but based on emotional factors and reactions to their experiences. Yet, students are not often prompted to respond in ways that engage those factors. Students might even engage in great educational experiences through use of High-Impact Practices (Kuh, 2008) like those discussed above, but without prompting to reflect on those experiences, their learning tends to remain hap-hazard and disconnected to other future real-life situations (Peet, 2019; Di Stefano, Gino, Pisano, & Staats, 2014).

Peet’s Integrative Knowledge learning methods attempt to engage the whole student- mind, body, and emotions- so students integrate their educational experiences for the present and their future. Students are more likely to integrate and transport learning that becomes known to them rather than experiences that remain buried in their tacit
knowledge (Peet, 2014 & 2019). An example of tacit knowledge is when a faculty or staff member can see a student they work with closely growing and “getting it,” much like the mentors in the story above, but the student does not see it in themselves. The student is in the thick of growing through an experience over a period of time through an internship, capstone course, or other involved project. They are fully there- the experience is happening in them and to them- but they remain unaware it is occurring. They are not explicitly seeing or realizing it. They are thus learning, but that amazing experience is remaining hidden to them, or remaining in their “tacit” knowledge (Peet, 2019; Whelan, Maher, & Deevy, 2017).

How do we then wake students up to their own learning? How do we move them from a zombie-like state to coming alive, waking up to the goals of a class assignment? How do they move from a dis-embodied educational experience to an embodied one? Kiverstein & Miller (2015) in their work on the “embodied brain” said “states of action readiness involve the whole living body of the organism, and are elicited by possibilities for action in the environment that matter to the organism.” In other words, when topics are discussed and assessed at the cognitive level only, it is difficult to make personal meaning or to connect in a personal way to content. But when learning involves what matters to students directly, including asking questions at the deeper affective level such as their own personal feelings, emotions, and reactions to the content, experience, or situation, they are more likely to engage in a deeper way. That deeper learning is also more likely to stay with them for future situations (Peet, 2019; Anderson, Krathwohl, & Bloom, 2001).

In 2017, the author (then Kilbourne, now Farrell) and Peet worked collaboratively to create the Basic Guide to Developing Embodied Reflection Prompts: Helping Students Identify and Integrate Hidden Learning in order to better serve the faculty and staff implementing learning activities through the University of Central Oklahoma’s Student Transformative Learning Record (STLR) process. According to this guide, there are three levels to developing embodied reflection prompts for integrative learning: retrieving, unpacking, and applying.

**Retrieving**

First, students need to be brought back to the situation where the learning occurred. Learning is highly situational and relational (Peet in Peet & Farrell Kilbourne, 2017). It is the same effect that happens after attending a great conference like the Distance Learning Administrator’s Conference held in Jekyll Island each year: meeting new people, attending sessions, having good discussions at the Cracker Barrel event or at lunch, and then thinking, “I’m going to go back and start implementing these great ideas my colleagues are doing.” Later, back-to-work real life sets back in with hundreds of emails, papers to grade, and mounds of work (and laundry). Many of those great ideas remain underneath the Spanish moss–filled trees, along the trellised Jekyll Club porches, or in the timeless spaces like the Federal Reserve room. Unless prompted in some way to recall those ideas, they stay in the past, in the situation they were learned. Thus, students’ usual attempt to summarize the experience is actually seminal to the process, they just need to be prompted more specifically to go beyond it. Getting students to think back to the situation does not have to be its own discrete question. It could be a statement before the first prompt to bring them back to the moment in order to retrieve what else happened.

According to Peet, using embodied language to ask students to recall specific moments during the learning that were “enlivening, energizing or memorable…(these can be emotionally positive, negative or neutral) when identified and reflected upon, reveal how, when, and where ‘real’ learning happens (Peet & Farrell Kilbourne, 2017, p.1).

Examples from the guide include:

- What was an insight or a-ha moment you had from today’s_____ (class, assignment, project, exercise, simulation, etc.)?
- What was a moment when you felt challenged or frustrated during _____?
- What was a moment from today that stood out to you or caught your attention?
- What were 3 concepts, tools, assignments, experiences, etc. from the class that have really stood out to you or grabbed your attention in some way?
Unpacking

To go deeper involves students connecting those enlivening or memorable moments to a deeper insight, action, or decision in order to uncover why that particular item stood out to them. Peet states, “deep learning typically happens when something new or unexpected occurs that captures our attention, or when something happens that disrupts our unconscious assumptions, expectations, values or norms in some way (Peet & Kilbourne, 2017, p. 1).

Examples (based on the above) include:

- Why did this a-ha moment occur? (Did it make you aware of something new or disrupt some assumption or expectation?)
- What was the nature of the challenge or frustration you experienced and what specific steps did you take to resolve it?
- Why did these particular concepts, tools, etc. capture your attention?

Applying

For students to go even deeper, to the point of developing life-long learning skills, prompt students to think about how they will use their insights from above in the future. Peet states,

“...having to think, write or talk about a future scenario in a detailed way activates their imaginative capacities, which makes them much more likely to remember and value what they've learned in the future. Even when students struggle with this step (which is often the case), it greatly increases their capacity to transfer their knowledge and learning to new contexts and situations in the future” (Peet & Kilbourne, 2017, p. 2).

Examples of application questions from the guide include:

- Identify at least two ways you will apply the insights from your learning experience to other classes or your life outside of school.
- What are two ways you can apply what you’ve learned from this ______ to specific challenges you might encounter in the future? Be specific.
- Describe at least two ways you will apply insights from this a-ha moment to your decisions and actions after this class.

When students complete each of these steps, they move deeper towards embodying the knowledge at hand.

Retrieve  Unpack  Apply  Embody

At the University of Central Oklahoma (a regional, yet metropolitan located, teaching-focused institution of approximately 16,000 students), the author has been involved with seeing Peet’s Integrative Knowledge Portfolio Process (Peet, 2015) implemented for three years with students in the co-curricular Hispanic Success Initiative (HSI) program. Most of the students are from under-represented, low-socioeconomic, and first-generation college student backgrounds. The group was created to form a learning community cohort where students interact with faculty/staff mentors in order to see representation in the larger university community that look like them and understand their background. These students are paired with a peer-mentor who was part of the program the previous year and a faculty/staff mentor. The blended-learning (McCarthy, 2017) group meets in person twice a month throughout the academic year and has additional online submission components. Group meetings consist of “Connect & Reflect”
sessions utilizing Peet’s Integrative Knowledge Portfolio Process (IKPP) curriculum manual (2016) and her additional Generative Knowledge Coaching method (2018; Peet, Walsh, Sober, & Rawak, 2010) curriculum through a flipped-learning and team-based learning dynamic (Lee & Bonk, 2019). During the face-to-face sessions, students connect with peer & faculty/staff mentors through community-building ice-breaker activities, then work through the curriculum activities which include a series’ of embodied language prompts like the ones provided above. They submit their work at certain points in the process to an online course site.

At the beginning of the year, HSI students record themselves responding to a set of Peet provided prompts that ask them about beliefs about their strengths, weaknesses, abilities, and goals utilizing embodied language similar to the prompts provided above, but specialized to the program goals (Peet, 2015). Students upload their recordings to the online course site. They record themselves answering these same set of questions mid-way through the year and at the end. Peet and the author have seen when students go back and listen to themselves from the beginning and middle of the year. At the end of the year, they are often surprised at how much they have grown. Through this innovative process, it builds a different level of belief about themselves and their strengths that goes far beyond what any faculty/staff mentor could attempt to reveal to them (Peet, 2019). The process brings up to the surface their tacit knowledge built that, if left in the past, would likely not become known to them at all (Peet, 2012). The difference is in both the way the prompts are worded and the process of the online submission which makes organizing and keeping these thoughts together in a place they can return to possible. If left to their own devices with even just having the recordings, students would likely delete them due to needed phone storage space, leave buried in an email inbox, or on a flash drive they cannot recall they saved onto and what file they named it. Voice recording, rather than video recording, was decided to be used with the Hispanic Success Initiative based on students who from 2016 through the present voiced to mentors (including to the author) very real fears related to the present political environment. Some students themselves may have been part of the DACA (Deferred Action for Childhood Arrivals) program, several were U.S. citizens by immigration (having not been born in the U.S.), voicing fears of their citizenship being revoked without change in the current political climate, and some may have had undocumented family members they feared losing.

In addition, HSI students built “Knowledge Snapshot Pages” as part of working through Peet’s IKPP manual activities. Students submitted the content for these pages in pieces to the online course site and received feedback from their peer and faculty/staff mentors. The feedback is both communicational, relational, and formative in nature. Some parts are to continue the conversations beyond the in-person sessions to build the relationships. Some students are often not outspoken in person at the sessions, but reveal things about themselves in online submissions that allow faculty/staff and peer-mentors to connect with them on a different level. Because of the way the questions are asked and students’ deeper answers, those relationships flourish beyond those of many similar programs. Some communication aims to provide formative feedback on the Snapshot pages for clarity, coherence, or to encourage more depth on a topic. The feedback helps create an online community-of-inquiry (with learner-to-content interaction, learner-to-peer interaction, and learner-to-faculty/staff (instructor) interaction (Cho, Kim, & Choi, 2017).

By the end of the academic year, students build an e-portfolio using the LMS (learning management system) integrated tool and present at a seminal show-case session (Peet, et. al, 2011) and are encouraged to present posters at the annual Transformative Learning Conference hosted by the University of Central Oklahoma in Oklahoma City (around ten out of approximately twenty-five students submit and present each year based on availability to attend the conference around class and work schedules). Seeing the showcase has been one of the most moving, fulfilling experiences for the author to witness in her fifteen-year career in higher education that spans live-in residence hall work, academic advising, e-learning course development, instructional design, curriculum development, faculty development, and implementing a campus-wide curricular and co-curricular transformative learning assessment program. At the showcase, students invite their families including parents and siblings to campus (many of their family members have never set foot on a college campus). The author has seen multiple students (and parents) tell stories of times the family was not too supportive of their work, including involvement in the program, until they saw their son or daughter start to grow and become confident in ways they had not seen before. Students, parents, faculty/staff, administrators, (and Peet herself) have left the showcase with tear-stained, beaming faces, and hearts set on fire to continue to do this work in this way.

The author, serving as a faculty/staff mentor, has seen these reflective prompt methods transform students. Many of the students come in to the program believing they do not belong in college. These students move from simplistic thinkers to deep, personally motivated learners who see themselves as scholars. They are going on to do great things,
including persisting at a rate of approximately forty-percent higher than before (Renteria-Mendoza, Montes, & Archuleta, 2018). [Full Disclosure – the author is not Hispanic, but is one of a few non-Hispanic faculty/staff mentors serving alongside Hispanic faculty/staff to support the work and mentor students].

Using Embodied Reflection Prompts in Online Course Settings

These same prompts can be utilized in online courses for written assignment submissions, to facilitate better blog or discussion board dialogue, to guide students to create e-portfolios, and many other creative ways within the possibilities of online learning. In addition to the voice recordings, ideas include: video recordings such as “selfies” used as check points throughout a course or a specific assignment; having students make infographics out of answers to these embodied prompts; asking students to create a photo board in the style of a scrapbook board; or having student-to-student video conference calling and interviews. While written reflections are the standard in higher education, it is worth considering that many students are learning far beyond their writing skill ability level, according to Amy Rogalsky, coordinator of the Project-TEACH program (a TRIO Student Support Services program) at the University of Central Oklahoma that assists under-prepared, first-generation, and low-socioeconomic students (personal communication, July 22, 2016). Rogalsky, herself a long-time K-12 teaching veteran, now helps these students persist through their collegiate experience to become future teachers. With written submissions as the often only option, their learning is not usually captured or documented in any other way. Having students submit evidence of learning in “less formal” methods than “official” written assignments and traditional tests may actually provide students the opportunity for deeper learning than traditional approaches.

Conclusion

When asking why students “summarize” instead of provide deeper, personal “reflection,” the answer seems related to the systemic way they are conditioned and the cognitive, content-based nature of prompts, rather than appealing to students’ deeper affective domain. Students’ answers therefore are reflective of the quality and type of questions asked. While critical reflection methodology helped better define levels of reflection to create more specific questions, Peet’s integrative learning and embodied questions show better results both in documented research and in the author’s three years of experience with students. These prompts can be used in a variety of innovative ways to transform the way students respond with deeper, internalization in face-to-face, blended, flipped, team-based, synchronous, or asynchronous online learning delivery.

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Student Transformative Learning Record (STLR):
Displaying Student Success and Work-Readiness

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Abstract

University of Central Oklahoma’s Student Transformative Learning Record (STLR) leverages the LMS to assess coursework and co-curricular, informal learning experiences beyond an A-F grade. Students build their STLR Snapshot to show growth in five core employability soft-skill areas and display them in a streamlined way to back up their resume.

What is the Student Transformative Learning Record?

The Student Transformative Learning Record (STLR) is a concept, process, assessment method, and student tool displaying career-readiness developed by the University of Central Oklahoma (UCO)—a regional, yet metropolitan located, teaching-focused institution of approximately 16,000 students, located in Edmond, Oklahoma (suburb of Oklahoma City). Transformative Learning (TL) itself is a holistic student development learning theory coined in 1978 by Jack Mezirow of Columbia Teacher’s College. UCO applied TL a university-wide framework to track how a student develops through their time at the university as they move towards becoming a successful, independent, work-ready graduate (or continues on to graduate school) (Mezirow, et. al., 2000; Mezirow & Taylor, 2009).

Setting a UCO-specific definition of Transformative Learning was critical to creating a campus-wide standard to measure students’ growth. At UCO (2015), Transformative Learning:

- develops beyond-disciplinary skills
- expands students’ perspectives of their relationship with self, others, community, and environment.

In other words, students need to develop skills and values beyond just their expertise in a major field of study (e.g. chemistry, modern languages, teacher education, etc.) in order to be successful in the real world. Students need to be prepared to: understand their own motivations and goals; how to relate and work with others; see themselves as part of a larger group around them (within an organization, those living near them, and beyond their own demographic and personal background of experiences); and their role in the environment surrounding them (sustainability questions of the world of which they inhabit/affect, emotional/psychological/healthy organizational ecosystems, or other factors within a broad application of the term).

Historically, American universities only track and record growth in general education and a specific discipline on the academic transcript. While a traditional academic transcript reveals students’ transformation in Discipline Knowledge, STLR captures students’ exposure to and growth in five other areas of UCO’s Central Six Tenets that address the skills/values needed to be successful (University of Central Oklahoma, 2019).
To measure student perspective expansions, the STLR program trains UCO faculty and staff in TL Theory and the use of a campus-wide STLR rubric. Inspired by the American Association of Colleges and Universities’ (AAC&U, 2013) V.A.L.U.E. (Valid Assessment of Learning in Undergraduate Education) rubrics, the STLR rubric was developed by a group of about twenty UCO faculty across disciplines and assessment professionals with student learning outcomes linked back to the V.A.L.U.E rubrics. The STLR rubric assesses if the student was only exposed to the tenet, are they integrating tenet knowledge to other situations, or is the student now embodying the tenet in their life with evidence of transformation in behavior, speech, ability, or identity. Upon graduation, students who have achieved a level of “Transformation” in one or more tenets receive graduation cords in the associated tenet color. The STLR rubric is UCO’s way of measuring and recording students’ Transformative Learning growth across these five tenets expressly and concisely in the way employers want.

Employers at the local level through the UCO STLR advisory board (University of Central Oklahoma, 2015-2019) and across the nation say they do not use the information from traditional academic transcripts to decide who to hire, they primarily rely on reviewing resumes. The employer’s Human Resources or hiring department may review the academic transcript to verify a student did in fact graduate and with the required credentials for the field or job, but the hiring manager often will not even look at it when choosing who to interview. Employers say they cannot tell from an academic transcript that for example, even if a student took and did well in an international management class, that it translates to being skilled in working with people from varying backgrounds or accurately demonstrates leadership characteristics. Employers say they have many candidates with required qualifications (completed degrees) in their respective fields, but are looking for new hires who have beyond discipline-specific skills (NACE 2016, 2018; Hora for NACE, 2017; Soffel, 2016).

What Employers Want Beyond the Transcript

In a study by Hart Research Associates for the American Association of College and Universities, the top five areas causing new hires not to succeed (not fired in every case; not performing as desired) were, in order and by percentage: 1. Coachability (26%): the ability to accept and implement feedback from bosses, colleagues, customers and others; 2. Emotional Intelligence (23%): the ability to understand and manage one’s own emotions, accurately assess others’ emotions, and work with others accordingly; 3. Leadership/Initiative/Motivation (17%): sufficient drive to achieve ones full potential, excel in the job, and take initiative with or without being asked; 4. Temperament (15%): attitude and personality suited to the particular job and work environment; and 5. Technical Competence
In order to better prepare students, give students a tool they can use to stand out among other graduates, and ensure UCO is tracking and measuring outcomes for accreditation associated with the University’s mission framework of Transformative Learning, the STLR program launched in 2015. Initially, students tracked their STLR progress on a custom digital dashboard built in the learning management system (LMS). To see an example of the initial dashboard, see author’s (Kilbourne, now Farrell) 2017 DLA-published conference proceedings paper (p. 123). Starting in November 2017, students could access, organize, and print an unofficial PDF copy of their STLR progress in a tool called the STLR Snapshot (seen in Figure 3). As of September 2018, students can request an official copy through the university’s Parchment Transcript Request Portal (Parchment, 2019).

**STLR Snapshot Tool**

UCO Student Transformative Learning Record (printable PDF) Snapshot example (2019) included on the next page shows credit earned in three of five possible STLR tenets (see paper’s second page for list of all five areas).
Figure 3.
Student Transformative Learning Record Snapshot

Students can access their STLR Snapshot online any time through a mobile-optimized, custom, in-house built web application. A university owned and hosted, separate data warehouse feeds to populate each student’s data in the tool. The data warehouse collects data from the SIS (Student Information System—currently Banner by Ellucian) and a custom report from the LMS (Learning Management System—currently Brightspace Daylight by Desire 2 Learn/D2L hosted offsite). Based on feedback from the STLR Employer Advisory Board, to keep the data clean, concise, and easy to read, students show up to ten experiences under each tenet. Thus the tool is called the STLR Snapshot since it shows only a portion of their overall STLR credits at any given time.

Students organize how the order of tenets and experiences within the tenets appear based on the need at the time and can hide tenets where no credits yet exist. Students can customize and save PDFs in as many possible variations as needed, similar to tailoring experiences on a resume for a particular objective. For example, they might choose to order and highlight tenets in a particular way geared towards applying for a leadership scholarship, to obtain an internship or job in their field, or for a graduate school application. The STLR Snapshot is an official record, backed
by the university registrar. Though students can customize and arrange items on their Snapshot, they cannot add items that were not STLR-assessed by UCO faculty or staff.

The STLR Snapshot tool, though a goal of the UCO STLR program prior to, was created as part of a Lumina Foundation grant in association with NASPA and AACRAO’s (National Association of Student Personnel Administrators and American Association of Collegiate Registrars and Admissions Officers) Comprehensive Student Record (CSR) Project. In 2015, UCO was asked to be part of the pilot cohort. Based on recommendations from Lumina, NASPA, AACRAO, and UCO STLR leadership, students can customize and choose what STLR achievements to show or not disclose. The recommendation of allowing students to choose or not choose to disclose certain achievements is rooted in two main aspects: 1. intentionality for the STLR Snapshot to be asset-based and student motivational rather than deficit-based and 2. to protect students from potential discrimination.

First, the document is intended to be asset-based by showing students’ strengths and growths. The tool was not intended to negatively portray a student as does a deficit model such as the A-F grading scale on the academic transcript. For example, if the student did not achieve credits in an area, particularly in early stages of STLR where opportunities were not as widespread, it could be perceived as if the student is low achieving. Yet in actuality, any achievements for UCO students have done more than what is required. Students who have any STLR credits are going above and beyond, seeking opportunities to differentiate themselves compared to what is required of most graduates of any institution. At UCO, STLR participation or non-participation is not a graduation requirement and therefore driven by student personal motivation to achieve more or less credits. The A-F grading scale and traditional academic transcript perpetuate the idea that only students who achieved the highest marks are the best candidates for jobs. Employers overwhelmingly disagree and believe transcript grades alone are not an accurate representation of a successful employee. However, the negative, deficit-focus of the academic transcript negatively impacts students’ core belief of their capability to complete college and succeed, serving as more of a de-motivator of student success than a motivation that celebrates their success.

Second, certain areas of students’ achievements such as within Global and Cultural Competencies could cause students to become victims of illegal, but possible hiring or placement discrimination. For example, if a student was an officer in the LGBTQIA+ student chapter, they may not wish an achievement related shown because it might “out” them to parents/guardians, hiring organizations, or other groups where they are not comfortable sharing such information. Or, if a student was particularly active in student government and demonstrated leadership through activism related to a particular end of the political spectrum, such information could be seen negatively by opposite party affiliates.

The Lumina NASPA AARAOA project provided multiple sessions to meet with the twelve-institutions from across the U.S. between July 2015 and December 2016, on-campus site visits from NASPA and AACRAO consultants mentioned above, and attendance at a Lumina Foundation convening to introduce the new comprehensive student record models in November 2016. The project institutions selected were chosen based on special attention to those that served non-traditional students, adult learners, residential students, commuters, under-represented groups, veterans, under-prepared, and highly selective students. Other institutions included were: Borough of Manhattan Community College of New York, NY; Brandman University of Irvine, CA; Dillard University of New Orleans, LA; Elon University of Elon, NC; Indiana University Purdue University Indianapolis (IUPUI) of Indianapolis, IN; LaGuardia Community College of Long Island City, NY; Stanford University of Palo Alto, CA; University of Houston Downtown of Houston, TX; University of Maryland University College of College Park, MD; University of South Carolina of Columbia, SC; and the University of Wisconsin Extension and Wisconsin Colleges of Madison, WI and all extension campuses (Lumina, 2019).

**STLR Assessment Rubric**

Beginning in Summer 2015, all faculty teaching a first-year success course, student affairs programming staff, and a group of faculty from a prior smaller pilot completed training by the author (around 125 individuals total) to incorporate the STLR rubric to measure students’ achievements in one or more of the five tenets shown on the first page of this paper. As of the end of February 2019, approximately 665 faculty from all colleges and staff have been trained by the STLR staff (now three assistant directors) to implement and assess for STLR.

STLR-trained faculty and staff assess students in a rubric tool in the LMS. The official UCO STLR Rubric (the same rubric is used across any STLR experience) utilizes the competency structure tool in the LMS with a
customization for UCO that allows the dome, overall university course structure to track achievements across any course shell within the entire system. Usually this capability only is tracked within a particular course, program, or college. To do so across any area of the University, in both curricular and co-curricular experiences, is unique to the UCO STLR program. In co-curricular settings, faculty and staff request a LMS course shell to be set up for student organization groups, out-of-class independent projects (research or otherwise), on-campus internships, campus events, etc. The faculty or staff overseeing the co-curricular activity enrolls the students involved into the course shell, has students submit a learning reflection artifact, and assesses the students using the STLR Rubric in the course shell. For curricular course shells, the faculty assess an assignment aligning with the STLR tenets using the STLR rubric tool in addition to any academic transcript related grade assigned. Faculty can assess with the STLR Rubric and their own separate grading rubric in the same assignment submission space. The LMS grading screen can handle multiple rubrics for the same submission. If they are not using a grading rubric, they can assess with the STLR rubric and put in their numerical points grade in the corresponding field of the assignment space.

For STLR, faculty and staff are asked to provide formative feedback to the student in the rubric tool, regarding why the student received a particular STLR level. See a screenshot example below (UCO, 2019):

**Figure 4.**
*Student Transformative Learning Record Feedback Screenshot*

Conclusion

To respond to growing employer demand, students at the University of Central Oklahoma, through the Student Transformative Learning Record (STLR) program build beyond discipline-specific employability skills and showcase them to employers on the STLR Snapshot, an official document backed by the university. The tool helps them keep track along the way of what to include on their resumes. Students can attach their unofficial or official STLR Snapshot PDF with their resume or cover letter to apply for a job, attach supporting documents with a graduate school application, or upload to their own e-portfolio. Overall, UCO STLR graduates quickly show employers how they are prepared and ready to succeed in any job. For more information on STLR, visit stlr.uco.edu.
References


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Academic Advising and Online Doctoral Student Persistence from Coursework to Independent Research

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Abstract

Approximately 50% of doctoral students do not complete their degrees. Attrition for online doctoral programs is 10% to 20% higher than traditional programs. This study’s purpose was to understand online doctoral students’ perceptions about the role of academic advisement in transitioning from coursework to independent research. Semi-structured interviews with 18 participants revealed six major themes pertaining to advising’s role on persistence, the efficacy of advising, and potential improvements to advising. The major themes identified within and across three cases are: faculty advising is paramount, lack of process advisement, inconsistent advisement, peer advising is powerful, persistence comes from within, and doctoral research feels lonely. Further research is needed about online doctoral students’ experience, particularly with respect to transitioning from coursework to independent research.

Academic Advising and Online Doctoral Student Persistence from Coursework to Independent Research

Student attrition is a problem for both institutions and students at all levels of higher education, but it is especially troubling for doctoral students (Council of Graduate Schools, 2017; Terrell, Lohle, & Kennedy, 2016). Approximately 40% to 60% of doctoral students fail to complete their degrees, and this number has remained fairly constant since the early 1990s (Bowen & Rudenstine, 1992; Council of Graduate Schools, 2008; Golde & Dore, 2001; Terrell et al., 2016). Online doctoral students are at a higher risk of degree non-completion than students in traditional programs (Cross, 2014). The proliferation of online doctoral programs makes research into meeting the unique needs of online doctoral students timely and necessary (Ames, Berman, & Casteel, 2018).

Researchers have consistently shown a connection between the role of student advisors and student persistence (Drake, 2011; Tinto, 1993, 2012; Vianden, 2016). This connection is consistent with other studies that have shown poor or ineffective advising contributes to attrition of doctoral students (Council of Graduate Schools, 2010; Craft, Augustine-Shaw, Fairbanks, & Adams-Wright, 2016). For doctoral students at the research stage, challenges with advisors can lead to lack of persistence (Locke & Boyle, 2016). The current study focused on the advisement online doctoral students receive as they transitioned from coursework to research-based doctoral study, and in particular, their perceptions about the role of academic advisement in their persistence.

Conceptual Framework

The National Science Foundation (2017) reported there were more than 55,000 doctoral degrees awarded by institutions in the United States in 2015. The National Center for Education Statistics (NCES) report on fall 2015 enrollment showed 26% of post-baccalaureate students were exclusively participating in distance education courses versus 12% of undergraduate students (U.S. Department of Education, 2017). A subsequent NCES report revealed 3 million full-time and part-time post-baccalaureate students were enrolled in fall 2016 (U.S. Department of Education, 2017).

The exact number of students pursuing an online doctoral degree in the United States is difficult to ascertain since the NCES does not differentiate between types of post-baccalaureate students, which means that available data
included combined master’s, doctoral, law, medicine, and dentistry students (U.S. Department of Education, 2017). Other researchers have reported more than 1 million students pursuing graduate-level degrees online in 2017 (Seaman et al., 2018). Most evidence points to an overall increase in the demand for online doctoral programs (Fuller, Risner, Lowder, Hart, & Bachenheimer, 2014).

**Institutional and Individual Student Persistence**

Institutional stakeholders often use student persistence rates to assess institutional effectiveness because decreasing student attrition leads to a range of beneficial outcomes (Tinto, 2017). High student attrition, particularly in online universities, can result in lost revenue and prestige for a school (Lovitts, 2001; Rockinson-Szapkiw, Spaulding, & Bade, 2014). Researchers have considered the impact on student retention and persistence of institutional initiatives such as learning communities, orientation courses, first-year seminars, curriculum design, and strategic expenditures (Gansemer-Topf, 2013).

Tinto (2017) described student persistence as an active form of a student’s motivation that is shaped by the key dimensions of self-efficacy, sense of belonging, and the perceived value of the curriculum. These dimensions are not related to the institution but are unique to individual students. Other researchers examined how student persistence rates are affected by characteristics of individual students, including demographic, academic, and situational factors, and which may indicate a higher or lower risk not to complete (Markle, 2015).

**Online Doctoral Student Persistence and the ABD Phenomenon**

The persistence of online doctoral students is not as well understood as the persistence of traditional doctoral students (Rockinson-Szapkiw, Spaulding, & Spaulding, 2016). Attrition for limited-residency and online doctoral programs is 10% to 20% higher compared to traditional programs (Terrell et al., 2016). Rockinson-Szapkiw et al. (2016) used Tinto (1975, 1993) and Bean and Metzler’s (1985) seminal works on student attrition as a framework to develop an online doctoral persistence model that indicates online doctoral persistence is promoted by: (a) specific support services (e.g., advisors, librarians, writing coaches, and methodologists); (b) academic integration through strategic curriculum and instruction; (c) social integration with faculty; and (d) familial integration.

High attrition rates among doctoral students have resulted in students who have completed the required coursework for their doctoral program but who have not completed their required research-based doctoral study project, and these students are often referred to as all-but-dissertation (ABD) students (Locke & Boyle, 2016). The exact number of ABD students is unknown; however, the ABD phenomenon is a relevant framework since approximately 50% of all doctoral students do not complete their degrees (Terrell et al., 2016). For ABD students, the failure to complete their studies can result in personal, professional, and financial loss for the student (Council of Graduate Schools, 2017; Devos et al., 2017; Gomez, 2013).

**Advising Online Doctoral Students**

Experiences with advisors influence doctoral students’ attitudes about their doctoral program and affect their progress (Barnes, Williams, & Archer, 2010). Doctoral students often feel isolated and look to their advisors for support beyond research supervision (Duke & Denicolo, 2017). The more interactions traditional doctoral students have with their advisors the more likely they are to progress through their programs (Girves & Wemmerus, 1988).

Advising practices for online doctoral students are unique and less well understood than for traditional campus doctoral students (Deshpande, 2017). Online students have support needs that differ from campus students, and the effectiveness of advising sessions is important (Britto & Rush, 2013). Advisors should provide positive support for online doctoral students due to limited social and face-to-face contact experienced in an online learning environment (Deshpande, 2017).

**Advising Students in Transition**

Transitioning from one level of study to another is challenging for students (Frischmann & Moor, 2017). Moving from coursework to independent research is a crucial transition for doctoral students (Baker et al., 2013; Lovitts, 2005, 2008). Doctoral students often feel unprepared to make the transition into independent research (Lovitts, 2001). Online doctoral students do not perceive they get adequate advisement about the transition from graduate
coursework to the research-based phase of their doctoral program, resulting in lack of persistence (King & Williams, 2014; Mullen, Fish, & Hutinger, 2010).

Method

The purpose of the qualitative exploratory multiple-case study was to understand online doctoral students’ perceptions of the role of academic advising on their persistence as they transition from coursework to research in doctoral study. The study was designed to gain online doctoral students’ perceptions of the nature and efficacy of advisement they received during the coursework phase of their online doctoral program in preparing them for research-based study, and how they perceive this affects their persistence.

A case study design is appropriate when contextual conditions are relevant to the phenomenon under study (Yin, 2014). Using the multiple-case design allows for the examination of outcomes which might be affected by different environments and to help form more general categories of how specific conditions might be related (Chmiliar, 2010). Data derived from multiple cases can provide greater confidence in a study’s findings (Yin, 2012). Acquiring information from multiple sources also may lead to other data sources not previously considered (Harder, 2010).

An exploratory case design allows illustrating through a case an in-depth analytical study of critical issues related to a phenomenon and provides a means to define questions and hypotheses for future studies (Yin, 2014). Exploratory case studies are used to investigate distinct phenomenon when there is limited detailed preliminary research about the phenomenon, when there is a lack of detailed hypotheses that can be tested, or when a specific research environment limits the choice of methodology (Streb, 2010). Although the research environment did not limit the choice of methodology for the current study, there is limited published peer-reviewed literature about students’ perceptions of advisement on making the transition from coursework to research-based doctoral study. There are also no existing detailed hypotheses that can be tested about this phenomenon. An exploratory multiple case study design was therefore an appropriate research design for the current study.

According to Yin (2014), researchers of multiple-case studies use replication logic as opposed to sampling logic. For the current study, the multiple cases consisted of three unique groups of online doctoral students, and the scope was limited to ABD students who were currently enrolled in an online doctoral program, online ABD students who completed their coursework within the past five years but were no longer enrolled in an online doctoral program, and students who had graduated from an online doctoral program in the past five years.

Purposive sampling techniques identified individuals knowledgeable and experienced with making the transition from coursework to independent research in an online doctoral program. Recruitment focused on identifying participants through social media and snowball sampling who could be grouped into one of three distinct groups based upon their progression in an online doctoral program. Following a self-selection process that ensured voluntary participation, 18 online doctoral students and graduates were interviewed. Six of the participants were ABD students enrolled in an online doctoral program at the time of their interview (33%), five of the participants were ABD students not enrolled in an online doctoral program at the time of the interview (28%), and seven of the participants were recent graduates of an online doctoral program (39%). Sample sizes provided sufficiently rich data to achieve saturation in each case.

Participants included five men (28%) and 13 women (72%). Eight participants identified as white (44%) and 10 as non-white (56.6%). Participants’ ages ranged from under 45 years of age (27.8%), age 45-54 (33.3%), and over 55 years of age (38.9%). The most popular fields of doctoral study for the sample were education (39%) and psychology (28%).

Data Collection and Analysis

Individual semi-structured phone interviews provided the primary data for the current study. Each participant gave informed consent and willingly and thoughtfully answered all questions that were asked from an interview script. Asking multiple follow-up questions and changing the order of the questions to follow logical streams of thought during each interview provided additional context and generated thick and rich data.
Units of analysis were the three groups of students that made up each case, as well as the data obtained from participant interviews. All interviews were digitally recorded, transcribed, and analyzed. Each participant had the opportunity to member-check a copy of a transcript of his or her interview in order to provide edits, comments, or additions to the data. General descriptors of themes and patterns from the interview data were identified, coded and examined within and across the three cases to triangulate the findings from the data.

Findings

Six main themes emerged from the data collected from participant interviews: (a) faculty advising is paramount, (b) lack of process advisement, (c) inconsistent advisement, (d) peer advising is powerful, (e) persistence comes from within, and (f) doctoral research feels lonely. The first three of these themes were among the top five themes for each case in the study.

Theme 1: Faculty Advising is Paramount

The importance of faculty advising was the most often cited theme across all three cases. The 18 participant interviews revealed 157 instances of how faculty advisement influenced the persistence and preparation of participants in making the transition from coursework to independent research. Interactions with a chairperson was the most common instance of faculty advising mentioned. In addition to their chair, participants also identified coursework faculty, committee members, faculty met at in-person residences, and faculty working at other institutions as important advisors.

Reasons given by participants across all cases for why they considered faculty advising to be important included the advisor’s experience in guiding students through the research process, the quality of feedback given by the faculty advisor, and the power faculty advisors had to approve or disapprove of a student’s work. Another reason noted by multiple participants was the general high regard that faculty were held by online doctoral students.

A female graduate summed this up best when she said:

“From my perspective, (faculty advisors) were up on these pedestals and I was grateful to have their time and their input. And I would never ask for anything more than what I thought that was appropriate… but I felt like in 20 minutes of talking to this person, the information was more valuable than any other I'd [sic] ever received.”

Participants across all cases commonly referred to faculty expertise. Participants considered faculty to be unquestioned experts, especially for all advising related to independent research. Answering questions related to the research process, preparing for and dealing with the transition into independent research, helping students identify an appropriate topic, providing access to resources students found helpful to their study, and providing feedback on scholarly writing were areas in which participants relied heavily on a faculty advisor’s expertise.

Several participants specifically mentioned how a faculty advisor influenced their persistence. For example, a male graduate stated simply that, “I can tell you right now that if it wasn’t [sic] for my (faculty advisor) I would not have graduated.” Other ABD enrolled and graduate participants described how the personal relationship they developed with their faculty advisor(s) helped them to persist by assuaging their feelings of vulnerability and loneliness, which is another major theme addressed below. Two ABDs no longer enrolled identified a poor relationship with their chair as a reason they did not persist. However, the majority of participants across all cases described the advisement they received from faculty as having a positive influence on their persistence.

Advisors Need Authority - A subtheme within the importance of faculty advising is that online doctoral students perceive the value of the advisement they receive to be more substantial when given by people who have positions of authority within the institution. Participants across all cases generally afforded their chairperson a level of authority above other advisors and staff at their school. Participants also identified interactions with deans, associate deans, lead faculty, and directors to be valuable.

Academic Advisors Lack Credibility - Participants across all cases identified that their academic advisors lacked credibility due to not having had experience doing research themselves, not being competent about the research process and school policies, and to being perceived as not having the students’ best interests in mind. ABD no
longer enrolled and graduate participants also reported that interactions with their academic advisors were more likely to be transactional or generic in nature.

**Theme 2: Lack of Process Advisement**

Participants across all three cases expressed frustration with the lack of advising they received about the independent research process prior to making the transition from coursework. Seventeen of the 18 participants referred to the lack of process advisement they received at some point during their interview. Improving advisement about the independent research process was also the most common recommendation that participants gave when asked about potential improvements to the advising process.

The word “daunting” was mentioned several times in relationship to the independent research process. Participants across all cases reported high levels of confusion about the steps they needed to take and where to find information about what to expect. Not knowing where to start in developing a research topic, wishing they had been taught about the process sooner so coursework content and resources could be saved for their independent research, and being unprepared for the shock of being in a class of one with their chair were common areas participants perceived a lack of adequate advising prior to making the transition from coursework to independent research.

Many participants identified academic advisors’ lack of expertise about the process due to having no experience of their own as a doctoral student as a reason for students not getting the guidance they wanted. Participants reported that resources such as handbooks were not readily available or were not referred to until after students were already in the independent research phase. The participants indicated that other students and colleagues often become the primary individuals that online doctoral students relied on for information because they felt they did not get adequate advisement from university employees.

Participants across all cases also reported wanting specific instruction about the process. As a current ABD enrolled student noted, “Programs give you resources, but that doesn't [sic] do it! Because that's [sic] not instruction. Knowing what you need to apply is very specific.” Faculty advisors’ unwillingness to provide guidance about the process at the point of transition adds to this frustration. Participants also described wanting to be taught why the independent research process is designed the way it is and to be given more realistic timeframes for how and when they should be achieving progression milestones in their program.

**Theme 3: Inconsistent Advisement**

Participants across all cases perceived their advisement to be inconsistent. It was not unusual for participants to recount how they received different answers to the same question posed to different advisors. The interview responses included frequent comments expressing confusion and frustration created by the lack of consistency in the advisement that students received.

Lack of response and delays in receiving feedback were reasons given for seeking feedback from other advisors. Not receiving an immediate response directed to an assigned academic advisor prompted some participants to call general advising phone numbers, only to find the advisement they received by doing so was incorrect or differed substantially from the advisement they received once their assigned advisor eventually responded to their initial inquiry.

Some ABD no longer enrolled and graduate participants identified turnover of their advisors, chairs, and committee members as a reason for receiving inconsistent advising. Thirty-nine percent of all participants reported that their academic advisors had changed at some point during their program, 22% had different chairpersons than whom they started with, and 11% experienced changes in their committees. Of the 11 unique participants reporting an advisor change, only two indicated they had advance notice of the change, while three others said they received no communication at all about the change. Advisement from the new advisor invariably differed from the advisement the previous advisor gave, and in one case the differences in advisement caused one graduate participant to take a nine-month break in her program.

Participants also commonly referred to inconsistent advisement from different faculty members as a source of frustration. One ABD enrolled student recalled an experience at an in-person residence where three faculty members gave three different opinions about her research topic ideas.
She expressed her frustration by saying:

“You're [sic] trying to figure out what's [sic] going on. You don't [sic] know your topic. You don't [sic] know what type of paper you're [sic] supposed to write. You don't [sic] know where to begin. So you ask different faculty – who are supposed to have the answers, right? I guess I was looking for one right answer and there was no one right answer. They all told me different things.”

**Theme 4: Peer Advising is Powerful**

Participants across all three cases perceived advisement from other students and colleagues to have a high degree of influence on both their persistence and their progression through their program. Participants repeatedly noted that relationships that were formed with peers at in-person residences, from being part of the same cohort, and/or in online social media forums were essential to both their social and academic integration with their online doctoral program. Examples of peer advisement found in the interview responses included giving each other encouragement, gaining an understanding of the research process, soliciting feedback, and relying on an available resource when unable to contact their assigned advisors.

Participants across all cases also pointed to benchmarking as another powerful outcome received from peer advising. Participants reported that being able to compare their own progress and the quality of their own work to other students was helpful in easing their anxiety.

As one ABD enrolled student noted:

“As I joined these Facebook groups, I was able to kind of hear the pros and the cons of other students’ situations. You know the unfortunate stories…the really exciting stories of what it was like. And so these things came out and they were very, very helpful. It made me realize I was doing okay.”

Other participant responses noted that having other students who were further ahead in their program report their progress was inspiring and provided incentive to persist.

**Theme 5: Persistence Comes from Within**

Participants consistently reported that their own drive and internal motivation had a much stronger influence on their persistence than advising did. Interview responses to questions about how advising influenced participants’ persistence regularly included terms like driven, self-propelled, passion, and self-motivated. This was seen across all cases but was especially prevalent among graduates, as six of the seven (83%) graduate participants attributed their persistence to themselves. Even two ABD no longer enrolled students considered their failure to persist to be their own responsibility that no advising could have influenced.

Perceived efficacy of advisement did not appear to be a factor in participants’ perceptions about their persistence. For example, both a graduate student who perceived a lack of support from her advisors and an ABD no longer enrolled student who spoke effusively about the quality of her advisement considered their persistence (or lack thereof) to be their own responsibility. Participants referred to their advisors as “cheerleaders” and thought of them as helpful resources, but ultimately attributed their persistence to their own passion, drive, and self-motivation.

Participants who indicated their advisor positively influenced their persistence also acknowledged the idea that persistence comes from within. A male graduate who gave a great deal of credit for his completion to his mentor also noted that “the work was my own.” Another ABD enrolled student who felt “lucky” to have a qualified chairperson to “push along” her progress also said her persistence was the result of being a “self-guided learner.” Similarly, a male graduate who stated that having advisors who were more experienced repeatedly telling him he was becoming an expert on his topic made him want to continue also strongly advocated for being responsible for his own persistence.
Theme 6: Doctoral Research Feels Lonely

Participants across all three cases reported not being prepared for the feelings of loneliness they experienced in their independent research phase. The interview responses included descriptions such as “isolation,” “totally on your own,” “just yourself,” and “abandoned” to describe their doctoral research experiences.

One ABD enrolled student mentioned feeling “adrift at sea” to describe being on his own:

“Well, I think the way I feel is where I think most people are, and it's [sic] like being adrift at sea. We've [sic] been pushed away from the shore. We're [sic] comfortable and doing well with the last three years or so, and then you transition and they say, ‘Ok, okay, go out and sail the seas,’ right? And it's like, ‘Okay. I've [sic] never been out there, and I don't [sic] have the skill set to produce at the level that you need me to produce,’ and I think that's [sic] where we are.”

The one-on-one course structure during the doctoral research phase of a program accounted for the feelings of loneliness for some participants. Participants across all cases described being unprepared to be working only with faculty, not getting feedback as regularly as they did during the coursework phase, and not being able to compare notes with others because they were the only individuals working on their topic. Another female graduate singled out independent coursework as the hardest adjustment she had to make during her transition into doctoral research. Participants recommended advising on how to prepare for the independent nature of research study and acknowledging the difference once in the one-on-one environment as opportunities to improve advisement.

The ABD enrolled and graduate participants in particular made reference to feeling alone because they were insecure about their abilities. Participant feedback included comments about not feeling intelligent enough to do independent research, being overly sensitive about negative feedback from their chair, questioning the value of an online program versus a traditional campus program, and feeling they were incapable of working on the research problem they chose. Participants noted that these feelings were especially profound when they first started doing independent research because they did not feel comfortable sharing their thoughts with their advisors because they lacked close relationships with them.

Cross-Case Analysis

A cross-case analysis of the current study’s data revealed findings that were common across all cases as well as themes that were unique to one or more cases. Analyzing concurring and contrasting themes in the data proved sufficient to address the central research question about current and former online doctoral students’ perceptions of the role of academic advising on their persistence as they transition from coursework to research in doctoral study. Table 1 shows the top five themes for each case in terms of how prevalent each theme was mentioned by participants in each case. Three themes were common among the most prevalent themes for each case: (a) faculty advising is paramount; (b) lack of process advisement; and (c) persistence comes from within. The prevalence of these themes across all three cases provides evidence of triangulation of these data.

Table 1.
Most Prevalent Themes for Each Case

<table>
<thead>
<tr>
<th>Case</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABDs still enrolled</td>
<td>- Faculty advising is paramount</td>
</tr>
<tr>
<td></td>
<td>- Lack of process advisement</td>
</tr>
<tr>
<td></td>
<td>- Academic advisors lack credibility</td>
</tr>
<tr>
<td></td>
<td>- Inconsistent advisement</td>
</tr>
<tr>
<td></td>
<td>- Persistence comes from within</td>
</tr>
<tr>
<td>ABDs no longer enrolled</td>
<td>- Lack of process advisement</td>
</tr>
<tr>
<td></td>
<td>- Faculty advising is paramount</td>
</tr>
<tr>
<td></td>
<td>- Persistence comes from within</td>
</tr>
<tr>
<td></td>
<td>- Coursework content</td>
</tr>
<tr>
<td></td>
<td>- Dissatisfaction with financial advisement</td>
</tr>
</tbody>
</table>
Graduates

- Faculty advising is paramount
- Lack of process advisement
- Persistence comes from within
- Inconsistent advisement
- Value of in-person residence experience

Discussion

The current study added to the existing body of knowledge pertaining to online doctoral students’ persistence, online doctoral advising, and online doctoral students’ transition from coursework to independent research. The theme of persistence comes from within and doctoral research feels lonely represent individual persistence characteristics related to advising. The other four major themes—faculty advising is paramount, lack of process advisement, inconsistent advisement, and peer advising is powerful—reflect institutional persistence influences connected to advising. These findings also indicate that online doctoral students may not be properly prepared to make the transition from coursework to independent doctoral research.

All participants reported having multiple advisors, including both faculty and academic advisors. Participants clearly perceived faculty advisors to be their primary source of information about research processes. Participants recognized faculty’s expertise, authority, and credibility in ways they did not perceive from other advisors. The importance of faculty advising extending to online doctoral students supports Barnes et al.’s (2010) findings that faculty advisors influence doctoral students’ attitudes and progression.

At the same time, participants reported the advisement they received about the transition from coursework to independent research left them feeling unprepared and frustrated. Inconsistent advisement compounded their frustrations. Lovitt’s (2001) germinal research on doctoral students’ persistence included findings that doctoral students often felt unprepared to make the transition into independent research. The themes of lack of process advisement and inconsistent advisement extend this idea to online doctoral students. Inadequate advising may be at the root of participants’ perceptions that they are responsible for their own persistence. Participants may have been more likely to attribute some degree of their persistence to their advisors if the advising they received was better.

Opportunities exist for institutions to reduce student frustrations when transitioning to independent research by improving the advising process. Practical recommendations informed by the current study for doing so included (a) facilitating more faculty-student interactions, (b) adding more advisement and instruction about the research process during the coursework phase of a program, including giving student advisors additional training about the doctoral research process, (c) creating opportunities for more peer-to-peer interactions and instituting peer advising or peer mentoring initiatives, and (d) implementing appreciative advising strategies to assist students to make the transition from coursework to independent research.

The current study’s findings suggest that facilitating more faculty-student interactions can improve advising to support doctoral student persistence. Participants reported that opportunities for one-on-one advising with faculty were especially valuable. Russo-Gleicher (2014) suggested online student retention could be improved through better student access to mentors and faculty. The theme that faculty advising is paramount presents an opportunity to improve the advising process by giving students more access to faculty advisors earlier in their program. Assigning chairpersons and committees to facilitate one-on-one faculty advising sessions for students prior to the transition from coursework to independent doctoral research could better prepare them and positively influence their persistence.

The theme of lack of process advisement supports adding more advisement and instruction about the research process during the coursework phase of a program. This strategy would be consistent with Tinto’s (1975, 1993) findings about the importance of academic integration. Participants reported that they often turned to peers because of perceived inattention, incompetence, or discomfort they experienced with other advisors. Thus, facilitating more peer-to-peer interaction in ways to maximize peer advising opportunities supports making for a smoother transition for students from coursework to independent research. Establishing a formal peer advisor or peer mentor system would improve social integration for students, as well as possibly alleviate some of the feelings of isolation that the study participants reported, as reflected in the theme of doctoral research is lonely.
Advising practices suggested by the current study to improve students’ preparation for independent research include: (a) having faculty discuss the process of the transition and what to expect with students outside of the classroom environment; (b) providing additional training for academic advisors about the research process, which has the added benefit of increasing these advisors’ credibility; and (c) giving more advisement related to self-care, loneliness and isolation, and other psychological stressors that online doctoral students experience when transitioning to from coursework to independent research. Appreciative advising aligned with Schlossberg’s 4 S System (1981) —situation, self, strategies, and support—through use of an appreciative inquiry framework to challenge students’ deficit mindsets, highlight student strengths, and empower students to control their own academic success (Hutson, Ye, and Bloom, 2014). Extending 4 S and appreciative advising methods to online doctoral students supports an advising improvement to positively influence the transition from coursework to independent research.

Online doctoral students’ persistence remains problematic. Further study is needed about online doctoral students’ experience, particularly with respect to the transition from coursework to independent research. Implementing institutional measures in advising for online doctoral students as they make this transition may positively influence persistence rates overall.

References


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Preparing Faculty for EPIC Results:  
Online Faculty Certification and Assessment

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Abstract

This article is about how the online faculty and staff EPIC online certification program at Wake Technical Community College, a component of the Quality Enhancement Plan, affected the instructors and students. The focus will be on how the faculty and staff use their newly gained knowledge to affect changes in their online courses to improve student success.

Introduction

In Fall of 2014, Wake Technical Community College set out to improve online instruction and student success in online courses. The overall goal was to “reduce [online learning] barriers and support student learning, persistence and success in online courses” (Wake Technical Community College, 2014). As one measure to reduce online learning barriers, the college created and implemented an online instruction certification program through the eLearning Preparedness Initiative across the College (EPIC). The EPIC certification program was designed to “help faculty design and deliver online courses in accordance with Wake Tech’s EPIC eLearning Quality Standards” (Popp et al., 2018). To review the specific courses and their descriptions refer to the white paper from Consol, Barton, and Holliday called “Epic Online Faculty Certification Program” (Clay & Bennafield, 2017).

In our work to evaluate the certification program, the EPIC Assessment Team conducted surveys to elicit instructor feedback on the training program, as well as their own courses, in order to propose improvements to the necessary departments. In reviewing the responses provided by full-time faculty, staff, and adjuncts, we discovered themes in the comments. These comments assisted in the revision and updating of the professional development courses offered to receive online instructor certification at Wake Technical Community College. It is important to note that any individual who desired to teach online was required to complete the online certification program.

Changes Implemented

One of the most exciting revelations we encountered in reviewing the data collected was that an overwhelming majority of those surveyed gained new skills in designing and delivering their online courses. In fact, only a small percentage, 6%, felt they did not gain any new skills because they felt they already had the necessary skills. However, in their qualitative responses they also indicated that they gained a few new skills that were helpful for both their online and seated classes.

The top three qualitative themes for how instructors implemented their newly acquired skills are:

- improving accessibility in their courses,
- organizing both their online and seated courses so that it is easier for students to locate course materials, and
- better and more focused communication with students (Fussell et al., 2018).
Accessibility

One of the most daunting tasks for any instructor, whether they teach online or seated courses is making their materials American Disabilities Act (ADA) compliant. In the EPIC certification program, instructors receive training on how to make various mediums ADA compliant including: Word documents, PowerPoints, videos, tables, and images. Instructors who completed the certification program have indicated that they are now “more aware of accessibility issues” and they are “trying to incorporate more creative ways to present information” (Fussell et al., 2018) that are accessible to their students.

While instructors have gained new skills in making their classes more ADA compliant, they have also discovered how difficult it can be to make all material in a course accessible.

- “My classes are more ADA-compliant. It’s very hard to get them completely compliant and have an active, adaptive course.”
- “I am more aware of ADA and accessibility. However, and I feel bad for writing this, but I have found good content but neglected to show it because it wasn’t accessible.”

Organization

Within the EPIC Initiative, Wake Tech Community College instituted a template for the learning management system (LMS) menu and overall organization of all online courses in order to provide students with a consistent structure regardless of the course they are taking. Having this consistency from course to course allows students to more easily navigate their online courses and focus on the content instead of trying to find the content. This was a major change for many instructors and was a point of contention for many veteran online instructors. However, after using the new template, instructors have seen a decrease in student questions about locating course materials (Fussell et al., 2018).

Because of this change, instructors spend less time answering questions about where items are located or where documents should be submitted and more time answering questions that focus on applying course content.

- “Now that I am certified, I am more aware of the student perspective when looking at an online course format and when taking an online course. I see more from their perspective, and EPIC gave me the push I needed to more fully develop my course in a more user friendly way.”
- “I am much more intentional in my organization. Much more consistent in my structure.”
- “I am planning a hybrid course and I want to make sure that I develop that course cleanly and clearly for the students. It really improved my online presence in my seated course with clarity and organization.”

Communication

One of the most important items for an online instructor is communicating effectively to and with students (Jaggers & Xu, 2016). In an online course, this can be difficult, as most communication tends to be in the form of videos or written text that students view on their own. This disconnect makes it challenging for an instructor to know when a student is having difficulty unless the student reaches out and asks for assistance or clarification. In a seated course, an instructor can often use visual cues or body language to determine students’ understanding of a concept being taught. In an online course, that insight usually does not happen until an assessment occurs. In the survey responses of instructors who completed the EPIC certification program, most instructors are communicating with their students in some manner multiple times a week (see Table 1 for details).
Table 1.  
EPIC Certification Program Instructor Communication Evaluation

<table>
<thead>
<tr>
<th>On average, how often do you interact with your students?</th>
<th>Spring 2017 Total Respondents 164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer Options</td>
<td>Response Count*</td>
</tr>
<tr>
<td>Daily</td>
<td>37</td>
</tr>
<tr>
<td>More than twice a week, but not on a daily basis</td>
<td>77</td>
</tr>
<tr>
<td>Twice a week</td>
<td>30</td>
</tr>
<tr>
<td>Once a week</td>
<td>18</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>2</td>
</tr>
</tbody>
</table>

*Comments were reviewed and when applicable response counts were adjusted. Two of the “Other” responses for were moved to “Once a week,” one response was moved “Twice a week,” one response was moved to “More than twice a week, but not on a daily basis,” and one response was moved to “Daily.”

Surveyed faculty indicated that they provide multiple student engagement opportunities with many indicating that they use collaborative assignments and allow students some choice in topic of discussion board posts, essays, or projects (Narin et al., 2018).

- “I am more proactive, sending more reminders than in the past.”
- “Communicating more... Bring the personal touch into play.”
- “More thorough Announcements; more specific how to with Lessons - give plenty of examples of what is desired. It’s very easy for things to be misunderstood when you don't meet face-to-face - and it's more difficult to fix when things due to lag time in online classes.”

These changes in online courses have not gone unnoticed by students. Through end of course survey data, students indicated that the interactions with their instructors were good and included regular reminders as well as messages of encouragement. Most students felt that their instructors were responsive to questions and that they were able to explain the content very well. While most students’ comments praised the instructor as being an advocate for the student, accommodating, and friendly, there were students who felt that the interactions with the online instructor were lacking (Popp et al., 2018).

Conclusion

The data and comments from various measures used to assess the online certification program have led to revisions of the program. For example, many instructors would like to have a summary document for many of the courses as it can be difficult to remember all the information provided (Fussell et al., 2018). To this end, the EPIC Enhancement Team and QEP director created a booklet called the EPIC Course Construction Playbook that contains key facts and a checklist of all the EPIC eLearning Quality Standards.

Some of the respondents indicated that they would also like refresher courses periodically or courses that were more focused on specific course content, as indicated by the sample of comments below (Fussell et al., 2018):

- “I would add more areas of refresher or deeper levels of learning.”
- “I think templates designed that we can access or review in bb or somewhere else would be helpful. I may forget a step and it would be nice to have a visual resource in Bb.”
- “Add more classes concerning ADA compliance with videos, PowerPoints, etc. Add classes for advanced users of Blackboard.”
- “Maybe have a master online faculty member from each discipline teach a master class on how to do that discipline as an expert online.”
“Probably have some regular refresher courses for those that are already certified.”

A master-level certification that goes beyond the EPIC certification previously discussed has been developed and is available to faculty. The program allows faculty to delve deeper into important themes like mentoring, peer-review, accessibility, and pedagogy. In the master certification program, faculty take more advanced courses and are paired with an instructional designer to go in-depth and tailor their course to their subject area.

The EPIC initiative is raising faculty awareness about tools, such as Blackboard Ally, to assist them with accessibility, and recording studios, to assist in video creation. Awareness is also being raised about the availability of instructional designers to help faculty. In conclusion, as instructors continue to make changes to their courses using the skills they acquired during the certification processes, we believe that students will continue to reap the benefits and be more successful in their courses.

References


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Bringing Faculty to Online Course Quality Standards

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Abstract

Online course quality standards are becoming an accepted goal of administration and regional accrediting bodies. These standards often blur the line between course design, informed by instructional design theory and practice, and the academic province of faculty who are responsible for curriculum delivery and who also typically do not have specific training in pedagogical method or course design. This conference session and paper will describe a program that integrates the Online Learning Consortium (OLC) online course quality review standards (OSCQR) with online course building, faculty training, and course redesign at a regional 4-year public institution. Internal processes of faculty buy-in, development, course redesign, support building, and communication across academic and administrative units are discussed.

Introduction

This paper will first describe a program that integrates the OLC Quality Scorecard and Open SUNY Course Quality Review (OSCQR, or “Oscar”) rubrics with online course development and course redesign processes used at a mid-size regional public 4-year institution. Participants will be asked to consider online course development routines used at their own institution and compare approaches to online quality standards. With an emphasis on innovation in teaching and learning, this session will then explore best practices that are functional, repeatable, and effective across different academic and institutional settings. Strategies for resolving issues related to faculty understanding of academic content delivery, teaching practice, faculty autonomy, and external quality and assessment measures will be summarized.

Background

This paper presents a case example where the Online Learning Consortium (OLC) supported Open SUNY Course Quality Review (OSCQR) rubric and course review process are being implemented in several academic degree programs at a regional public 4-year institution. The rubrics themselves, and the process by which they are utilized, have already impacted course and faculty development activities and have brought changes on campus. This paper will consider four emergent “problematic” areas of this landscape; learning outcomes and course design foundations and associated assessment practices, communicative practices and student engagement in virtual environments, administrative enrollment needs and faculty autonomy, support and cooperation, and the competing interests of active and experiential learning preferences in hybrid and online or virtual learning spaces.

Driven by accreditation expectations and needs for internal and external accountability, external quality standards are becoming the norm for online programs in higher education (Stella & Gananam, 2004; Wang, 2006; Seok, 2007). Traditional, face to face (F2F) course management follows fairly standard and established practices within processes of faculty governance, curriculum development and institutional policy guidelines. Online education has disrupted these practices as requirements to implement “best practice” methods place new demands on faculty, administration, and departmental processes in course development, teaching, and assessment methodologies (Paulson, 2016; Piña, Lowell & Harris, 2018). The very different and unique nature of online teaching and learning opens up the traditional F2F pedagogical process to a necessary reconsideration in light of the opportunities and challenges of digital pedagogy. It has long been proposed that new technologies can and do impact teaching practices in a variety of ways, particularly as an opening to introducing more effective pedagogical practice (Chickering & Ehrmann, 1996; Barone, 2005; Bates, Bates, & Sangra, 2011; Kirkwood & Price, 2014).
Faculty Resistance

As stated in the seminal American Association of University Professors policy for academic freedom, known as the “1940 Statement,” the legitimate function of faculty at any institution is the creation and provision of content and free speech in the context of learning environments organized by institutions of higher learning (Nisenson, 2017). While the statement and policies of most institutions protect faculty autonomy in this regard, the organization of curriculum in academic programs is further influenced by institutional needs for enrollment. The fine balance of providing high-demand degrees and certificate programs with the faculty interests of teaching their respective discipline knowledge areas is a topic beyond the scope of this paper but worthy of examination.

Faculty attitudes towards online teaching have been identified as a hindrance to adoption of online teaching methods (Wingo, Ivankova & Moss, 2017). In one study, Ciabocchi, Ginsberg, and Picciano (2016) identify attitudes among faculty governance leaders and noted that leadership among faculty tend to be the most critical and skeptical of online and blended learning quality among faculty in general. While faculty attitudes towards online education have improved over the past several years, the status of online teaching remains relatively low among surveyed faculty when compared to institutional administration and leadership (Allen & Seaman, 2016). Regardless of their skepticism, faculty genuinely value high quality teaching and learning just as students value faculty who genuinely care about their learning and the course experience (Rawn & Fox, 2018). To that end, faculty teaching online accept that the standards which have evolved over time provide good guidance and practical frameworks for creating better organized and higher quality learning experiences in online courses (Beyer, Taylor & Gillmore, 2013; Mohr & Shelton, 2017). This has certainly been true at Upstate, particularly with the online course review process for the RN-BSN nursing degree program.

The OSCQR Process at USC Upstate

The OLC OSCQR course review rubric is one of a number of quality standard frameworks for online teaching in higher education (Shelton & Pederson, 2015). The rubrics were selected as a result of the Director of Distance Education’s attendance at sessions presented at the Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC) annual conferences and summer institutes for quality improvement. The OLC programs were selected over Quality Matters as they were determined to be more flexible, open sourced, adaptable to specific needs, and cost effective. In 2016, the Office of Distance Education initiated the Upstate Online Course Consultation (UpOCC) program, a concierge model faculty and course development program for supporting the expansion of online teaching, to create a structured framework for faculty to engage in course design/redesign as part of their professional development. In the concierge model, instructional designers reach out and meet the faculty in their offices and begin the process of course adaptation to online through careful assessments of pedagogical practice, content requirements, and individualized faculty preferences (McCurry & Mullinix, 2017). Faculty qualified through an online teaching certification process or receiving a waiver for the requirement apply for a Level 1 New Online Course Development grant to convert their F2F course to online, or a Level 2 Online Course Redesign grant if the course is already online. The concierge model calls for an instructional designer to meet with the faculty member to review the overall course goals and existing course design, engage them in self-review of the course and learner outcomes revision, negotiate modifications and improvements through an action plan generated by the rubric tool, and complete targeted items and overall course design for final approval.

When it comes to institutional implementation of the OSCQR course rubric and working particularly with faculty, the goal is to lower the difficulty for faculty members to utilize the rubric. The University of South Carolina Upstate Office of Distance Education and Information Technology & Data Services collaborated to provide a user-friendly form, based on the open source OSCQR rubric documents, that the faculty members can use to review their courses and receive a neatly laid out action plan. Along with the action plan and consultation opportunities with instructional designers on campus, the UpOCC program implemented Blackboard mini-modules that help faculty members build courses according to the tasks required in the mini-modules, which tie directly into the OSCQR rubric. The design of the mini modules (short hybrid modules that are self-guided, with an option to engage an instructional designer/concierge in completion of specific tasks) is paired with specific outcomes in the OSCQR self-review, peer-review and action plan.
In the work undertaken so far, four emergent areas prove the most challenging:

1. **Reviewing and redesigning course learning outcomes.** This single area is the most critical to good course design, as ill-stated, vague or inappropriate outcome statements are a hindrance to building a good course, regardless of the delivery modality. Most faculty developers and course designers can attest to the need to continually work with faculty in making improvements and refining the learner outcome (or objective) statements used to define the scope and specific learning goals of the course. Faculty are less likely to have encountered organizational learning theory and practices, such as Bloom’s Revised Taxonomy or Backward Design principles in their work, so inclusion of this in the initial portions of the course design process and OSCQR self-review are fundamental to good course design (Chickering & Gamson, 1987; Anderson, et al., 2001; Wiggins, Wiggins & McTighe, 2005). As the OSCQR rubrics include a specific item for outcomes (Item 9; “Course objectives/outcomes are clearly defined, measureable, and aligned to learning activities and assessments,”) faculty are supported in reviewing and revising their outcome statements in the course review process.

2. **Building better (and different) communicative strategies to engage students.** Most faculty making the transition to online teaching encounter difficulty in building new skill sets for engaging their students in meaningful exchange. Online course discussion forums are a standard tool used in online course design but lack the immediacy of in-class group exchanges and individual consultations in office hours. Even with this apparent limitation, faculty in the UpOCC program learn about several possibilities for increasing and enhancing student engagement and participation in online courses. The first step promoted is to encourage the faculty member to put “more of themselves” into the course, through self-introductory, and course-introductory videos. The former is a brief video highlighting the faculty member’s personal interest in the course content, the positionality of the course within the academic program goals and broad outcomes for the institution, and other personal information that can better connect students to the professor. The latter serves as a video introduction to the course, typically a review of the syllabus, course requirements, assignments and expectations. Communicative strategies in online courses can differ substantially as faculty encounter using social media, discussion forums, social groups, and other web-based communication tools integrated into their course. While some faculty are quite new to these technology-based tools and environments, others are quite adept and use them regularly in their professional life, but less so as a teaching strategy (Quong, Snider & Early, 2018).

3. **Balancing enrollment needs and program development with faculty autonomy and buy-in.** The pressure to expand enrollment is particularly keen at USC Upstate and has been included in one of three priority areas in the new strategic plan for the institution. Public funding of the state’s university system has declined over the past decade to record low. Currently, the State of South Carolina provides less than 14% of the overall operating budget for the university from state funds. In essence, this forces the institution to consider strategies more commonly used by private, nonprofit institutions that rely almost entirely on tuition revenue for support. Expansion of online education is a common strategy to create enrollment increases through new programs and course opportunities for students who otherwise would not be able to enroll or attend the institution in traditional modalities. A great deal of effort has been made in the past 4 years to engage faculty departments in considering, designing and planning for more online options, new online degree programs, and engaging in a comprehensive, peer-facilitated course review process.

4. **Re-evaluation of online teaching in light of active learning and service learning experiential course design initiatives.** Research is mounting that hybrid, or blended forms of course design and experience provide the optimal form of teaching and learning environment (Means, et al., 2010; Helms, 2014). Service learning, a community-based form of experiential learning, is also increasingly becoming a design model for courses and programs and proving to be a benefit to student retention and performance (Warren, 2012). While purely online courses have advantages for providing convenient and far-reaching opportunities for students,
blended courses are increasingly seen as a favorable compromise for leveraging the capabilities of web-based instruction with the benefits of F2F contact.

Conclusion

The use of the OLC OSCQR rubrics for course review and the Quality Scorecard (an institution-wide effort) has helped provide a structure and guidance to course design/redesign efforts for online education at Upstate. While some individual faculty still remain skeptical of online teaching, there has been broad support from a faculty task-force and deans and department chairs who support the efforts of the ODE to create better quality learning opportunities for students through faculty engaged in a systematic online course review and redesign process.

References


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Student and Faculty Engagement in 3D Virtual Learning Environments

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Abstract

This paper applies a digitized Human Resource Development (dHRD) Framework Model to student/faculty engagement in 3D Virtual Learning Environments (3D VLEs). We discuss dynamic learning and leadership in context of the Theory of Gamification and psychological theories to explain avatar-mediated learning in 3D VLEs, including advancing technologies, legalities, and ethics.

Key words: 3D Virtual Learning Environment, Avatar, Student Engagement, Faculty Engagement, Gamification Learning, Leadership Development, Problem Solving, Creativity, Critical Thinking, Strategic Leadership

Introduction

Until recently, higher education enjoyed a long period of stability within which tenure and respect for the academy provided little incentive to change (Lloyd, 2014). With the turn of the new millennium, however, increasing globalization, technology, socio-political demands for accountability, and other factors have propelled most universities into a world within which they must learn to quickly evolve to remain competitive, relevant, and solvent.

Introduction to the dHRD Framework Model

The focus of this paper is to discuss the use of avatar-mediated learning and student/faculty engagement in 3D Virtual Learning Environments (3D VLEs). Virtual training environments are evolving in the higher education industry as online learning paradigms continue to shift with advances in technology (Miller, 2014). We use the Theory of Gamification and instructional design practices as the basis for engaging both students and faculty in the process of learning creative problem solving within the 3D VLE. According to Arena (as cited in Migliore, Bottomley, & Arena, 2019, p. 38), the 3D VLE is defined as “A computer-generated and immersive, graphic environment in which learners interact with content, components of the virtual environment, and other participants through the direction of an avatar.” We apply the digitized Human Resource Development (dHRD) Framework Model to explain conceptually the theoretical applications for advancing learning outcomes in 3D VLEs.

Use of Second Life Platform in Higher Education

Many universities are using the Second Life Platform for avatar-mediated learning outcomes in the classroom. For example, Texas A & M’s College of Veterinary Medicine uses the Second Life Platform as a role-play simulation to teach students triage and medical treatment skills for injured animals in preparation of emergency disasters like hurricanes (Pereira et al., 2018). The simulation training also includes social awareness to apply safe protocols and emotionally intelligent responses to various stakeholders (e.g. animal owners, elected officials, etc.). Second Life has also been used in various health and human medical trainings to integrate heart murmur simulations and genetics interactive labs in developing clinical reasonings skills. Recently, the Ross University School of Veterinary Medicine (RUSVM) piloted the Second Life Platform “for first-semester students to practice clinical reasoning in a
simulated veterinary clinical setting,” (Pereira et al., 2018, p. 148). Perceptions of RUSVM students and faculty were favorable, having reported positive educational experiences. Another Second Life example in higher education is University of Texas (UT), which created a collaborative learning community with its 16 campuses involving students, faculty, researchers, and administrators (Eaton, Guerra, Corliss, & Jarmon, 2011). The UT study established the value of generosity as the ethic of the collaborative model to learn, share, and grow together. The purpose of UT’s collaborative model was to assess alternative learning in the Second Life Platform and use findings to inform pedagogical transformation.

Literature findings also indicate the United Kingdom (UK), European, Asian, and Australian educational systems are progressive in using the Second Life Platform to understand users’ frames of reference for improving pedagogies and instructional design practices in virtual worlds (Wimpenny, Savin-Baden, Mawer, Steils, & Tombs, 2012).

For example, Wimpenny et al. (2012) gathered data on studies conducted in Second Life, which included the following learning activities:

- **Computing** – to develop media production skills via 3D modeling
- **Chemistry** – to develop deep understanding of atoms and DNA strands via 3D modeling
- **Education** – to explore pedagogical applications via game-based learning
- **Employability** – to develop career-employment skills via project management
- **Environmental Health** – to develop risk management skills via simulations
- **Geography** – to develop geographical concepts via field trips
- **Information Science** – to develop cultural understandings via discussions and field trips
- **Theatre** – to develop theatrical skills via productions and performances

These learning activities provide insight into the multiple ways virtual worlds can be used to meet the learning needs of diverse populations. Globalized higher education continues to shift in pedagogical approaches with interactive applications that will engage students and advance secondary learning outcomes. However, the need to understand the transition from digital games to virtual worlds is complex, yet essential to understanding the changing demographics in generational learner expectations like Millennials and Gen Z (Bottomley & Burgess, 2017; Bottomley & Burgess, 2018; Steils, Tombs, Mawer, Savin-Baden, & Wimpenny, 2015; Wimpenny et al., 2012). These complexities include cognitive abilities, past learning experiences, behavioral norms, expectations of personal competence, and influencing exposure from past digital-gaming experiences.

The need to understand how users, such as Millennials and Gen Z (digital natives), transition from virtual social spaces (gaming) to learning in Second Life is essential for engaging minds with fluid content and flexible applications. However, the challenge to achieving fluid and flexible curriculums in higher education that shape technology, rather than just adapt to technology, is the risk of not knowing with certainty if assessments will show learning progression – this ambiguity can limit pedagogical innovations in virtual worlds (Steils et al., 2015). Thus, more research is needed on pedagogies using technologies that push the edge of conservative teaching in higher education to satisfy administrator and educator low-risk tolerances. Researching the transitions from today’s Millennials and Gen Z in digital games to virtual worlds can be helpful to informing pedagogical approaches in personalized teaching and learning (avatar-centric) - all of which can promote academic freedom.

Meanwhile, time marches on and technology continues to advance. When converged technology infrastructures can symbiotically facilitate academic freedom for both students and faculty to shape technology, rather than just adapt to technology, the liquid curriculum (Steils et al. 2015) of personalized learning can change the future. This future state embodies liquid curriculum as “the constellation of identities [users’ avatars] and stances informing approaches to learning” (p. 12). The concept of liquid curriculum has the potential to transcend the learning management systems (LMS) of today into the advanced technologies of tomorrow’s OASIS Virtual-Reality System as depicted in the 2018 movie Ready Player One (Spielberg, 2018) and based on the 2011 novel (Cline, 2011). Whether that is 10, 20, 30, or even 50 years beyond remains to be seen. However, the glide path to getting there is already set in motion with the Second Life Platform and the Sansar Virtual Reality Platform, which is still in beta (Johnson, 2017).

Consider too, that according to KZero Worldwide (as cited in Steils et al. 2015):
“there are now more than 1.3 billion user accounts crossing multiple VW [virtual worlds], with the majority of those accounts being held by children between the ages of 10 – 15. 66.4 million unique users logged into VW at least once in the final quarter of 2012 (p. 2).”

Although those younger users have experienced virtual worlds for social and entertainment purposes, as they reach adulthood, the challenge for educators is to consider how these students, now 16-21, at the time of this writing, have been acclimated to virtual worlds and what level of engagement they expect in learning (Migliore et al., 2019).

**Integrating Theory and Practice in 3D VLE**

To prepare for this pedagogical shift in higher education, we posit there are three aspects of leadership and learning in which 3D VLEs can integrate theory and practice to advance student success and assuage the risks of not knowing: (1) use realistic real-world data, (2) include relevant real-world problems, and (3) emphasize creativity for development of customized solutions to problems.

While instructional design techniques can accommodate these three aspects into any type of online learning environment, the 3D VLE is conducive to providing an engaging experience where other platforms are limited in one or two-dimensional architectures. The Second-Life Platform, owned and operated by Linden Labs, is a three-dimensional virtual world most commonly experienced through a third-person avatar. However, *Sansar* is a three-dimensional virtual world integrating biosensing technologies (headsets, hand gear, and other body-stimulating gear) to provide an immersive first-person experience in the virtual world (Johnson, 2017). Generational learners like Millennials or Centennials (Gen Z) are conditioned to this type of digital experience such as online gaming in 3D virtual worlds. As technology continues to advance, learners who are already immersed in 3D experiences will expect the same level of engagement in the classroom. The dHRD Framework Model (Migliore et al., 2019) illustrated in Figure 1 provides a conservative, yet innovative approach for leaders in the higher education industry to apply a glide path towards achieving liquid curriculums (Steils et al., 2015).

The integration of gamification into instructional design practices aligns to a workforce need to hire people who have leadership skills and ability to think strategically, identify and resolve problems quickly, and provide innovative solutions that create value (Migliore & Bottomley, 2018). Today’s work environment commonly includes a virtual presence via the Internet (e.g. websites, social media, mobile applications) and Intranets (internal virtual presence to organizational members). Likewise, the 3D VLE in higher education programs could be used to re-create a real world in the virtual world by using relevant situations with realistic data to stimulate critical-thinking skills in learning course concepts. For example, there are many public-use datasets available via the Internet to access and analyze for problem solving. The Centers for Disease Control and Prevention (CDC) is one such example, that provides various public-use data including health care surveys, vital statistics, family growth rates, immunization, morality, Medicaid enrollment and claim filing, etc. (Centers for Disease Control and Prevention, 2019). Linking to public-use data sets like the CDC in the 3D VLE is a simple, yet effective way to introduce students to becoming resourceful in identifying credible online data in which to analyze problems. Students can work independently or in teams to troubleshoot problems and find creative solutions through critical-thinking processes. This freedom to explore creative-problem solving is a core benefit in well-designed 3D VLEs.

Designing 3D VLEs need not provide complete information. In fact, purposely leaving information out can be part of the design process to activate critical-thinking skills. For example, students can be coached by the instructor to identify what they need to know and then asked where they would go to find this information. The instructor has opportunity to inspire a sense of adventure in finding the data to solve the problem. Just like in the real world, the student may not find all the information they need to determine what is relevant and what is not. Making decisions with incomplete information is common in today’s fast-paced work environments. Enter the leadership and learning opportunity for the student to determine what information is needed, where to find it, and how to best use what is known in decision-making constrained by resources and time. Here is where the theory of gamification and instructional design practices can create a dynamic learning environment to engage both faculty and students, and advance learning outcomes.

**The dHRD Framework Model**

The dHRD Framework Model, as illustrated in Figure 1, is recommended for improving participant behaviors and attitudes based on the psychological influences of gamified learning attitudes (Migliore et al., 2019). Reinforcing
positive learning behaviors through repeated associations of a positive outcome (e.g. earning digital badges or receiving a positive response for completing a learning task) can inspire students to engage in active learning via the psychological theory of classical and operant conditioning (Landers, Bauer, Callan, & Armstrong, 2015). The human motivation to achieve and receive is an example of Expectancy Theory in which faculty can apply within the 3D VLE to enhance the learning experience. However, it is important for faculty to keep in mind that students must perceive value in the reward to engage in the 3D VLE (e.g. improve grades, collaborate with classmates, have fun, etc.). In addition, Migliore et al. (2019) recommend helping learners set SMART goals – the acronym for Specific, Measurable, Attainable, Realistic, and Time-bound. Doing so will help students establish a process for how to think about setting realistic and achievable goals.

Learner self-determination is important for achieving success and here is where faculty can also use gamification in the 3D VLE to introduce students to new learning strategies and cultivate intrinsic and extrinsic rewards. For example, when students are exposed to repeated incidents of positive learning such as a highly-effective individual activity or an engaging learning team assignment, students will be more likely to internalize the experience.

The dHRD Framework Model can be applied in the 3D VLE classroom through student and faculty-relationship building via dynamic learning. According to Migliore et al. (2019), the model is applied conceptually as:

Dynamic Learning (2.0) occurs in the connection between content (2.1) and metacognition (2.2) applying reflection practices on learning, skill development, and collaboration. Dynamic learning (2.0) then synergizes with relationship building (3.0) to fuel motivations via the mechanics (3.1) of how to learn, play, work, and win together in the 3D VLE through avatar behaviors (3.2). Relationship building (3.0) engages employee minds (engagement 4.0) and facilitates innovation (4.1) and performance (4.2). In summary, the right side of the dHRD Framework Model represents human resource (people) contributions to performance (4.2), and the left side represents organizational policies, processes, and systems contributions to innovation (4.1). The middle factors (psychology, dynamic learning, and relationship building) form the valence of employee engagement to attract and catalyze innovation (4.1) and performance (4.2). (p.39).

Figure 1.

*dHRD Framework Model*
We posit the same principles as cited above to be applied in the academic classroom to use the dHRD Framework Model to leverage technology as a tool for engaging both students and faculty in meaningful ways to advance learning outcomes. The 3D VLE can be used to synergize intrinsic and extrinsic motivations of students’ career goals as related to the course concepts. When biosensing technologies are included, the immersive learning experience can be enhanced more to create positive perceptions. Engaged students and faculty are more likely to enjoy the 3D VLE experience and find innovative ways to learn and develop.

The 3D VLE can be used for specific curriculums or as supplemental learning. One of the benefits is academic freedom for faculty to determine how to best use the course (e.g. examples, class discussions, and assessing student performance).

We recommend using 3D VLEs for teaching students the process of creative problem solving – to make learning objectives about the process of learning and leading in decision-making for problem resolution. Through faculty use of open-ended questions or challenges and learning-team activities, students can approach learning with a sense of adventure and freedom to creatively solve problems. Diversity of perspectives about the problem at hand will reflect student knowledge, skills, and prior experiences. For example, a manufacturing situation where production capacity is restrained, some students may see the problem as a cash flow issue, others may see it as an operational issue, or others may see it as a leadership deficit. All perspectives are important because each provides a point of reference in which the individual, as well as the team can learn together. The avatar experience within the 3D VLE can also facilitate creative ways for participants to collaborate perspectives for trouble-shooting the problem and ideas for solving it.

Faculty could then assess the problem-solving process by establishing a rubric on key learning areas:

- The process used to define the problem
- Rationale to support the problem definition
- Process used to identify what information was needed, why, and where to get it
- Credibility of sources used
- Data analysis
- Process used to determine viable solutions
- Rationale used to evaluate solution selected

Technological Considerations of the 3D VLE

3D VLEs provide learners with the ability to access content anytime and from virtually anywhere with a broadband internet connection (Muñoz-Cristóbal et al., 2015; Nuffer & Duke, 2013). However, this availability and flexibility does not come without challenges. Delivering educational content in the 3D VLE requires attention to both the environmental design and platform delivery of the experience. Ease of use and familiarity help to support learners by reducing frustration and facilitating engagement.

The design of the VLE should be like educational environments that learners have encountered in real life (IRL), and according to Minocha, Tran, & Reeves (2010) should include:

- Virtual objects that operate similarly to IRL counterparts (e.g. computer screens operate by point and click, doors open by touching the handle)
- Sign posts to assist learners in locating areas of interest
- Clear paths of travel to allow learners (avatars) to move easily from one area of the 3D VLE to another

Similarly, accessing the 3D VLE should be as seamless and frustration free as possible. Since 3D VLEs are built using modern gaming platforms, accessing a 3D VLE requires substantial computer hardware and specialized software. Fortunately, the use of a cloud-based virtual desktop relieves learners of all such technical requirements.
and allows for access into the 3D VLE from any computer with a broadband connection. In addition to providing ease of use for the user, the cloud-based delivery model also facilitates technical support and design.

For example, Migliore et al. (2019) indicated:

- Standardization of the viewer facilitates design though predictable display outcomes
- Security and performance support are streamlined through a patch-once-deploy many model
- Assisting students with technical support is streamlined through the standardized design and interface

**Legal and Ethical Considerations**

As part of the educational institution’s data governance and cybersecurity policies and practices, legal and ethical considerations should always be considered in use of 3D VLEs to build and sustain trust with all stakeholders. Other considerations include U.S. regulatory requirements such as the Americans with Disabilities Act of 1990 (ADA), the Rehabilitation Act of 1973, and the ADA Amendments Act of 2008. The topic of technical accessibility in the 3D VLE is also an important consideration and applies to the design and development of components (1.1) and content (2.1) in the dHRD Framework Model (Figure 1). Technical accessibility is specific for individuals with disabilities so they can access content (e.g. computer screen readers, audio amplifications, etc.). Finally, faculty will need to think about how this type of modality will expand learning opportunities to students who may need ADA accommodations, but also recognize that it may limit accessibility to other students. For educational institutions with student and faculty living and working in Europe, the General Data Protection Regulation (GDPR) must be considered. The GDPR applies to individuals residing in the European Union (EU) and this regulation imposes strict rules for hosting and processing data anywhere in the world. Non-compliance to any of these regulations can result in costly punitive fees and damaged reputation, etc.

There are also health-related issues that should be considered for those who may be photosensitive, migraine sufferers, and prone to epileptic seizures (Migliore et al., 2019). Thus, technical accessibility and design practices should take into consideration these risks and mitigate as much as possible. Obtaining informed consent is a recommend practice when employing 3D VLEs, as well as including warnings about possible physiological effects. According to Kamasheva, Valeev, Yagudin, & Maksimova (2015), participation may need to be voluntary to build intrinsic and extrinsic motivational learning that acclimates to meaningful engagement in the 3D VLE. These practices can improve learning, reduce risks, and promote ethical responsibility within the educational institution.

**Recommendations**

The dHRD Framework Model (Figure 1) provides a strategic approach to engaging employees in the workplace and is specifically targeted towards Millennials and Centennials (Gen Z). The model was designed through the lens of strategic human resource (HR) management to drive innovation and performance. These same principles of strategic HR and employee engagement can be used to inform executive leaders, administrators, and faculty in the higher education industry for engaging students in classrooms within virtual worlds as discussed in this paper. We recommend that executive leaders and administrators in the higher education industry apply a strategic approach that aligns to their institution’s vision, mission, and purposes.

However, in applying a strategic approach, higher education leaders need to be open minded and willing to explore the opportunities in a spirit of learning and discovery for how 3D VLEs can be used to facilitate the processes of pedagogical transitions and integration with learning management systems (LMS). Creating transformational change within educational institutions takes time and requires professional will and resilience to persist towards achieving desired outcomes. For example, implementation of a new LMS should apply a multi-theoretical perspective to create meaningful leadership and learning encounters for students and faculty, as no single theory embodies the personalized essence of transformational change (Migliore, Burrus, Bradley, & Shaw, 2018).

To achieve personalized student and faculty experiences in 3D VLEs through avatar-centric applications, curriculums will need to become fluid and flexible and not simply transfer curriculums to new platforms (Migliore et al., 2018). The strategic higher education leader will keep the perspective of a future state where converged technology infrastructures symbiotically facilitate academic freedom for both students and faculty to shape technology, rather than just adapt to technology. For example, higher education leaders should ask questions like
“how can you incorporate micro-learning, adaptive technology, etc. [into 3D VLEs]? Something should be new besides the LMS” (Migliore et al., 2018, p. 115).

Higher education leaders should also practice the following habits for 3D VLE strategic thinking and visionary alignment:

- Test assumptions to identify gaps in assessment data
- Gain clarity among key stakeholders by asking questions and addressing the most critical aspects of pedagogical processes and student learning outcomes
- Exchange perspectives by having meaningful dialogue with IT and HR professionals, legal counsel, and other key stakeholders
- Structure interstitial solutions to bridge the pedagogical transitions and select the most appropriate approaches with faculty involvement in the development process.
  - For example, apply these three aspects: (1) use realistic real-world data, (2) include relevant real-world problems, and (3) emphasize creativity for development of customized solutions to problems
- Open channels of communication – feedback from all key stakeholders is essential
- Execute action and capture lessons learned to build digital competencies within the educational institution
- Become comfortable with ambiguity, which is an attribute of the innovation process

Since Millennials and Gen Z are digital natives, accentuate the digital features of familiarity and personalized experience with avatar-centric learning activities. Use cloud-based gaming / web services, which are much less costly than purchasing all the hardware and software necessary to make it work as seamless technology and create immersive learning experiences. Students will want to see a connection between the use of the technology, the learning goals, and the application in future employment opportunities. Millennials and Gen Z learners will not be interested in using the technology just because it is viewed as a cool modality; they will have to understand how it relates to their personal learning and career goals. Finally, higher education leaders, administrators, and faculty will need to integrate technical accessibility into all learning processes within the 3D VLE to accommodate students with disabilities.

Conclusion

There are a variety of commercially available learning management systems in the marketplace, each with benefits and limitations to learning. However, the next frontier in learning is evolving with advancing technologies to provide immersive 3D VLEs that engage students with the technologies they have used growing up. Strategically-minded higher education leaders, administrators, and faculty will recognize the future is now to prepare and develop for personalized avatar-centric learning experiences. The dHRD Framework Model (Figure 1) provides a strategic approach to engage students and faculty in the 3D VLE and innovative pedagogical practices. The glide path to getting into the place of seamless 3D VLE immersion is already set in motion with the Second Life Platform and Sansar Virtual Reality Platform, which the full version is yet to be released (still in Beta testing mode). Hollywood has provided us with a glimpse into the future of virtual world technology via the movie Ready Player One (Spielberg, 2018). Our question is: Are You Ready?

References


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Community as a Sustaining Force: Strategies for Online Scholarly Support

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Abstract

This paper discusses the ways that community connections serve to sustain and support scholarly growth, retention and success, particularly in longer-term online contexts. These strategies are seen through the reflective experience of a faculty mentor and two recent graduates who co-developed community support strategies that helped doctoral students to stay motivated, connected, and succeed over many years of what might otherwise be a long, individual, and lonely journey, particularly when undertaken online. A matrix of strategies, apps, and online tools has emerged from this process and is offered for consideration.

Introduction

While academic scholarship often needs individual focus to flourish, it can also be a lonely and isolating experience, causing emergent scholar-learners to question whether they should continue their journey. Isolation can be particularly problematic in online environments and, when steps are not taken to counteract, this can form a barrier that keeps students from feeling connected, sharing ideas and best practices, and often results in missed opportunities for fostering personal, professional, and educational development (Stevenson & Bauer, 2014). There has long been attention to identifying effective practices in higher education and considering how to apply such practices utilizing emergent technologies (Chickering & Ehrmann, 1996) and yet, issues related to building and maintaining connections persist and require constant vigilance. Building community in an online environment serves as an overarching strategy that helps students to feel connected and increases the likelihood of their success (Wehler, 2018). Community connections have been found to sustain and support scholarly growth, retention, and success (Bawa, 2016; Erickson & Neset, 2014; Palloff & Pratt, 1999).

This paper explores key elements of building long-term online communities and engaging students by identifying strategies for sustaining connections and community. These strategies are drawn from the case-based experience and evolution of a community built with students of disparate interests and backgrounds at various stages in their studies and situated across multiple time zones. It collects and shares participant reactions to the process and its impact on their learning experience. In particular, early participants had a particular influence on shaping the community and contributing to the identification, design and development of interactions and activities. This paper highlights the experiences of two of these students who reflect on how they helped to develop and facilitate regular online synchronous meetings, co-created an effective learning agreement format/template, and shared experiences coordinating, and collaborating on presentations. Their descriptions of experiences over 3 to 5 years of study illustrate how the flow and interconnection between these experiences qualify as successful and sustaining strategies.

Case Context: Community Building in a Long-term Online Doctoral Studies Program with a Taste of Hybrid Residencies

As the case context is central to this discussion, sharing it early on in this discussion is appropriate. While term-based online courses require community and connection, the opportunities to integrate community are confined to
15 week, 11-12 weeks or even 7.5 weeks or less. The opportunities are limited by the term’s relatively short duration. The ability to determine whether or not these efforts actually sustain students in their studies is increased with contexts that are focused on longer-term programs of study, such as doctoral degree programs. This case is situated within Walden University’s PhD in Education program. Doctoral candidates get assigned a mentor and/or chair after coursework as they begin their dissertation journey. They are then invited into a Research Forum community within the Learning Management System (LMS). Here, they join a community of colleagues on a similar journey that takes a minimum of 2 to 3 years. This context allows plenty of time to explore how to build a community and consider which elements contribute to sustaining students through their longer-term scholarly studies. In this case, early members of this Research Forum worked with their mentor to explicitly explore elements of the community and ways to strengthen it. These strategies included the online components of: fostering personal connection, clear expectations and timely communications, focused discussions, monthly synchronous meetings, shared facilitation responsibilities, structured individual learning agreements, collaborative projects and even a hybrid addition of periodic multi-day face-to-face residencies. Some of these elements were embedded in the design of the LMS-based Research Forum ‘course’ and/or doctoral requirements, while others were initiated by the mentor in collaboration with the early mentee/docotoral candidates (two of whom are co-authors of this paper). All are worthy of considering as elements that sustain community.

Key Elements Needed to Build and Sustain Long-Term Online Communities

Understanding key elements that build community, foster interaction, and support connection in an online educational environment is essential for distance learning success. There is little doubt that community fosters a sense of belonging for students which in turn motivates participation and interaction (Shea, 2004). Muirhead (2007) offered six strategies that positively impact student motivation and engagement. They include: 1) challenging students to think beyond their knowledge and skills; 2) student-centered freedom to complete instructor defined goals; 3) resources that include the integration of online relationships and community building; 4) work-group features that personalize online classroom relationships; 5) supervisory encouragement in which the teacher/mentor serves as a guide in assisting students through difficult moments; and 6) organizational support on the part of the larger institution in which the online classes are housed so teachers and students feel their efforts are respected and valued (p. 4). These observations and those of other researchers align well with the elements built into our context and case-specific experience found to be effective in sustaining emergent scholars.

The following identifies each element in general, connects it to other observations and research in the field and ends with a quote from the co-authors who, as students, experienced and/or co-created each. Taken together, these begin to illustrate the power that community connections offer as a sustaining force.

Fostering Personal Connection - Early individualized connection through the ‘Mentee’s Cafe’ allow for faculty-student/mentor-mentee connections and student-student connections that begin to build trust, share experiences and look for commonalities to connect individuals to each other. Researcher-practitioners (Stone, 2016; Wehler, 2018) confirm that online classrooms require deliberate efforts to create such interaction, to ensure that these are meaningful and relevant to both of the parties participating. While this initial connection begins the process, it is continued through discussions, video-based meetings, mentor-mentee phone calls, and more. Actively engaging in online interactions requires that students feel welcome, safe, acknowledged and connected.

The feeling of having a true mentor, one that will motivate me, guide me, be stern when needed, and then reassure me that I can do this, was absolutely essential in feeling connected to the process and broader scholarly community. It was having conversations outside of our classroom, learning about her personal life and family, and the feeling of compassion and empathy between us that really provided me with the support needed to get through the program.

Clear Expectations and Timely Communications - Course structure, participation expectations, regular announcements and communications, and modeling and monitoring to ensure proper netiquette are regular parts of our Research Forum practice. Providing structure, rules, and guidelines for acceptable behavior are common characteristics of online community communications that help to ensure community members respect differences, culture, and ensure that any inappropriate interactions are addressed (Shea, 2004). Encouraging interaction while ensuring individuals employ netiquette helps all students feel safe in the online classroom; structure helps to make the path forward clear.
The online classroom encouraged interaction through regular, structured, and academic discussions. The professor modeled high expectations and standards of scholarly conduct, respectful behavior, and ensured a safe arena to discuss cultural and educational topics. There were students from multiple areas of the country as well as outside of the United States, from many cultures, religions, and political affiliations. Our professor and the class as a whole would help each other understand the many viewpoints we had. There were times that I adjusted wording in my presentations and I continuously ensured I used appropriate multicultural etiquette when discussing topics. It was absolutely wonderful to be able to understand different viewpoints and to be able to talk about them in a safe, caring, and scholarly environment. Our discussions were always productive and we all were eager to meet again.

Structured Learning Agreements and Individualized Planning - Our case setting uses individualized learning agreements in the form of term plans that require clear goals and weekly plans to meet those goals that guide mentee work and facilitates mentor monitoring and check-ins. Term plans are approved and followed up with progress report(s), the possibility for amendment and final reporting. These together with completed submissions as planned, justify a satisfactory end-of-term grade. Other documents required along the way also guide individualised research designs and work plans. Motivation is an essential aspect of promoting creativity and creative processes as it concerns critical thinking, problem solving, and the fostering of new ideas. These elements of creativity are the foundation of healthy student academic outcomes, educational experiences and providing structure to facilitate planning (Muirhead, 2007).

I felt that the use of structured learning agreements and individualized planning as a requirement for course completion was very helpful. I have very fond memories of working on this with my mentor/dissertation chair as we embarked on a quest to develop plan outlines which adequately addressed work needed for completion and milestones. Particularly as it related to how students filled out the learning agreements and quarter plans. Use of these tools established a framework for completing current coursework, setting individual parameters for getting work done, while also considering future projections. They also helped tremendously in developing a relationship between my mentor/dissertation chair and myself.

Focused Topic/Skills Oriented Discussions - In longer term communities where individual work is the focus, Research Forum discussions need to be relevant, topical, and oriented on developing useful skills and uncovering useful resources. Faculty generally determine the frequency and focus of discussions, as well as develop and share discussion prompts that are particularly generative. It also offers the opportunity to engage students in identifying and selecting preferred topics.

The discussions brought together individuals from diverse backgrounds with multiple perspectives ensuring scholarly discourse through topical questions that prompted us to create, problem solve, and theorize. The topics for discussions as well as our monthly Zoom meetings typically revolved around cultural education and/or improving scholarly skills. Such discussion experiences began to connect me with fellow students and build my sense of community.

Monthly Synchronous Meetings - Synchronous meetings are not a required component of the standard Research Forum, but they are the collective brainchild of our community and are a centerpiece and lynchpin of our shared experience. What started as a kernel of an idea was grown by our early cohort and evolved from an experimental endeavour to a quarterly gathering and then, after much scheduling and negotiation, into a monthly meeting that coincides with our focused discussions (introductions, week 5-6 and week 9-10 of an 11-week quarter). It is far and away the most activity most mentioned and appreciated by all. O’Malley (2017) notes that encouraging discussions through video or video conferences creates an online community in a class where students are not likely to meet each other in person. This type of interaction promotes social presence, a connection on a human and emotional level. Social presence is more likely to occur when students move beyond reading and written communications to actually seeing, hearing and engaging in synchronous dialogue with each other.

We agreed that the type-written aspect of the research discussion forum helped to further our work. However, we had come to the general consensus that taking the interaction up a few notches might foster more motivation and inspiration while simultaneously deepening a sense of community. We came up with the idea of creating an online meeting for everyone in the research forum that occurred in Skype and Zoom synchronous video formats. The net result helped me tremendously. The opportunity to see, listen,
challenge, and support one another in the form of mentor- or student-led first of the month meeting times set the tone for the following weeks. I found myself to be thinking more creatively; motivated towards continuing my work; challenged by the feedback I received; able to work with problem solving based on that feedback; think critically about my work; and most of all I experienced a sense of community. I realized that I was not alone sitting at my dining room table trying to survive doctoral studies and a dissertation. The sense of community that was built around these face-to-face online meetings was nothing short of inspirational as they provided a feeling of being recharged and ready to dive back into my dissertation work and keep on going.

Shared Facilitation Responsibilities - Communities are not created alone, nor are they the responsibility of a single individual. We determined early on that responsibility for identifying and selecting focal topics should be a collective and collaborative undertaking. Participants offer to take responsibility for specific dates associated with an asynchronous discussion and a synchronous meeting. They then identify a topic and work with the faculty mentor to craft appropriate discussion prompts and are designated as the lead facilitator for both text-based and live discussion. Opting to offer students choices in an online learning environment provides an opportunity to foster individual and group motivation and creativity. If a strong sense of motivation is fostered it supports the establishment of wanting to participate, being a part of, and extending newfound relationships within a learning community further during and after online learning occurs (Muirhead, 2007).

Once we started having our monthly face-to-face online Zoom meetings, students would volunteer to facilitate, choose the topic, present, and lead an hour-long discussion with the group. This would often be the same topic for text discussion. Whenever there was no volunteer, our professor chose the topic which generally directed our conversations to ensure scholarly skills development, discourse and an expansion in our understanding. Both types of these focused topic discussions were important for community building. When our professor lead the discussion topic we built our community through group learning which was more traditional with the professor guiding us. When the student lead the discussion topic our professor stepped back so we could build our community through being the teacher. It was amazing how gentle our cohort guided each other as we presented. We made mistakes together, laughed together, and cheered each other on. It goes to show the deep bond we created and the great respect we had for each other’s thoughts, opinions, and beliefs.

Collaborative Projects - Whether collecting and annotating resources or encouraging co-facilitation of topics, opportunities for facilitating collaboration were pursued. Google Documents and other online collaboration tools were explored and utilized to help form teams, select topics, identify meeting times and collect and share information. Choice, creativity, and direction were seeded to participants wherever possible. We know and acknowledge that encouraging students to stay motivated requires attention be paid to individual intrinsic motivation if student creativity is to develop productively within online learning environments (Muirhead, 2007). Online instructors who bring a human-centered approach to the online classroom tend to do the following: initiate interactions inside and outside the classroom, interact in real time, incorporate multimedia and collaborative tools, and make use of learning agreements (O’Malley, 2017; Talbert, 2015; Williams, 2011).

A classroom interaction that I found quite helpful with building scholarly skills was using Google Documents. As a community, we would begin a topic that we could each build upon. We would each add our part to the document, building an increasingly complex document that included more information and would have taken much longer to complete if it was a solo activity. It was also incredibly helpful to use the Google Document program which allowed me to understand the many ways this application was useful for online learning and with a community that may be spread across the United States or even the world. Using the application during my PhD program prepared me for real world experiences such as writing this article with my co-authors.

Face-to-face Residencies - Walden doctoral degrees include a face-to-face component in the form of 3-4 day residencies with immersive and intensive seminars, consultations and working sessions to help guide individuals through their doctoral studies and dissertations process across key milestones. Residencies have served as an anchoring community experience at Walden since its early pre-online distance education years. In its nearly 50 years, Walden has maintained residencies and found through ongoing evaluation and general feedback that students find this to be central to their sense of community, grounding in the process and offers important networking opportunities. While Walden’s residency structure and focus may be unique at institutional and program levels, the
residency experience is not and the contributions to sense of community, connectivity, and networking potential have long been found in the residency components of otherwise online programs (Rovai & Jordan, 2004; Vincenzes, Drew & Romero, 2015). While not the traditional interpretation of a hybrid experience, at the program pathway level, this periodic residency feature has proven to be powerful and important to maintain and serve to sustain students.

*Residencies were essential for me to feel connected to this online educational community. During these 3-4 day intensive gatherings, I was able to network, build my confidence in my scholarly abilities, and the intimate groupings and gatherings provided me the opportunity to sit next to, talk to, and meet other students. It was in this environment that I met lifelong friends.*

**Engaging Students in Co-Creating Community**

Communities must be co-created. While initiation of community should rightly begin with the faculty and supported by the design of the online course platform, the next step is the need to actively engage students in contributing to, imagining, and even creating the community. Creation leads to a sense of ownership and responsibility for the health of the community. The establishment of community in online learning environments requires maintaining a balance between the educator, course construction, and educator willingness to allow the space for student-centered activities to occur (Bawa, 2016; Donovan, 2015; Muirhead, 2007; Shea, 2004; Trespalacios & Perkins, 2016; Wehler, 2018). Effective student-centered strategies provide the opportunity for students to experience a sense of contribution, being challenged, supported, and personal ownership in online classrooms.

In our case, two of this paper’s co-authors, recent PhD graduates from Walden University, were central in the development of our community. Both were part of the same program specialization (Global and Comparative Education). As such, their paths were near parallel and they shared a chair, a Research Forum, community, and a number of critical activities including residency experiences. While existing Walden structures served to sustain them, as early members of a community of mentees, they also helped to co-create many of the community support structures that fostered connections that would sustained them throughout their years of study. The quotes extracted from their narratives highlight the key elements section of the paper above, sharing aspects of their doctoral experience they found to be most sustaining (note: to read extended reflective narratives, see Appendix A).

**Effective Strategies for Building Online Community**

Motivation plays a central role in the development of creativity (Muirhead, 2007). Maintaining student motivation and attention in online learning environments is difficult (Bawa, 2016; Muirhead, 2007; O’Malley, 2017; Stone, 2016). Attention to motivation provides the opportunity to establish online course dynamics that support student willingness to actively engage, be challenged by, and experience a feeling of connection to coursework and community. Fostering and maintaining student motivation in an online learning environment presents unique challenges for instructors and students alike. Especially as it concerns the development of learning experiences that address creative constructs, retention, educational outcomes, and community building (Bawa, 2016; Muirhead, 2007; O’Malley, 2017; Shea, 2004; Stone, 2016). The promotion of interaction, collaborative learning, socially constructed meaning, resource sharing, support, and encouragement in online learning environments has had a positive influence on the establishment of a sense of community between educator and students (Trespalacios & Perkins, 2016, p. 38).

**Matrix of Tools for Building and Sustaining Online Community**

The following tools have been found to assist in building and sustaining community in an online learning environment, leveraging learner choice, engagement, opinions, and dialogue (Mullinix, 2018).

- *Gathering Options & Soliciting Preferences and Availability – Tricider*
- *Scheduling Meetings - Doodle and Google/Outlook calendar events & invitations*
- *Preparation & Preliminary Discussions – Community Discussions*
- *Conducting Virtual Meetings (synchronous with video) – Zoom, Google Hangouts &/or Skype*
  - Follow-up – LMS, Posting Video Recordings
• **Communications** – email, announcements
  - Personalizing posts - photos, multimedia/videos, etc.
• **Student Presentations** – Synchronous Video Meetings, LMS posted presentations, face-to-face Residencies
• **Featuring Well-Written Student Papers** – LMS, Shared Drives, Mentor/Educator Website

For additional detail and a matrix view with links to specific tools, see: https://tinyurl.com/DLA18-Community

**Closing Thoughts**

The community that was built in the Research Forum was strengthened through the vision and commitment of its earliest participants, the co-authors of this paper. Together, they worked with others to co-create and enhance activities to build community in their online environments. For the two Walden students, this community was further solidified through shared Residency experiences and culminated in their decision to wait until both had completed their dissertations to participate in commencement; where they were third and fourth across the stage among a field of nearly 500 doctoral candidates and were hooded by their chair and co-author. Photos and videos of this capstone experience were shared with their long-time colleagues contributing to the connection and motivation in this robust online community.

While online learning has the danger of being a solitary endeavor, online communities offer a solution. However, community must be co-created. Valuing and inviting student perspectives regarding the potential and power of various online strategies is essential to success. Additional strategies involve recognizing the importance of choice, voice, scholarly dialogue, distributed responsibility, and mentor support strategies that sustain and promote participation. When implemented with care and attention, it is possible to create communities that not only support but sustain learners throughout their studies and beyond.

**References**


Appendix A: Narrative Reflections from Online Doctoral Graduates Regarding their Experiences with the Practices that Sustain Community

The following are reflective narratives from two recent PhD graduates from Walden University. Both of them were part of the same program of studies pursuing an individualized path within the Global and Comparative Education specialization. Their paths were near parallel, and they shared a chair, a Research Forum, community, and a number of critical activities including residency experiences. While existing Walden structures served to sustain them, as early members of a community of mentees, they also helped to create the community and connections that sustained them over their years of study. The quotes extracted from their narratives highlight the aspects of their doctoral experience they found to be most sustaining.

Dr. Michael Lees

I chose to attend Walden University for my doctoral studies. While Walden University is predominantly an online university, it has important hybrid characteristics as it requires periodic face-to-face interactions in the form of four, 4-day Residencies scheduled at key milestones throughout the academic program. I have always been a brick and mortar student and educator. I have been teaching in the college classroom for more than 18 years and continue to do so at the time of this writing. Stepping into an online learning environment is something that I approached with interest and trepidation. That a sense of community that could foster creativity would be able to be exercised in an online learning environment was a major concern for me. Questions surrounding motivation, attention, retention, and the ability to have authentic interactions with professors, a mentor/dissertation chair, and fellow colleagues were a high priority as it concerns my own personal learning processes. The bulk of the work done towards earning the degree involved being online and, in my case, camped out at my family’s dining room table for a long number of years.

Walden was successful in providing the foundation for individual and greater community building to take place. I felt that the use of structured learning agreements and individualized planning as a requirement for course completion was very helpful. I have many fond memories of working on this with my mentor/dissertation chair as
we embarked on a quest to develop plan outlines which adequately addressed work needed for completion and milestones, particularly as it related to how students filled out the learning agreements and quarter plans. Use of these tools established a framework for completing current coursework, setting individual parameters for getting work done, while also considering future projections. They also helped tremendously in developing a relationship between my mentor/dissertation chair and myself. Discussion forums throughout the coursework and dissertation process provided the opportunity for all of us to discuss our work. However, I had the great opportunity to caucus with my mentor/dissertation chair and a fellow colleague in our research forum concerning taking this environment a step further. We agreed that the type-written aspect of the research discussion forum helped to further our work.

However, we had come to the general consensus that taking the interaction up a few notches might provide the modus operandi towards fostering more motivation and inspiration while simultaneously deepening a sense of community. We came up with the idea of creating an online meeting for everyone in the research forum that occurred in Skype and Zoom synchronous video formats. The net result helped me tremendously. The opportunity to see, listen, challenge, and support one another in the form of mentor- or student-led first of the month meeting times set the tone for the following weeks. I found myself to be thinking more creatively; motivated towards continuing my work; challenged by the feedback I received; able to work with problem solving based on that feedback; think critically about my work; and most of all I experienced a sense of community. I realized that I was not alone sitting at my dining room table trying to survive doctoral studies and a dissertation. The sense of community that was built around these face-to-face online meetings was nothing short of inspirational as they provided a feeling of being recharged and ready to dive back into my dissertation work and keep on going.

The effort to initiate and sustain these monthly online meetings required a mentor that was willing to go further than the standard instructional requirements and student willingness to participate in order to see it all succeed. I am more than thankful that I experienced both. It was in this environment that I realized that online learning can work when everyone involved uses the tools at hand to take things a step further to ensure that the educational experiences have meaning. It was in this aspect of meaning making that I felt my creativity thrive, motivation was sustained, and a collegiate atmosphere that was at once serious and critical, as well as compassionate and gentle, had been achieved. As a lifelong educator, this made my heart smile as I completed my doctoral studies and dissertation. I would say that I now lament seeing aspects of the doctoral journey come to an end as it regards the connections and community that was established throughout these online meetings. However, a sense of community was established. I continue to work and be in contact with my mentor/dissertation chair, fellow colleagues, and now those I call lifelong friends, all of which is still happening predominantly online.

Dr. Alison Binger

Walden University, a distant learning educational institution, operates similar to brick and mortar universities in that it provided me with the coursework, mentoring, and a clear path through the dissertation process. I found three areas that provided me with the means necessary for my success, and all were associated with feeling a part of a great community of scholars: classroom interactions, residencies, and my connection with my mentor. The online classroom encouraged interaction through regular, structured, and academic discussions. The professor modeled high expectations and standards of scholarly conduct, respectful behavior, and ensured a safe arena to discuss cultural and educational topics. The discussions brought together individuals from diverse backgrounds with multiple perspectives, ensuring scholarly discourse through topical questions that prompted us to create, problem solve, and theorize. Such discussion began to build my sense of community. The residencies further solidified the community feel by bringing students together for face-to-face professional presentations, workshops, and community-building. Residencies were essential for me to feel connected to this online educational community.

During these 3-4 day intensive gatherings, I was able to network, build my confidence in my scholarly abilities, and the intimate groupings and gatherings provided me the opportunity to sit next to, talk to, and meet other students. It was in this environment that I met lifelong friends. The connection I had with my mentor and dissertation chair enhanced my online educational experience, providing me with the final means to ensure I continued through the dissertation process and graduated. The feeling of having a true mentor, one that will motivate me, guide me, be stern when needed, and then reassure me that I can do this, was absolutely essential in feeling connected to the process and broader scholarly community. It was having conversations outside of our classroom, learning about her personal life and family, and the feeling of compassion and empathy between us that really provided me with the support needed to get through the program. The mentor connection was real enough to continue after graduation and into the professional and scholarly field of higher education. It is this type of connection I will provide my higher
education students as well to help them through the long arduous higher education process. These three areas of classroom interactions, residencies, and connection with the mentor I have found essential to my success through an online doctoral educational program.

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Growth Focused Collaboration

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Abstract

Due to the rapid growth of distance learners at the American College of Education, the doctoral program made revisions. Inter-department collaboration required a process which embraced collective intelligence resulting in additional support of doctoral students and faculty. Strategies for enhancing and sustaining effective collaboration are key to managing rapid growth.

Introduction

As stakeholders within the doctoral program for the American College of Education (ACE), collaboration was necessary to build a future to preserve academic quality and exceptional student outcomes. The online doctoral program started in 2013 and grew by over 600% by 2018. Major program revisions were also implemented in 2018. The collaborative team explored solutions for the program, faculty, and students served. Collaboration and co-innovation include engagement, co-creation, and a valuable experience (Lee, Olson, Trimi, 2012). This paper reviewed how academic team members worked with different departments, faculty, and student groups to provide additional support for the vast growth.

Need for Support

Growth projections and diversity within the student body created the need for continuous training and modifications within the higher education environment (Williams, Conyers, & Garcia, 2018). With a need to support a diverse population of students, as well as support new doctoral faculty, a plan for growth focused collaboration emerged and was structured by multidisciplinary faculty, staff, and teams. The goal of supporting students involved working across departments to prepare resources and tools to support administration, faculty, and staff understanding of the current doctoral processes in order to provide a basis and build a bridge for additional doctoral programs.

Changing demographics, support structures, and training staff and faculty to facilitate learning across the disciplines are ongoing challenges for institutions of higher education (Williams, Conyers, & Garcia, 2018). Supporting the increasing number of doctoral students required support beyond the academic team. There was a need for more student advisors to provide guidance and support in common areas of weakness for doctoral students.

Training of faculty and staff to support doctoral students and candidates academically and emotionally occurred through job embed professional development. Experienced faculty were teamed with novice instructors and faculty or staff from other disciplines shadowed administrators and faculty. Facilitated faculty training became more self-paced.
Collaboration Strategies

Kaufmann, Perez, and Bryant (2018) suggested collaboration in the higher education environment between administration, faculty and staff is more important than ever before. Increasing academic success while also maintaining budget restraints creates an environment where collaboration is essential (Kaufmann, Perez, and Bryant, 2018). Interorganizational relationships help support collaborative innovation. Collective intelligence and an experienced mindset are necessary components for collaboration (Lee, Olson, Trimi, 2012). Teams evolved and were formed based on ideas and needs of new doctoral faculty. Mentoring of faculty to support various levels of the doctoral program was incorporated within the existing responsibilities. Faculty became consultants for administration transitioning to other departments or roles within the institution.

Through faculty input, ACE revised the dissertation committee training to align with program changes, as well as become more accessible and self-paced for faculty. The quarterly Skype meetings were also implemented to ensure consistent messages were being shared. Given the program changes and updates, faculty needed to be aware of what was changing for the student and the communication shared with the student. The Learning Management System (LMS) also included a specific area in Faculty Commons dedicated to the dissertation. The resources included templates, forms, and any materials necessary to help guide the student throughout every phase of their dissertation journey.

A social networking tool, Yammer was used by the organization to support collaboration. A page for communication and collaboration regarding dissertation matters was created for faculty to share ideas and helpful tips with one another. Technology, while not directly impacting organizational performance, technology does impact the ability of the organization to develop relationships and collaborate (Ping, Chinn, Yin, & Muthuveloo, 2018). Strategies for growth focused collaboration included meetings, creating group workspaces, and conferencing to expand the communication channels and processes.

Student Services was a core component in sharing ideas on how to advise doctoral students. Skype meetings were conducted to offer insight regarding the doctoral journey, the struggles students experience, and how to overcome the obstacles. A Frequently Asked Questions (FAQ) document was also created for Student Services to gain a quick glimpse in solving commonly discussed issues.

Students needed and wanted to be heard with regards to any programmatic changes and the personal impact. Following informational emails, a live informational Zoom session was designed and open to all students. Information regarding programmatic changes was presented with PowerPoint slides to support transparency and discuss benefits of modifications to the institutional process and program changes. Students were able to ask questions and receive answers in real-time. A recording was posted in the Student Commons section within the LMS for students who were unable to attend. The Student Commons Discussion Board was another way for questions to be asked and answered in an open forum the board has been enhanced to increase support. Just as faculty had a resource center in Faculty Commons dedicated to the dissertation, Student Commons included similar documents specifically designed to guide them.

Most notably, a Doctoral Student Advisory Board was developed. Fourteen individuals from the Ed.S. and Ed.D. program were selected through self-nomination and faculty recommendation. Those selected represent student and alumni voices within a program of study, provide insights, convey information and perspectives, and share in collaborative communication regarding needs from the student and alumni viewpoint. Table 1 reflects how the collaboration impacted certain stakeholders and the support types developed from the discussions.

Table 1. Collaborative Strategies

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Support Type</th>
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<tbody>
<tr>
<td><strong>Faculty</strong></td>
<td>Dissertation Committee Training (Revised)</td>
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<td>Dissertation Committee Quarterly Skype Meetings</td>
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<td></td>
<td>Faculty Commons Dissertation Resource Center</td>
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<tr>
<td></td>
<td>Yammer Page</td>
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<tr>
<td><strong>Student Services</strong></td>
<td>Skype Meetings</td>
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</table>
A balance of distributed pathways for employee engagement such as impromptu interactions, team collaboration, planned presentations, and central resources support group effectiveness (Oseland, 2012). Creating the conditions for sharing, information and exchanging ideas to drive change and make progress to accommodate growth included complete constituency of faculty, staff, and students. A combination of approaches, experiences, skills, and viewpoints completed the collaboration strategies.

Conclusion

The doctoral program grew quickly, in which support systems were needed to maintain growth. The doctoral team collaborated with faculty, Student Services, and students to develop strategies to work toward a sustainable future. From the strategies, the cooperative engagement lead to the creation of additional resources, training, memberships, and meeting spaces. Various stakeholders were empowered to make differences and meet shared goals.

References


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Are Cognitive Differences to be Considered?

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Introduction

It is a known fact that teaching online is different than teaching face-to-face. Teaching face-to-face allows you to make adjustments by watching body and facial changes of the students, which are not visible when you are teaching asynchronously online. One option is to build multiple deliveries with the thought of the uniqueness of each student putting an extra burden on the creation of the different delivery modules. This is not only more work for the faculty member, but it also creates a navigational maze for the students. But maybe there’s another alternative, and that is to predetermine what delivery method the student might use to his or her benefit. What if you can get a simple computer assessment to determine the best-fit delivery method for the individual? Using that cognitive information would give the student a recommendation of the most appropriate instructional delivery.

Lens Model

Brunswik (1955) suggested that we receive information from multiple sources around us, but we only acknowledge a few pieces that interest us. His learning theory as it is applied to education explains the different study routes taken by an individual to master a given subject area. He suggested three different regions that make up this dual lens (see Figure 1). The central portion refers to events within the individual, the proximal refers to the interface between the individual and the environment, and the distal relates to events which the organism has no media control. The information in the form of cues from a single piece of information is focused on the person’s perception by a double convex lens. The learner chooses these cues because of the experiences from their history, and in their makeup suggesting that all learners will make a judgment individualistically. The learner can choose to revisit an object to gain more information or continue using cues already accepted.

Figure 1.
Brunswik’s Dual Lens
Education built on this environment suggests that individuals need to have an opportunity to select cues in the form of information. The more cues offered may increase the chances of increased learning. There is a danger in flooding the presentation with multiple cues suggested by Snow, (1968) when he said: “…no matter how you try to make instructional treatment better for someone you will make it worse for someone else.” New methods of delivery have changed the opportunity of delivering cues compared to what was available in the 1950s.

A comprehensive literature review on cognitive styles (Kozhevnikov, 2007) presented multiple levels of information processing and how they process within their environment. Within that context, the idea of perception leading to selective attention was related to field dependence and field independence.

Field Dependence/Independence

Teaching styles matching field dependence/independence was an important consideration in distance education by improving students “deep processing skills” (Savard, Mitchell, Abrami, & Corso, 1995). Witkin, Moore, Goodenough, and Cox, (1977) suggest that field dependence/independence presents a wide dimension of individual differences that extends both perceptually and intellectually. They state these “… individual differences include how we perceive, think, solve problems, learn, relate to others, etc.” (pg.15). They further suggest that individuals who were found to be field dependent are more likely to require defined goals and reinforcements than a field independent individual who tends to have more self-defined goals and reinforcements. Two types of cognitive styles that were suggested by Schmeck (1988) were global-holist/field dependent/right-brained and the other focused-detailed/field independent/left brained. Cognitive styles were also suggested to be related to analogical problem solving by Antonietti & Gioletta, (1995). Looking at a web-based distance education setting, De Ture, (2010) looked at the possibility of whether or not you could advise students to participate in an online course. Findings did not support that there was any relationship between the group embedded figures test (GEFT) and final grade. The study did find though that students who are more field independent are more comfortable with online technology.

Understanding the relationship between cognitive styles in education is still insufficient for justifying educational decisions (Kozhevnikov, 2007), and it is suggested that research combining the concept of cognitive styles in education may enhance our understanding of the relationship.

Online Learning

The findings of students’ preferred learning styles of taking a distance education course might have some effect on academic achievement and student attitude (Gee, 1990). Although the sample size in this study was relatively small, she concluded that there was a difference in academic results between an independent learning style group and one or more dependent learning styles. Later Jonassen and Grabowski (1993) gathered information dealing with multiple individuals’ difference in cognitive and motivation related to student learning. Adapting coursework by considering student learning styles to increase student learning was investigated by Carver Jr., Howard, and Lavelle (1996). Differences in informational retrieval and learning styles (FD/FI) was examined by Kerka (1998). Kerka found the research of others demonstrated that field independent students performed shorter and more efficient searches and were more comfortable about navigating the screen presentation than those students that were field dependent. Field-dependent students reported to be more disoriented and navigated more linearly and followed sequences rather than tromping around. Diaz, (2000) suggested that educational researchers look at the future of distance education by focusing on student success rather than the method of teaching. He suggested since characteristics of students are constantly changing, generalizations in research need to be altered in favor of a way of monitoring student characteristics and determining which features produce favorable achievement. Shih and Gamon, (2002), further suggested that rather than a cognitive style, the teaching strategies used made the difference in student achievement.

A mismatch in instructional models was found in the dissertation done by Parcels (2008). By matching instructional design, the needs of a field dependent learner were met and had a positive impact on achievement as measured by their pre-and post-test scores. He also found that matching the needs of both field dependent/independent learners can be done by tending to the needs of the field dependent learner as it works for both in an asynchronous distance education environment. He went on to suggest that perhaps the coping abilities of university undergrad and graduate students may obscure the true differences between instructional designs that are matched or mismatch their cognitive style needs.
Karamaerouz, Abdi, and Laei (2013) investigated teaching English using multimedia and a measure of field dependence/independence. Their research examined if there was a difference between field dependent and independent students when studying English by using multimedia. They found a significant difference between the performances of the students when educated by multimedia. They also looked at comprehension, memory, and analytical skills. Field independent students fared better when analytically looking at the main content, whereas field dependent students had a better memory for data and topics which could be verbally expressed.

In a study relating to the relationship between field dependent learners and their attitude toward distance education, Faruk (2014) found a correlation between their attitude and their preference for student roles and e-learning. He did suggest that field independent learners preferred e-learning technologies and the characteristics of learner interface design which were formulated for students with field dependence.

A study created to review research on field independent students suggested that caution needs to be applied to existing investigations and its interpretation of the evidence presented by others (Evans, Richardson, & Waring, 2013). They suggest that field independence is “… clearly correlated with measures of spatial ability.” Furthermore, they looked at the relationship of field independence with working memory. This ability may be tied to being selective about the information retained, reducing the amount of knowledge to process in working memory (Kozhevnikov, 2007), and maybe why field dependent individuals may not perform as well due to the unnecessary distracting information.

**The Previous Studies Looking FD/FI**

An earlier study (Packard, Holmes, & Fortune, 1996) based on Brunswik’s psychology looked at pretesting 102 master and doctoral students, using Hidden Pattern Test (HPT) student levels of FD/FI to determine their levels of field dependence/independence. The research questions asked if the manner of presentation would make a difference in retaining content when student levels of field dependence and independents were tested against the type of delivery used in learning statistical sampling instruction. Three different delivery methods (text only, text and static graphics, and text and animated graphics) used simple instructions of two sampling techniques (systematic, random sampling), and two graphic examples of skewness of distribution (one negative and one positive). An Aptitude-Treatment-Interactions (ATI) analysis was used to study the interaction between participants’ cognitive attribute and the presentation types. Graphic representation of the ATI results is presented in Figures 2 – 5.

The immediate recall of random sampling showed that field independent students performed better when text and graphics were used, and poorest when presented information by text/animation (see Figure 2). Immediate recall also showed that field independent students performed better when text/animation or text only were used, and poorest when presented information by text/static graphics.

**Figure 2.**

*Immediate Recall Random Sampling Content (5) Questions by Presentation Type by Level of FD/FI*
Delayed recall of random sampling showed that field independent students performed better when text or text/animation graphics were used, and poorest when presented information by text/static graphics (see Figure 3). The delayed recall of random sampling showed that field dependent students performed better when text/static graphics were used, and poorest when presented information by text/animated graphics.

**Figure 3.**
*Delayed Recall Random Sampling Content (5) Questions by Presentation Type by Level of FD/FI*

![Figure 3](image)

Looking at the learning of skewness with both immediate and delayed recall also presented a slightly different result. Field dependent students performed better with both immediate and delayed recall using a textual presentation (see Figures 4 and 5). Field independent individuals performed best on the immediate recall using either text only or text/static graphics. On the delayed recall, the field independent participants seem to retain the instruction best with text and animation.

**Figure 4.**
*Immediate Recall Skewness Content (5) Questions by Presentation Type by Level of FD/FI*

![Figure 4](image)
A later study (Packard, Holmes, Viveiros, & Fortune, 1997) looked at field dependence/independence and possible student attitude toward the interaction with different instructional methods. Open-ended questions for 102 graduate students suggested that the computer delivery of information was enjoyable, with the majority of students preferring textual and graphic presentation. Students were asked if they would be agreeable to have the computer choose delivery (sixty-four percent agreed) whereas ninety-five percent felt that they could make the proper instructional delivery.

**Conclusion**

“So what does it mean?” is a question which should be asked at the end of every research project. The findings supported Brunswik’s notion that cognitive difference in how the individuals perceive the instructional material can make a difference. Although the findings of the previously discussed studies did not convince this researcher that measures of field dependence/independence would be the sole solution to effective computer presentation of instructional material, there were differences found. What can be and has been presented by this research was that online computer presentations could effectively deliver instructional material. It also suggested that the type of presentation could be used to fit the student's cognitive characteristics. This study and its review were no more than a suggestion that, as educators, we may need to consider cognitive difference when designing instructional content. This study was short in content and exposure was limited. It is possible that the results were effected because the material was not very relevant to the participants, and there was no consideration of previous knowledge of the subject matter.

**References**


Gee, D. B. (1990). *The Impact of Students’ Preferred Learning Style Variables in a Distance Education Course: A Case Study. No Title.*


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Optimizing Faculty Onboarding Through Rapid Institutional Growth

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Abstract

One of the biggest challenges for a growing online program is recruiting and retaining highly qualified faculty. Over the past two years the American College of Education has made substantial changes to faculty onboarding that have shortened the process while also improving the quality of the training experience.

Introduction

While the problems posed by growth are good problems to have, there are still substantial challenges for an institution that is rapidly growing. These challenges are particularly apparent in online education, where the process of not only finding, but also preparing, online faculty have direct impact on the institution’s ability to serve students. This paper will present the experiences of the American College of Education (ACE) as the institution has seen, and continues to benefit from, enrollment and program growth and continually hires and trains additional faculty. While there are several different elements involved in successfully pursuing these activities, the focus of this paper is on ACE’s onboarding and training efforts and how those have been scaled up to best serve the needs of our new and continuing faculty.

The Need For and Approach to Training

Successful onboarding, which includes quality training, is essential to give employees an opportunity to best contribute to the organization (Lisbon & Welsh, 2017). While essential for all employees, onboarding and training are of particular importance for faculty entering the online environment, and this is an increasingly frequent element of higher education as more institutions are shifting more content to online delivery (Frass & Washington, 2017). Mohr and Shelton (2017) emphasize this, explaining that while total higher education enrollment is on the decline, online enrollment is actually increasing. The increasing shift to online platforms, combined with the constant change of online learning theory and technology, means not only that onboarding is critical, but that there is a need to provide training throughout an online educator’s career, something that is seen across industries as everyone faces constant change in the workplace (Eisner, 2015).

To deliver this training effectively, planning is essential. Driving effective instruction means identifying the training topics in both technology and pedagogy that will best serve students and their success in the course (Frass & Washington, 2017). Three primary areas of content that address this need in online education are an instructor’s visibility, intentionality, and active engagement (Mohr & Shelton, 2017). Training at ACE follows this approach, which has become much more important over time as institutional growth requires hiring, and effectively onboarding and supporting, a high volume of faculty.

Faculty Training History and Restructuring

Faculty training for onboarding at ACE from 2016 and prior consisted of four phases: (a) a two-week training including discussion board questions to better understand the Learning Management System, (b) a two-week...
training including discussion board questions to better understand the ACE policies and grading an assignment, (c) shadowing a faculty member with ACE to review the instruction, and (d) teaching in a course after the first three phases were complete. One of the main issues with the training was that the review of instruction took place before the first assignment, in which new faculty may not always know what questions to ask until actually in the course. Just-In-Time (JIT) training was thought to be a better avenue for new faculty to enhance retention of the new information and gain the knowledge when they need it the most.

After the onboarding training, faculty professional development (PD) training consisted of an annual Family Educational Rights and Privacy Act (FERPA) refresher. Any additional PD was left up to the faculty to seek out and receive outside of ACE. Yet, having internal training could provide faculty with targeted coaching while teaching for the college.

Results

As a result of prior onboard training, faculty were often overwhelmed by the onboarding workload and confused in the process. From the moment of hiring to teaching a course would last months. If improper onboarding protocols are established, organizations can anticipate a 20% turnover within the first 45 days of employment (Martic, 2018). In 2017, the onboarding process was completely revamped to create a more efficient and effective training experience. Three weeks prior to a term start, new faculty are enrolled in our online onboarding training program. This onboarding training is completed independently and housed within our Learning Management System (LMS), Canvas. Our onboarding training covers a variety of topics including: Institutional information (College history, mission, vision, assessment and accreditation process), LMS hands-on training and an application practicum. All new employees are also required to complete a FERPA training which is revamped every year to keep information current and engaging.

Manual paperwork processes for onboarding have now been made virtual and automatic with our Faculty180 database. Within Faculty180, new faculty will enter transcripts, curriculum vitae, scholarship and a biography to automatically pull to our website. When faculty information is needed, for an accreditation visit or state report, faculty information is easily accessible and accurate from the moment of onboarding. Faculty are required to update their Faculty180 profile annually to ensure information is current. Clear expectations and step-by-step video tutorials are provided to both new and current employees to help support and guide them through the process.

During the onboarding process, a member of the Professional Development and Training team assists the new hire with Canvas and Faculty180 components, as well as provides video guidance and one-on-one training sessions. Helping faculty become comfortable and confident in ACE expectations and the learning management system prior to teaching is essential. Faculty are trained in institutional best practices and Canvas components and then required to apply new information in our practicum component. This practicum component is a copy of a live course currently running within our institution with mock students enrolled. New hires are enrolled in this course as the teacher and are given five assignments to complete: Create a welcome announcement, Share a guide with students on how to access feedback, Grade an assignment, Contribute to a discussion post, and Write a welcome letter for students. These assignments align with weekly expectations of faculty members and annual faculty evaluations. Faculty can access all training materials and the application practicum 24 hours a day, seven days a week. This flexibility allows part-time faculty to come and go throughout the training when it works best for them. Additionally, the Professional Development and Training team is there to assist and provide feedback on the required activities throughout the onboarding training experience. Faculty are given one week to complete the onboarding course, practicum, Faculty180 uploads, and FERPA training.

The onboarding process evolved from a 9-week minimum training to a 10-day maximum process. Faculty were more prepared and felt equipped in a shorter amount of time. Faculty are given an anonymous survey at the end of onboarding training and responses like this are very familiar, “Of all the training programs that I have participated in at various universities and nonprofit organizations (both online and in person), I feel like I have learned the most from this experience!” and “The onboarding experience was perfect in my opinion.” As policies, programs, and platforms continue to evolve within the institution, we can easily make adjustments within the course to make sure our faculty are well-informed and prepared. Every quarter, every internal training is reviewed and updated to include any new requirements, instructional or institutional changes. After the completion of new hires’ course and document requirements, employees are transitioned into their teaching assignment.
During this transition from onboarding to teaching, faculty are supported by an academic administrator who is there to help answer specific questions, conduct weekly checks to make sure faculty are transitioning well within individual courses, and mentor new hires in institutional best practices. New hires are brought on in cohorts three weeks prior to a term start, which allows for both individual and group support. Ongoing professional development and training is available for all employees. Twenty-two online and internal autonomous training courses are currently offered within our Professional Development and Training Portal. Courses range in industry best practices, institutional and department specific needs, softs skills, and leadership development. Employee feedback on annual surveys, administrator and leadership input help drive training development to ensure all training experiences support our employees in an engaging and informative manner. All trainings are self-paced and self-register, so employees can sign up and complete trainings at any time. Upon completion of new hire onboarding and all professional development courses, employees are awarded digital badges and certificates which can be shared on social media.

**Conclusion**

New hire onboarding is the first in-depth experience an employee will have with an organization. Building an onboarding experience that is engaging and informative, clearly explaining and outlining expectations, and providing one-on-one support throughout the process allows employees to feel empowered and equipped to be successful. Professional development and training within an organization increases employee retention, employee engagement, and skill development in an ever-changing learning environment (Gutierrez, 2017). As institutions continue to grow at a rapid rate, it is essential employees are continuously supported, informed, and well-trained.

**References**


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Utilizing the AECT Instructional Design Standards for Distance Learning

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Sullivan University

Abstract

Amid the continued growth of online learning—and concerns about its quality—a number of different groups have moved to establish tools, such as rubrics and standards for online course quality. This paper highlights the development of the Instructional Design Standards for Distance Learning by the Association for Educational Communications and Technology. AECT is the leading international professional association for the scholarly study and practice of instructional design. Also featured is a comparison with other popular tools and suggestions for use of the AECT Standards.

Introduction

With approximately 30% of college and university students nationwide enrolled in one or more online courses, it is safe to say that distance learning has become fully institutionalized into the fabric of U.S. higher education (Piña, 2016; Seaman, Allen & Seaman, 2018). In spite of the national trend of decreased enrollments at colleges and universities during the past few years, enrollments in online courses have continued to increase (National Center for Education Statistics, 2019).

Notwithstanding the growing ubiquity of distance learning, and an ever-increasing body of research indicating that students can learn well online (e.g. Means, Bakia & Murphy, 2014; Means, Toyama, Murphy, Bakia & Jones, 2009), skepticism regarding its quality persists. Opinion polls continue to report that many postsecondary faculty members feel that learning online is inferior to learning in a traditional classroom (Jaschik & Lederman, 2018).

Advances in distance learning research and practice, and efforts to address the elusive concept of “quality,” have inspired professional communities, organizations and vendors to establish quality standards and rubrics for online courses. Standards “provide people and organizations with a basis for mutual understanding, and are used as tools to facilitate communication, measurement, commerce and manufacturing” (CEN-CENELEC, 2018, p.1). Popular distance learning standards and rubrics include Quality Matters (Maryland Online, 2017), the Open SUNY Course Quality Review (OSCQR) rubric offered by the Online Learning Consortium (2018), the OLC Quality Scorecard for Online Programs (Shelton, 2010), the iNACOL Standards for Quality Online Courses (iNACOL, 2011), and Blackboard’s Exemplary Course Program (Blackboard, 2017).

AECT Instructional Design Standards for Distance Learning

The Association for Educational Communications and Technology (AECT) is the most established international professional association for instructional design and technology (www.aect.org). It was established in 1923 as the Department of Visual Instruction of the National Education Association and later rebranded as the Department of Audiovisual Instruction (DAVI), with an initial focus upon the use of audio-visual technologies in classroom instruction (Reiser & Dempsey, 2017). As a result of evolution and progress in the areas of learning theory, communication technologies and an emerging field of instructional design, the Association for Educational Communications and Technology emerged in 1970 as an independent professional association (AECT, 2001; Molenda, 2008).

AECT launched the Journal of Instructional Development, the first scholarly journal dedicated to instructional design in 1977 (AECT, 2019). The association maintains a position of leadership in research and practice in the field with its five journals: Educational Technology Research and Development, Tech Trends, the Journal of Applied

**How the AECT Standards Came to Be**

During a series of discussions between AECT members and association staff, a recurring topic was that online courses at colleges and universities were being developed without the benefit of research-based instructional design guidelines. A small task force of AECT members researched and produced a first draft of ten instructional design standards for distance learning. An edited version of the standards was approved by AECT’s Executive Committee, by the board of its Division of Distance Learning, and by the association’s full Board of Directors (Harris, 2017a).

Once approval has been obtained by the association’s Directors, several leading AECT member scholars and practitioners were invited to write chapters providing evidence and justification for each of the ten standards. Those who contributed chapters were Saul Carliner, Yuan Chen and David Price (2017), Peggy Ertmer, Judith Lewandowski and Jennifer Richardson (2017), Phillip Harris (2017a; 2017b); Michael Molenda (2017), Gary Morrison (2017), Jennifer Morrison and Steven Ross (2017), Anthony Piña (2017b; 2017c), Wilhelmina Savenye and Yi-Chun Hong (2017), and Michael Simonson (2017).

Each chapter underwent a double-blind peer review process by a combination of faculty members from graduate programs in instructional design and technology, and practicing professional instructional designers. Final corrected drafts of the standards’ chapters and a set of rubrics for their application (Harris, 2017b) were compiled into an edited book, Instructional Design Standards for Distance Learning, published by AECT (Piña, 2017a). Members of AECT have access to a free e-book version of the book through the publications area of the AECT website (www.aect.org).

**What are the Standards?**

**Standard 1: Purpose.** Effective course design begins with a clearly articulated purpose. This is the standard to which all other standards must align. Purpose may be thought of as two-dimensional: institution or instructor and student. The design should include both the purpose of the course as envisioned by the institution or instructor and the purpose as viewed by the student. As the purpose is articulated through goals and objectives, collaboration between instructor and student will set a firmer foundation than can be achieved through a one-dimensional purpose statement.

**Standard 2: Assumptions.** Course design must take into account assumptions that shape the purpose and subsequent course development. Most assumptions are based on students’ prior knowledge and established understandings and skills. Articulating these content assumptions provides a starting point for new learning. Assumptions in the case of online learning also encompass students’ ability to use delivery technology.

**Standard 3: Sequence.** Learning opportunities must be sequenced in a manner that promotes efficient knowledge acquisition consistent with the prior-knowledge assumptions. Various models of sequencing—linear, spiral, scaffold, etc.—should be considered, and the course design should incorporate those strategies best suited to the content within the constraints of online delivery.

**Standard 4: Activities.** Learning is achieved through activities both passive (reading, listening, viewing) and active (experimenting, rehearsing, trying). Activities should be chosen that best suit the content, students’ levels of knowledge, experience, ability, and online delivery constraints, particularly accommodating synchronous, asynchronous, and mixed course participation. Student self-selected or self-developed learning activities should be incorporated along with instructor-selected and instructor-developed activities, consistent with a two-dimensional purpose.

**Standard 5: Resources.** A range of resources should be articulated to foster deep learning and extend course-centered experiences and activities. Resources should be multimodal to accommodate students’ interests, understandings, and capacities, consistent with course content and technological accessibility. Resources should allow students to go beyond the constraints of the formal course structure to engage in self-directed, extended learning.
Standard 6: Application. Consistent with providing for active learning, students should have integral opportunities within the course design to apply new learning. Effective course design incorporates opportunities to practice newly acquired understandings and skills, both independently and collaboratively. Online collaborative application opportunities should be developed using social media, and offline collegial groups also should be structured whenever physical proximity of students affords this opportunity.

Standard 7: Assessment. Regardless of the model of sequencing learning opportunities, the sequence should include points of assessment for purposes of feedback and review, with instances of re-teaching as necessary for students to acquire full understanding. Formative assessment, whether formal, informal, or incidental, allows teachers and students to give feedback to one another and to review the operationalized design in order to revise the course design based on students’ input with regard to knowledge acquisition and effective use of new understandings and skills.

Standard 8: Reflection. Effective course design must include opportunities for reflection as an extension of the Feedback/Review/Reteach standard. Reflection involves both instructor self-reflection and student self-reflection related to achievement of the purposes that have been articulated as the basis for the course. Such reflection is intended to deepen the learning experience and may serve as reiteration of purpose at key points during the course.

Standard 9: Independent Learning. Effective course design incorporates opportunities for independent learning, both instructor- and self-directed. Online course development, particularly in the asynchronous mode, should epitomize independent learning, which should include opportunities for feedback, review, and reflection—all of which should resonate with the purpose.

Standard 10: Evaluation. Course evaluation must be purpose-driven. Alignment with the purpose should be threefold: a) based on acquisition of new knowledge, understandings, and skills; b) based on instructor self-evaluation; and c) based on student self-evaluation. Multidimensional evaluation offers a fully articulated basis for judging the success of the course and the students as well as providing information that can help shape future iterations of the course.

How the AECT Standards Compare to Other Tools

The International Board of Standards for Training, Performance and Instruction (IBSTPI), Maryland Online/Quality Matters, the Online Learning Consortium, iNACOL, and Blackboard have developed widely-used and helpful tools for those concerned about online course quality. The IBSTPI standards emphasize competencies that can be demonstrated by instructors, instructional designers, evaluators, training managers, and online learners (Klein, Spector, Grabowski & de la Teja, 2004; Kozalka, Russ-Eft, & Reiser, 2013). The Quality Matters Higher Education Course Design Rubric and the OLC OSCQR Course Design Review Scorecard are comprehensive tools, providing a large number of assessment items by which the features of online and blended/hybrid courses can be evaluated formatively for improvement or summatively for judgment and awards (Blackboard, 2017; Maryland Online 2017; Online Learning Consortium, 2018). The iNACOL Standards (2011) are intended for use in K-12 schools, but have much in common with the aforementioned standards and rubrics.

The AECT Instructional Design Standards for Distance Learning are intended to inform and provide guidance before, during, and after the design and development of online and blended/hybrid courses. They can be used in tandem with other tools to assure that empirically sound principles of learning and instruction are “baked” into courses designed for learners at a distance. There is also a set of accompanying sample rubrics that have been developed for practical application of the standards (see the next section).

Utilizing the AECT Standards

A set of rubrics has been developed to provide guidance for instructional designers and others who wish to incorporate the Instructional Design Standards for Distance Learning (Harris, 2017b).
Table 1.
Standard 1: Purpose

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose statement is multi-dimensional.</td>
<td>Statement incorporates multiple viewpoints and clearly articulates purpose as specifically applicable to the institution, the instructor, and the student.</td>
<td>Statement recognizes multiple viewpoints and is generally applicable to the institution, the instructor, and the student.</td>
<td>Statement is generally applicable but does not adequately address one or more viewpoints among the institution, the instructor, and the student.</td>
</tr>
<tr>
<td>Purpose statement incorporates collaboration.</td>
<td>Statement is made through collaboration between the instructor and the student.</td>
<td>Statement is a generalized reflection of instructor and student views.</td>
<td>Statement is not reflective of collaboration.</td>
</tr>
<tr>
<td>Goals and objectives are articulated.</td>
<td>Statement includes comprehensive elaboration through specific goals and objectives that are coherent and fully articulated.</td>
<td>Statement includes basic goals and objectives that are comprehensive and at least partially detailed.</td>
<td>Goals and objectives are missing or only partially developed.</td>
</tr>
<tr>
<td>Purpose is aligned with external requirements.</td>
<td>Statement aligns fully with external requirements, such as state or federal standards, and alignment is detailed and specific.</td>
<td>Statement generally aligns with external requirements with at least partial one-to-one correspondence.</td>
<td>Statement either does not fully align with external requirements, or there is little or no evidence that such requirements have been considered.</td>
</tr>
</tbody>
</table>

Table 2.
Standard 2: Assumptions

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Students’ prior knowledge</td>
<td>Students’ prior knowledge is assessed in detail and such information is used as a primary factor to shape course design.</td>
<td>Students’ prior knowledge is assessed in general terms and such information is used to help shape course design.</td>
<td>Students’ prior knowledge is assumed rather than assessed.</td>
</tr>
<tr>
<td>Curricular expectations</td>
<td>Curricular expectations are clearly articulated and incorporated into the course design.</td>
<td>Curricular expectations are generally stated and used to shape the course design.</td>
<td>Curricular expectations are unstated or non-specific.</td>
</tr>
<tr>
<td>Institutional requirements</td>
<td>Institutional requirements are clearly articulated and incorporated into the course design.</td>
<td>Institutional requirements are generally stated and used to shape the course design.</td>
<td>Institutional requirements are unstated or non-specific.</td>
</tr>
<tr>
<td>Technology skills</td>
<td>Students’ ability to use required technology is assessed and such information is a factor in course design.</td>
<td>Students’ ability to use required technology is basically assessed and used to help shape course design.</td>
<td>Students’ ability to use required technology is assumed rather than assessed.</td>
</tr>
</tbody>
</table>
### Table 3.
**Standard 3: Sequence**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence is consistent with prior knowledge.</td>
<td>Students’ prior knowledge assessment is fully incorporated into the learning opportunities sequence.</td>
<td>Students’ prior knowledge assessment is used in general terms to sequence learning opportunities.</td>
<td>Students’ prior knowledge is not a major factor in determining the sequence of learning opportunities.</td>
</tr>
<tr>
<td>Sequence is varied in accordance with learning needs.</td>
<td>Various models of sequencing are chosen, based on the student’s learning needs.</td>
<td>The sequencing model is chosen based on the student’s learning needs but is relatively static.</td>
<td>The sequencing model is based on factors other than the student’s learning needs.</td>
</tr>
<tr>
<td>Sequence compliments content.</td>
<td>The sequence models are well matched to content for optimal learning.</td>
<td>Sequencing generally compliments content.</td>
<td>Sequencing is determined independent from content.</td>
</tr>
<tr>
<td>Sequence optimizes delivery.</td>
<td>Sequencing is determined in order to provide a best fit within online delivery constraints.</td>
<td>Online delivery constraints are taken into consideration when choosing sequence.</td>
<td>Online delivery constraints are not well matched to chosen sequence.</td>
</tr>
</tbody>
</table>

### Table 4.
**Standard 4: Activities**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities are varied.</td>
<td>Activities combine a variety of passive and active forms of engagement.</td>
<td>Activities combine some forms of active and passive engagement.</td>
<td>Activities tend to be mostly limited to either active or passive engagement, not both.</td>
</tr>
<tr>
<td>Activities are matched to knowledge, experience, and ability.</td>
<td>Activities are chosen based on the student’s specific level of knowledge, experience, and ability.</td>
<td>Activities generally suit the student’s level of knowledge, experience, and ability.</td>
<td>Activities tend to be predetermined, rather than specifically related to the student’s knowledge, experience, or ability.</td>
</tr>
<tr>
<td>Activities are self-selected or self-developed by the student.</td>
<td>Activities balance self-selected/self-developed options and instructor-selected/instructor-developed options.</td>
<td>The student’s self-selected/self-developed activities are given consideration and included whenever possible.</td>
<td>Instructor-selected/instructor-developed activities dominate, with little accommodation for the student’s self-selected/self-developed activities.</td>
</tr>
<tr>
<td>Activities match online delivery constraints.</td>
<td>Activities are highly adaptable and provide for synchronous, asynchronous, and mixed delivery.</td>
<td>Online delivery constraints are taken into consideration when choosing activities, and synchronous and asynchronous activities are included whenever possible.</td>
<td>Online delivery constraints do not accommodate both synchronous and asynchronous activities.</td>
</tr>
</tbody>
</table>
Table 5.  
Standard 5: Resources

<table>
<thead>
<tr>
<th>COMPONENT</th>
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</thead>
<tbody>
<tr>
<td>Resources foster deep learning.</td>
<td>Resources offer multiple, rich avenues to deepen understanding and extend learning beyond course content.</td>
<td>Resources are varied and provide avenues to deepen and extend course content learning.</td>
<td>Resources tend to be limited to course-centered content.</td>
</tr>
<tr>
<td>Resources are multimodal.</td>
<td>Resources are based on the student’s specific understandings and capacities of knowledge, experience, and ability.</td>
<td>Resources generally suit the student’s level of knowledge, experience, and ability.</td>
<td>Resources are general, rather than specifically related to the student’s knowledge, experience, or ability.</td>
</tr>
<tr>
<td>Resources are consistent with technological accessibility.</td>
<td>Resources fully take into account technological accessibility to ensure that the student can use the resources both within the course structure and independently.</td>
<td>Resources generally recognize limits of technological accessibility and ensure that the student can fully use the resources.</td>
<td>Resources do not fully take into account technological accessibility, making some resources difficult or impossible for the student to use.</td>
</tr>
<tr>
<td>Resources encourage self-directed learning.</td>
<td>Resources are consistent with course content and provide avenues for the student to engage in self-directed, extended learning.</td>
<td>Resources are consistent with course content and at least some offer ways the student can extend learning through self-direction.</td>
<td>Resources are consistent with course content but may be difficult or impossible for the student to use in independent learning.</td>
</tr>
</tbody>
</table>

Table 6.  
Standard 6: Application

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</thead>
<tbody>
<tr>
<td>Application is integral to the course design.</td>
<td>Application offers multiple, rich opportunities to deepen understanding through practice of newly acquired skills and knowledge.</td>
<td>Application provides varied opportunities to deepen and extend course content learning through practice.</td>
<td>Application tends to be limited or isolated from course content.</td>
</tr>
<tr>
<td>Application provides for collaborative and independent learning.</td>
<td>Application provides many opportunities and encourages the student to work with others and independently to practice new skills and knowledge.</td>
<td>Application offers multiple opportunities for independent and collaborative practice of new skills and knowledge.</td>
<td>Application is limited and includes few opportunities for either collaboration or self-directed learning.</td>
</tr>
<tr>
<td>Application includes feedback.</td>
<td>Application includes rich feedback from the instructor and multiple student peers.</td>
<td>Application incorporates instructor and peer feedback.</td>
<td>Application includes only limited feedback.</td>
</tr>
</tbody>
</table>
Application incorporates collaboration outside the course setting.

Application is enriched through multiple opportunities for the student to interact with peers outside the course setting, using face-to-face as well as electronic modes of communication.

Application incorporates collegial interaction, both face to face and through electronic communication.

Application includes few, if any, opportunities for collegial collaboration outside the class setting.

Table 7.
Standard 7: Assessment

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<tr>
<th>COMPONENT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Assessment is formative.</td>
<td>Assessment is an integral part of the learning sequence to ensure that the student’s acquisition of knowledge and skills is optimal.</td>
<td>Assessment provides for logical points of feedback and review over the learning sequence.</td>
<td>Assessment is limited or tends to be summative rather than formative.</td>
</tr>
<tr>
<td>Assessment is formal, informal, and incidental.</td>
<td>Assessment provides multiple opportunities for formal and informal review as well as encouraging incidental review whenever the need arises.</td>
<td>Assessment incorporates both formal and informal review and allows for incidental review when the need arises.</td>
<td>Assessment tends to be one-dimensional, either formal or informal rather than both.</td>
</tr>
<tr>
<td>Assessment fosters review of operational design.</td>
<td>Assessment is key to reviewing both the student’s learning and the operational design of the course, which is flexible and subject to adjustment.</td>
<td>Assessment is used to review not only the student’s learning but also the operational design of the course.</td>
<td>Assessment is limited to the student’s learning.</td>
</tr>
<tr>
<td>Assessment makes use of student input.</td>
<td>Assessment is largely driven by student input in order to ensure optimal learning through operational redesign of the course on an ongoing basis.</td>
<td>Assessment incorporates the student’s input in the revision of course design as needed.</td>
<td>Assessment is largely instructor-directed or instructor-determined.</td>
</tr>
</tbody>
</table>

Table 8.
Standard 8: Reflection

<table>
<thead>
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<th>COMPONENT</th>
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</thead>
<tbody>
<tr>
<td>Reflection is an integral part of the operational design.</td>
<td>Reflection is integrated into the course design so that it occurs naturally at significant intervals as well as spontaneously when the need arises.</td>
<td>Reflection is included at regular intervals in the course design.</td>
<td>Reflection seems to be an after-thought, if it is included at all.</td>
</tr>
</tbody>
</table>
Reflection extends feedback and review.

Reflection provides a regular means of extending feedback, reviewing activities and contributes to reshaping the operational design.

Reflection actively extends feedback and review activities.

Reflection may extend the feedback and review activities, but that does not seem to be its central purpose.

---

Reflection includes both instructor and student self-reflection.

Reflection offers multiple opportunities for instructor and student self-reflection, both shared and individual.

Reflection incorporates opportunities for instructor and student self-reflection.

Reflection, when it occurs, is limited.

---

Reflection deepens learning.

Reflection is regularly employed as a means of deepening learning at all stages.

Reflection is consciously used to deepen significant learning experiences.

Reflection only serendipitously deepens learning.

---

**Table 9.**

*Standard 9: Independent Learning*

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent learning is incorporated into the operational design.</td>
<td>Independent learning is as important in the operational design as structured learning.</td>
<td>Independent learning opportunities are regularly occurring in the operational design.</td>
<td>Independent learning occurs or is encouraged only serendipitously or occasionally.</td>
</tr>
<tr>
<td>Independent learning includes feedback, review, and reflection.</td>
<td>Independent learning, through feedback, review, and reflection, helps to direct or redirect the course’s operational design.</td>
<td>Independent learning parallels the operational design in terms of feedback, review, and reflection.</td>
<td>Independent learning is unstructured.</td>
</tr>
<tr>
<td>Independent learning is included in both synchronous and asynchronous activities.</td>
<td>Independent learning is incorporated in both synchronous and asynchronous activities but is particularly emphasized in asynchronous activities.</td>
<td>Independent learning is encouraged in both synchronous and asynchronous activities.</td>
<td>Independent learning, if it occurs, tends to happen only during either synchronous or asynchronous activities but not both.</td>
</tr>
<tr>
<td>Independent learning is both instructor- and self-directed.</td>
<td>Independent learning is equally valid and essential whether instructor- or self-directed.</td>
<td>Independent learning includes both instructor- and self-directed learning activities.</td>
<td>Independent learning, if it occurs, is either instructor-directed or self-directed, but not both.</td>
</tr>
</tbody>
</table>
Table 10.
Standard 10: Evaluation

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>ADVANCED</th>
<th>ADEQUATE</th>
<th>INADEQUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation is purpose-driven.</td>
<td>Evaluation is fully aligned with the stated purpose(s) of the course and based on multiple factors; evaluation is used to shape future iterations of the course.</td>
<td>Evaluation is aligned with the course purpose(s).</td>
<td>Evaluation is only somewhat related to the stated purpose(s) of the course.</td>
</tr>
<tr>
<td>Evaluation is based on student acquisition of new knowledge, understandings, and skills</td>
<td>Evaluation incorporates multiple factors to judge the success of the student’s acquisition of new knowledge, understandings, and skills.</td>
<td>Evaluation is multidimensional and fully takes into account the student’s acquisition of new knowledge, understandings, and skills.</td>
<td>Evaluation does not fully incorporate an accounting of the student’s acquisition of new knowledge, understandings, and skills.</td>
</tr>
<tr>
<td>Evaluation is based on instructor self-evaluation.</td>
<td>Evaluation is based on the instructor’s self-evaluation as a co-equal element in the multidimensional evaluation of the course and its design.</td>
<td>Evaluation incorporates the instructor’s self-evaluation of the course and its operational design.</td>
<td>Evaluation does not include or only partially considers instructor self-evaluation.</td>
</tr>
<tr>
<td>Evaluation is based on student self-evaluation.</td>
<td>Evaluation is based on the student’s self-evaluation as a co-equal element in the multidimensional evaluation of the course and its design.</td>
<td>Evaluation incorporates the student’s self-evaluation of the course and its operational design.</td>
<td>Evaluation does not include or only partially considers student self-evaluation.</td>
</tr>
</tbody>
</table>

Conclusion

The Instructional Design Standards for Distance Learning represents a unique and notable entry into the design and development of online learning by the leading international association for the study and practice of instructional design and technology.

References


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Online Faculty Mentor: Developing Best Practices

Beth René Roepnack
USG eCampus

Abstract

Participants in this session will learn about what worked and what didn’t during the first year of a new online faculty mentor program for a statewide online collaborative. I will share background research for building community for exclusively online faculty, the trial and error process, and information most valued by faculty.

Background

eCore is a University System of Georgia statewide collaborative that offers fully online classes at an affordable cost to students. The collaborative offers core classes and enables students to complete their first two years of college fully online or in conjunction with classes at their local university. Students receive transfer credit at 22 affiliate institutions. All courses use OERs, have an average course completion rate of 90%, and the current cost is $159 per credit hour (eCore Factbook, 2018).

Faculty for eCore come from institutions across the state and usually teach courses for eCore as an overload. The faculty-providing institutions nominate and approve eCore teaching faculty (eCore Factbook, 2018). Faculty are required to complete a two-week online certification program before teaching for eCore. The certification course includes information on online pedagogy, LMS training, and provides faculty with clear expectations on their role as instructors for eCore. An eFaculty team provides training webinars, coordinates a mentoring program for the first term, and provides technical and other support for all eCore faculty.

New Position: Online Faculty Mentor

For the 2018 Fall term, eCore created a new position, Online Faculty Mentor, to provide additional support to faculty to help them thrive in the online environment (Pearson & Kirby, 2018). The goal is to provide faculty with best practices for engaging students, for being visible and approachable in the online environment, and to provide them with a voice (Orr, Williams, & Pennington, 2009). We hope that extended mentoring might decrease the number of student concerns and grade appeals as faculty implement these best practices.

As the person hired for this position, I thought that it would be helpful to build a sense of community (Egan, 2013) and establishing positive norms (Pearson & Kirby, 2018) for being approachable and visible. To do this, I wanted to begin developing relationships with faculty, provide them with services and information, inspire them to do and be more (Green, Alejandro, & Brown, 2009), and help them step out of the privacy of their online classroom to share their concerns and best practices.

What Didn’t Work to Build Community

My initial task was to review courses to determine faculty’s visibility and approachability in their online classroom and to provide feedback on possible or required improvements (Alexiou-Ray & Bently, 2015). The most urgent need was for me to review courses of faculty who were still developing their skills as online instructors, who had received low evaluations from students, had high withdrawal rates, or low success rates (these numbers were compared to the corresponding statistics of their peers who taught the same class). Given that the course content and syllabi are already created, for each course review, I look at the use of the Announcements tool, Introductory Discussion participation, Unit Discussion participation, the response time taken to provide grades, the quality of feedback in the Gradebook, and responsiveness to emails (Mandernach, 2005). These tools provide a quick snapshot of faculty’s attempts to fulfill the seven principles of effective teaching for online (“Faculty Peer Review”, 2016). I then emailed my feedback to faculty. Since these were developing faculty, the feedback had more suggestions and requirements than positive feedback. They were not happy.
I also tried morning coffee webinars for the Fall term, but only had a few people show up each time and there was little conversation or community building happening.

**What is Working to Build Community**

Once I realized the impact of impersonal emails, no matter how positive my tone, I began emailing faculty to let them know that I had reviewed their course and that I would like to discuss it with them in a short (15-minute) conversation. While some faculty are comfortable having me just review their course, many conversations turn into 30-40 minute discussions about pedagogy, life, and teaching. However, these conversations take more time, so I now email feedback to those faculty with a more developed skill set and have conversations with faculty if I perceive that there are significant issues to tackle.

The most common suggestions I make in my course reviews are to:

- Turn the lights on in your course by posting weekly announcements and use a positive tone and images or colored fonts
- Participate in the online discussions to show the value of student work; be approachable and visible; model higher-order thinking, problem solving, and use of proper citations; share teaching stories; share your passion for teaching; and fulfill your MOU agreement
- Provide grades and feedback within 3 days of the due date with a 7-day maximum
- Be flexible about due dates, given our working student population

The morning coffee klatches were changed to lunchtime informational webinars, which have much higher attendance rates and more chats happening on the side. I switched from Google Hangouts to Blackboard Collaborate Ultra, which is also used by the eFaculty team.

I send out weekly (for 8-week term faculty) or bi-weekly (full-term faculty) bulletins that are colorful, short, and contain just-in-time information that faculty need. Topics that received the most responses are:

- Beginning of term reminders
- Love online
- How-to tips
- The value of pinning your posts
- Academic integrity
- Texting tools

I find that sharing faculty’s tribulations and providing much empathy also help to build community. One of my least favorite tasks is sending out emails to faculty who have not had course activity for a few days. Many faculty are quite upset about being reminded about this aspect of their job. While my email acknowledges that failure to have course activity for a few days does not mean that they are not usually very attentive to their students, a few faculty send unpleasant responses. I’ve found that the more I acknowledge the work that they do, the challenges that they face, and the positive impact that they are making with their students, the stronger the resulting relationships. Empathy is great for community building.

**Conclusions**

Working with faculty to build better practices and to share them with the larger community is deeply satisfying. I will continue to explore ways to build an online community and look forward to hearing your ideas.

**References**


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Quest for Success: Empowering Online Students at CU Denver

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Abstract

This paper provides an overview of the creation process of an online success course designed by a team with the Office of Digital Education at the University of Colorado Denver. The success course was implemented as part of an effort to better engage with online students and to provide them with resources necessary for retention and academic success. The course was piloted by a small group of continuing students in Fall 2018 and then released to all incoming, fully-online undergraduate students in the Spring 2019 semester. Surveys were administered to the pilot group and Spring 2019 participants to assess effectiveness, best practices, and identify needed improvements. These results were then used to develop a series of “next steps” and future recommendations.

Identifying a Need

It is well documented that the retention of online students should be a priority of higher education institutions (Russo-Gleicher, 2014). This is particularly true given the ever-increasing enrollments in online coursework and the subsequent increase in online student attrition rates, rates that tend to be higher on average than for face-to-face students (Bawa, 2016; Cochran, Campbell, Baker, & Leeds, 2013; Garratt-Reed, Roberts, & Heritage, 2016). Adding to this challenge, it has been shown that retaining online students is often more involved and problematic than for their face-to-face counterparts (Clay, Rowland, & Packard, 2008).

Low retention rates in online courses can be attributed to various factors, including the student’s lack of familiarity with the time, rigor, and technology demands of virtual classes (Bawa, 2016). Recognizing these concerns, and as part of an effort to identify, track, and support online students, the University of Colorado’s Office of Digital Education (ODE) began a strategic push to connect with fully online students with the intention of better understanding the needs of this population and providing interventions as needed. ODE sought to explore ways to enhance retention rates through the creation of an online course focused on student success. This initiative was coupled with the fact that nothing currently existed for fully online students: the university orientation was not required and focused primarily on face-to-face services for the entire academic journey.

A project team, consisting of the Academic and Student Success Manager, Navigator, and Instructional Designer, collaborated to design and develop a Quest for Success course. This student success course would seek to identify online readiness of students, provide opportunities for engagement and connection, and offer a variety of resources that could help online students overcome potential challenges faced during their academic journey. Quest for Success was conceptualized as an optional gateway for students to get a feel for online coursework without overwhelming them with the gamut of services offered by CU Denver. This aligns with Bawa’s recommendation to use orientation programs as a way to “introduce students to the rigors and unique demands of the online classes” (2016). While the Quest for Success course was not intended to serve as a true orientation, the team sought to create a course to supplement the university orientation, emphasizing the online learning experience.

Meeting with Stakeholders

The Academic and Student Success Manager invited various stakeholders to provide input on the project and share their experiences and initiatives within their units at CU Denver. These groups included employees from the Auraria Library, First Year Experience Seminars, On Campus Orientation, advisors from multiple campus programs, the Office of Information Technology Helpdesk, Undergraduate and Transfer Admissions, and the Student Success Project. Meetings were held between September and October of 2018. Feedback gathered from these groups had
heavy emphasis on a desire for technological instruction on the use of the university’s learning management system. During these meetings, the team learned that First Year Seminar courses are free, one-credit courses that cover a variety of topics through the lens of a discipline or theme, and that the formal orientation would soon be required for transfer students. This information was vital in order to reduce duplication of content between those two initiatives and the Quest for Success project.

**Developing the Course**

For the initial design and launch of the Quest for Success course, the project team designed the following student-centered outcome of identifying applicable CU Denver resources for the unique needs of an online student.

In the course, this was further clarified with objectives empowering students to:

- Assess preparedness levels as an online student.
- Experiment with tools and resources associated with the CU Denver online learning experience.
- Overcome obstacles, seek solutions, and problem solve as an online CU Student.

With the course outcome and objectives in place, the team identified, designed, and developed the following topics and challenges:

This study takes its lead from the following five research questions:

- **Advising:** Students were challenged to set up a meeting with their advisor and identify issues, problems, or general questions to discuss.
- **Technology:** Students were challenged to create or update their profile in Canvas and customize their Canvas notifications.
- **Auraria Library:** Students were challenged to use the “Start My Research” tool and submit 5 different types of content related to their academic program.
- **Avoiding Pitfalls:** Students were challenged to share tips and hacks for avoiding pitfalls (with time management, communication, application/software usage, etc.) as an online student.
- **Professional Networking:** Students were challenged to strategically update their LinkedIn profile and connect with peers, faculty, staff, departments, and colleges at CU.

Once the course was designed and developed, stakeholders from the previous meetings were invited to the course as students and invited to give feedback prior to the launch of the pilot.

**Student Pilot Group**

30 seniors from the online Bachelor of Arts in Public Service were identified, emailed, and added to the first iteration of the course. Out of the 30 invited, 24 accepted the invitation to the Quest for Success course in Canvas. In the welcome email, students were asked to evaluate the challenges and assess if they would have helped when first starting their online student journey. Instead of tiered prizes, they would all receive special swag items for participating. The challenges were available from November 16 to December 14, 2018. In addition to these 24 students, two CU Online graduate assistants were added to the course to complete the challenges and make suggestions for appropriate swag items to be incorporated into the Prize Bazaar for the official launch of the course in Spring 2019. Of these 26 students, 12 completed the first module, which included the Online Student Readiness Assessment and an Introduction discussion board, the minimum requirements for earning swag from the Prize Bazaar and gaining access to the challenges. 9 students completed the Advising Challenge, 9 students completed the Technology Challenge, 7 students completed the Auraria Library Challenge, 9 students completed the Avoid the Pitfalls Challenge, and 7 students completed the LinkedIn Challenge.
Spring 2019 Group

Prior to the start of the Spring 2019 semester, a list was generated of new fully online students based on enrollment data. The list of enrollees included 67 students that were enrolled in online-only courses and were first-time attendees at the University of Colorado Denver. These students ranged from first-time students to transfer students and included students at the freshman, sophomore, junior, and senior levels, based on previous academic hours earned. Academic majors spanned the offerings at the University, with students representing Biology, Public Services, History, Psychology, Accounting, Communication, Undeclared, and others. Out of the 67 students invited, 55 accepted the invitation to the Quest for Success course in Canvas. Of these 55 students, 15 completed the first module, which included the Online Student Readiness Assessment and an Introduction discussion board, the minimum requirements for earning swag from the Prize Bazaar and gaining access to the challenges. 10 students completed the Advising Challenge, 5 students completed the Technology Challenge, 5 students completed the Auraria Library Challenge, 7 students completed the Avoid the Pitfalls Challenge, and 5 students completed the LinkedIn Challenge.

Feedback

Feedback was solicited from both groups: the pilot group (n=24) and the Spring 2019 participants (n=55). Survey responses were collected anonymously through the course in Canvas. Pilot group participants were also issued a follow-up survey over the phone. Response rates varied by group and at the time of writing, the Spring 2019 group was still progressing through the success course, with a small number having completed all modules and the associated survey. Overall, responses collected were positive.

All participants were asked to respond with the extent they agreed with each of the following statements using a Likert scale (strongly agree / agree / neutral / disagree / strongly disagree):

Course content and challenges were valuable.
- Pilot: 40% of respondents strongly agree, 40% of respondents agree, 20% of respondents disagree (5 total responses)
- Spring 2019: 28.57% of respondents strongly agree, 42.85% of respondents agree, 28.57% of respondents neutral (7 total responses)

The challenges helped me understand the course content better.
- Pilot: 80% of respondents agree, 20% of respondents disagree (5 total responses)
- Spring 2019: 28.57% of respondents strongly agree, 57.14% of respondents agree, 14.28% of respondents neutral (7 total responses)

The course was well organized.
- Pilot: 20% of respondents strongly agree, 80% of respondents agree (5 total responses)
- Spring 2019: 28.57% of respondents strongly agree, 57.14% of respondents agree, 14.28% of respondents neutral (7 total responses)

My instructor(s) created a welcoming and inclusive learning environment.
- Pilot: 60% of respondents strongly agree, 40% of respondents agree (5 total respondents)
- Spring 2019: 14.28% of respondents strongly agree, 71.42% of respondents agree, 14.28% of respondents neutral (7 total responses)

I would recommend this course to others.
- Pilot: 80% of respondents agree, 20% of respondents strongly disagree (5 total responses)
- Spring 2019: 28.57% strongly agree, 42.85% of respondents agree, 14.28% of respondents neutral, 14.28% of respondents disagree (7 total responses)

How much effort did you personally have to put forth to complete the challenges? (Small, Usual, A Lot)
- Pilot: 40% of respondents small amount of effort, 60% of respondents usual amount of effort (5 total responses)
• Spring 2019: 28.57% of respondents small amount of effort, 42.85% of respondents usual amount of effort, 42.85% of respondents agree, 28.57% lot of effort (7 total responses)

In addition to the Likert scale questions, participants were asked to answer the following open-ended questions:

Which challenges were the most valuable to you?
• Across all responses, each challenge was represented as one that proved valuable to the participant. The “Technology” challenge was the most represented option, with 8 respondents selecting it as one of the most valuable, followed by “Start My Research” with 6 respondents, and “LinkedIn” and “Avoid the Pitfalls” with 4 each. The “Introduce Yourself” challenge was the least selected, with only 2 respondents identifying it as one of the most valuable.

What challenge(s) did you not find useful? Why?
• Responses to this question ranged. Participants from the pilot group were more likely to express dissatisfaction with their experience, possibly due in part to their time already spent as online students. One respondent remarked, “I had already been online for school so some seemed repetitive but if I was a first time user all of it would have been helpful.” Another said, “Introduce yourself was not helpful, but I understand it helps students understand there is a social aspect to the online courses that isn't present in other classes.” Incoming online students in the Spring 2019 group were less likely to identify an area as not being useful, though there was reoccurring confusion over the purpose of the LinkedIn challenge, with one respondent commenting “I don't feel like having an up-to-date profile on LinkedIn is necessary at this point in my college education.”

Pilot participants were asked the following questions via a phone survey:

When would be the best time for you (as a new student to CU Denver) to complete an online orientation course and how much time would you want to complete the course?
• In general, the responses centered around this course being offered at the beginning of a semester and for it to be self-paced. One respondent preferred for the course to be offered at the end of a semester because of wanting to focus on other courses, but concurred that the most value would be taken by completing it early in a semester.

What information was missing from the course? What would be most helpful to include in an online orientation course to set students up for academic success?
• One respondent indicated a more comprehensive overview of department-specific services that might be offered to students (departmental career advising for example). Another mentioned including details related to topics of inclusion and diversity, disability services, and counseling. Another respondent would have liked to have seen more mandatory social interactions, with a sharing of contact information to stay connected with other fully online students.

What are the elements of the course that you would change? Why? What was most meaningful and helpful to you?
• Respondents indicated that they would include information on student organizations and academic department social interaction opportunities as part of a module. Students indicated that they appreciated being rewarded with University swag as incentive to participate. One student said that the LinkedIn challenge was the most meaningful, as the student was able to network with a professor in the department that they will not take for another semester or two.

What other types of CU Denver resources would you like to see covered in this Quest for Success Course?
• Additional resources included in responses included: additional library education, technical training on Canvas, resources on how to best complete group projects in an online environment, details on veteran resources and services offered by the University, information about the Help Desk, and an overview of safety.
Discussion and Next Steps

The creation of the Quest for Success course at the University of Colorado Denver allowed for a collaborative approach with various units across campus, in addition to the Student Success Navigators and Instructional Designers involved with the project. This offered valuable insight into how units across campus are working to meet the needs of students, online and face-to-face. Most importantly, it allowed for units to avoid redundancy and duplication of efforts.

While too early to assess the overall success, retention, and engagement of online students that complete the student success course, the overall reception from students has been positive. There is room for improvement, particularly when it comes to challenges, such as the LinkedIn challenge, that were designed to be creative in connecting and networking students with one another and professional opportunities.

The course will continue to run with new sections opening every term. The Navigators plan to construct and implement a formal teaching presence strategy based on the Community of Inquiry Framework to streamline the process for current and future facilitators of the course. The team believes that a career change and parental leave may have impacted facilitator presence in the Spring 2019 section, so more iterations are necessary to make needed changes. Additional challenges will be created, with concrete plans to incorporate an academic honesty challenge. In addition to maintaining and improving the general Quest for Success course, new versions will be created and tailored for programs identified through the new Online Programs of Excellence Partnership Award.

Ultimately, the Office of Digital Education at the University of Colorado Denver is focused on finding unique ways to engage students and promote retention across online programs. The student success course was designed as a readily-accessible collection of modules that students complete early in their online academic experience and can continue to utilize as a resource as they advance in their classes. This methodology aligns with the findings of Clay, Rowland, and Packard, who observed that “students are better served and less overwhelmed when they receive information and reminders in short chunked formats over the period of the semester, rather than through just one single information packet” (2008). Finding innovative ways to deliver this information and to keep online students engaged, motivated, and retained holds its challenges, but is vital for the success of students and for the University to thrive as an academic institution.

References


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Mentoring Programs: Embedding Alumni Mentors in Online Courses

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Abstract

Alumni can provide specialized support as mentors to distance students because of their experience as learners and as employment seekers. This paper shares an overview of mentoring and ways to connect mentors and students, including a case study of providing convenient access for students by embedding mentors in online courses.

Introduction

Anyone who has felt insecure or unprepared in work, study, or life in general understands the value of a mentor. A mentor can provide guidance for achieving goals as well as confirmation when one is on the right track. The distance learning environment can increase student feelings of insecurity or isolation from those who can and will provide support. Universities with online programs may offer ways for students to connect with mentors, but establishing and maintaining mentor-mentee relationships usually requires extra time and effort, adding to the workload pressure students may be experiencing. This paper describes two types of mentoring provided by one large online university. One is focused on finding mentors related to career needs. The second is a complement to the first, offering mentoring by alumni to support students during their graduate studies.

University-Wide Mentor Program

The University of Maryland University College (UMUC) is an open university serving working adults and those with current or former association with the military. UMUC offers a comprehensive Career Mentor Program that serves undergraduate and graduate students (https://www.umuc.edu/current-students/career-services/index.cfm). The program includes special peer-to-peer support to veterans, service members, and their families. Students and mentors are connected via electronic communication with alumni and industry professionals who have volunteered to be mentors. The program enables students to expand their networks, connect with persons in their profession, learn about emerging trends, and receive coaching support from mentors. Students and mentors are matched through a profiling system with data entered by mentors and students when they join the program; however, mentors are not always alumni of students’ programs.

The UMUC mentor program offers a valuable service in supporting students regarding career planning, preparation, and job search; however, there is another type of mentorship that can benefit students as they pursue their degrees. The Master of Distance Education (MDE) program at UMUC has implemented a peer-to-peer mentor program in which alumni are embedded in its online courses to provide immediate access to mentors. The peer-to-peer mentor program covers issues and topics that the profession-level mentors may not be able to address as effectively as those who have recently faced the same challenges as current students. In this program, peer-to-peer refers to the common basis for relationship rather than a limitation on the number of students an alumnus may serve in the online course in which they serve.

MDE Embedded Mentor Program Description

The Master of Distance Education (MDE) program has teamed alumni and students in the past, but, as with the UMUC Career Mentor Program, these relationships were established outside of the learning environment and tended to be difficult to sustain. The challenges for a peer-to-peer mentor program include: 1) finding an effective way to provide connections between students and mentors; 2) serving as many students as possible with a limited number of mentors; 3) providing immediate access to a mentor when students identify an issue; 4) providing students with mentor advice that they didn’t realize they needed; and 5) designing a sustainable program that does not require
additional investment of university resources. The MDE program is addressing these challenges by including a Mentors Module in each online classroom.

MDE mentors are alumni of the program (or may be advanced students). Mentoring is a volunteer activity. Mentors are not hired by the university and receive no payment for their services; however, serving as a mentor in a graduate program can be an important addition to the mentor’s résumé. Mentors are not permitted to interact with students in course learning activities, nor are they allowed to comment on student assignments. MDE mentors share reflections about their own student experience, post recommendations and strategies for success (e.g., how to balance family, work, and study time), comment on their experiences in job search and employment, and answer questions.

The Mentors Module is a resource area rather than learning activities module. The module contains an overview of the mentor program and the role of the mentor. Next, there is an introduction to the mentor assigned to the course, including a picture and brief bio. The module contains two or more discussion topics where mentors can post information and interact with students. Discussion topics include a) a topic for mentors to share experiences, reflections, and tips for success; b) a Q&A area; and c) other topics the mentor may find appropriate.

Mentors are encouraged to check in to their assigned classroom at least once each week to add comments about their student experience or to share recommendations for study. They also should check for questions from students and provide answers. Mentors may continue contact with individual students after a term ends if they have a relationship each finds beneficial.

**Embedded Mentor Program Beginnings**

The Mentor program began with a pilot in the introductory course for the MDE program during Summer of 2018. Two recent graduates participated in the Mentor Module. They were included in the class roster as “guest lecturer.” Student response was positive, and both mentors reported enjoying their experience. The pilot was expanded to two courses during the Fall 2018 term. Beginning with Spring term 2019, the program was extended to all twelve courses in the MDE program. The mentor team consists of twelve alumni. Each mentor is assigned to one course and will remain with that course during their time as a mentor through subsequent terms. This approach will ensure students can meet and benefit from the experiences of twelve different alumni as they go through their graduate program.

At the beginning of a term, instructors are provided with a description of the mentor program and introduced to the mentor team. The mentor role is clearly defined regarding what a mentor is allowed to do in a course and to remind instructors that the mentor is not a teaching assistant who can be assigned instructor support activities. Instructors are encouraged to participate in introducing the mentor to the class by posting an announcement and/or sending an email to the class roster. Mentors are also encouraged to introduce themselves by sending an email to the class roster.

The program is still in its early stages, and the mentor team is working together to benefit from the experience of the pilot program mentors and to share ideas for supporting students. Students are also getting used to having mentors available in their online classrooms. A check of mentor discussion forums shows that students are viewing mentor posts even if they don’t ask questions each week. One surprise from the mentor forum review was the number of post reviews in the capstone course compared to some earlier courses in the program. Both the mentor and the Program Chair assumed that students reaching the capstone course would have found successful strategies for time management and assignment completion. While this is true in some regards, the capstone experience presents new challenges for students, and they are benefiting from seeing how a peer has met those challenges.

**Moving Forward**

The MDE embedded mentor program was developed to benefit both students and alumni. The obvious benefit for students is to offer another level of support that can be invaluable in a program that serves working adults. Current students may be more comfortable discussing some topics with peers as opposed to their instructors or profession-level mentors. The program also can benefit alumni by enabling them to enhance their résumés through a service experience. In addition to the expected benefits, there has been an unexpected and positive consequence. In reading mentor reflections and suggestions, the Program Chair has learned more about student needs and challenges. This insight may lead to program improvements in the future.
The success of any mentor program depends on the dedication and interest of its mentor team. In the MDE program, we are fortunate to have such a team. Recent feedback from a mentor bodes well for the future of the program: “I’m loving the mentor role!”

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Engineering Online Learning at a STEM University

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Introduction

The Colorado School of Mines (Mines) has a long history and tradition of providing rigorous residential programs targeting degrees in STEM (Science, Technology, Engineering, and Mathematics). Mines is a public university that serves about 6,000 students annually. Prior to 2015, Mines had not offered any online courses nor programs. This paper outlines the planning and implementation process we undertook to establish and maintain high-quality online courses and programs. It also discusses why Mines choose to have its teaching and learning center, the Trefny Innovative Instruction Center (Trefny Center), lead the online development efforts to ensure continuity between the online and residential programs.

Overview of Mines Online

In 2015, Mines welcomed Dr. Paul Johnson as its 17th President. Upon his arrival, he began to lay out a plan to maintain and advance Mines as a premier STEM institution. To this end, President Johnson laid out his vision, currently known as Mines@150, which pushes campus to ensure that we offer distinctive learning experiences, increase student success, diversify access to a Mines education, and develop a more resilient and sustainable business model for the institution (Johnson, 2015).

In order to meet the needs of current and future students, Mines@150 focuses on the development of online programs to reach new student populations, better serve graduates with opportunities to continue their studies as they move into the work place, and to help industry partners and alumni in “re-tooling” opportunities (advanced workforce development).

Since Mines was in essence starting from ground zero, the University began exploring what others were doing well, where they experienced challenges, what Mines would need to adjust to move to offering online courses and programs, and how to conduct an internal analysis of processes. During the discovery process in 2017, Mines explored partnering with Online Program Management (OPM) companies. After inviting multiple OPMs to campus, and discussing pros and cons with other universities that are working with OPMs, Mines decided to coordinate and organize the online initiative internally without the assistance of an OPM. This decision was due in large part to the cost of partnering, concerns related to the ownership of materials along with the quality of course content and design, and implementation priorities associated with using this type of service.

Academic Affairs also gathered data and feedback from faculty, staff, and administrators through town hall style meetings. These meetings sought to get a sense of the level of support and understanding from campus about developing online education at Mines. The Provost also asked Department Heads to work with their faculty to develop preliminary ideas for online programs. Departments were asked to submit proposals for online programs that identified desired target student and staffing levels, how their online programs could be distinctive from peer programs, and how Mines could utilize online to support students in new ways consistent with the Mines@150 vision. These documents defined the basis for establishing the strategy and goals for developing online graduate degrees and certificates.

In 2017, Mines developed its infrastructure to launch and support rigorous online programs that would be consistent with the quality of Mines’ residential programs. The institution established a campus-wide committee named Team Online, which included sub-committees focused on IT Infrastructure, Student Support and Services, Policies and Compliance, and Online Course Standards. Mines hired an Online Program Manager, Online Learning Experience Designers (3), and an Educational Technology Specialist to support online education. Mines also instituted a new
Faculty Hiring Excellence Process to ensure new faculty were able to support rich learning experiences for all students in all modalities (residential and online).

Due to the work conducted by the committees above, Mines pursued accreditation in 2018 for multiple programs through the Higher Learning Commission (HLC). On September 16-17, 2018, HLC performed their Distance Education Substantive Change site visit and on December 7, 2018 Mines was granted “Approval for distance education courses and one program (Change Visit Actions Letter, 2018).”

During the Spring of 2019, Mines launched its first fully online, accredited graduate program in Space Resources. In Spring of 2020, Mines anticipates reapplying for accreditation for multiple programs to be able to offer degrees in Mining Engineering and Management, Data Center Engineering, Advanced Manufacturing, Computer Science, CyberSecurity, GIS/Geoinformatics, and Finite Element Analysis.

**Institutional Infrastructure for Online Programs**

To accomplish the goals set forth for online programs, Mines committed to supporting significant shifts across campus. As a new initiative, Mines put forth both financial, developmental and support resources to establish rigorous and world-class online programs.

**Financial Support Model**

Mines developed a supportive financial model to incentivize departments and programs to move to online. These incentives include:

- Each program retains 25% of the cost per student credit hour for each fully online student.
- Departments receive full FTE load for students enrolled in the online course (comparable to residential programs).
- Teaching a course, regardless of modality, counts as teaching a course for faculty load.
- The Academic Affairs division pays for instructional support (adjunct level) for the first two years the course is offered to allow time to build up the enrollment numbers.
- Departments are encouraged to “buy out” one course load for faculty during the semester when they are building a new course (online or residential).
- Innovation Funds made available to departments may also be used to help support online development.

**Online Program/Course Approval and Development Model**

Mines instituted a rigorous program/course approval process to ensure all departments followed the same internal process for online degree programs. Under this process, departments are required to submit new program proposals that include program requirements and description, necessity, administration, and cost effectiveness to Undergraduate/Graduate Councils, Faculty Senate, and the Board of Trustees. Additionally, any course or program that reduces contact hours (hybrid, online, etc.) is required to obtain approval from the President’s Executive Committee to ensure new opportunities align with the institutional mission, and that sufficient resources are in place to develop and offer new courses.

After receiving approval, the faculty member developing the course is required to take a self-paced Canvas course to get comfortable with the eLearning environment, complete a 5-week Engineering Online Learning course, and attend a kick-off meeting with an Online Learning Experience Designer (OLED). Once the kick-off meeting has been conducted, the Design/Development Phase (~12 weeks) begins for the faculty member and assigned OLED to work collaboratively on the build. The typical commitment from the faculty member is 8-10 hours each week for approximately 12 weeks to develop each online course.

For both residential and online course development, the Trefny Center utilizes a framework referred to as Engineering Learning.
Engineering Learning guides faculty through an intentional and explicit development, implementation and continuous improvement model to engineer the richest possible learning opportunities for Mines students (Spiegel, Sanders, & Sherer, 2018). The OLEDs work in collaboration with the faculty to define clear learning outcomes, design tasks that supports students in mastering the outcomes, select or create assessments that directly assess the outcomes, and then build the course so that there is an intuitive flow that supports student success. Where possible, scaffolds and supports are developed to increase supports for the diversity of learners in a course.

Once design and development are complete, the course undergoes a Course Review and Revision Phase (2 weeks). A faculty member and a Trefny Center staff member each checks the course design against Mines Online Program Course Standards for outcome alignment, assessment measures, quality, and accessibility. The reviewers have one week to review and faculty members have one week to make revisions.

As each course is being taught for the first time, an OLED actively observes interactions between the instructor and students to provide real-time feedback on the course enactment. Faculty are guided in their enactment through the coaching and Mines Online Facilitation Standards. These standards are intended to help faculty create opportunities for learners to interact with each other, the instructor, and the content. The coaching also includes regular review of course data including a mid-semester and end-of-course survey. The mid-semester survey is administered to all online students to monitor their perceptions of the courses at mid-course so that adjustments can be made, if necessary. The end-of-course survey is administered at the completion of the course to collect data on course design, quality of feedback, classroom climate, relevance of material, and overall effectiveness of instructor and course.

Once the course has concluded, the Continuous Improvement Phase (time varies depending on data) is implemented based on feedback obtained by students and observations by the OLED. The data is reviewed to determine what revisions need to be made before the course is taught again to ensure it provides rich and rigorous learning opportunities.
Online Support

Technical assistance and support are available through the mines.edu and online.mines.edu websites. Support for the Canvas LMS is available from both Instructure (vendor) as well as from the Mines Technology Support Center. Additional support and information are available through support guides within Canvas and the Mines website for both faculty and students.

Mines online students have full access and privileges to many Mines resources including; library services, the writing center, tutoring through academic departments/faculty members, Mines bookstore, Disability Support Services, Career Services, Veteran Services, Blaster Card services, select organizations, training and professional development, counseling, CARE at Mines, and technical support through the Technology Support Center.

Students can access all of these services and more through the Mines Online website. These services are monitored by several committees and respective departments responsible for each service. Student are also surveyed periodically on their use and satisfaction of the services offered by Mines. Periodic announcements are made to all online students connecting them to Mines resources and the online learning community. Additionally, all of the student monitoring and supports currently utilized by Mines in residential programs will be used in the online programs.

Conclusion

Through these processes, in just two years, Mines has developed and launched 12 courses with 19 more in production and 20 waiting to be developed. The Trefny Center has trained 67 faculty through the Engineering Online Learning course to date. The fully-online Space Resources program is set to graduate its first set of students in Spring 2020. It is a strong belief at Mines that the development process, institutional leadership, supports and incentives are leading to the creation of distinctive and high-quality online courses and programs that compare to the quality of Mines residential programs. Retention rates in online courses are about 94%, which is comparable to residential success rates and notably higher than other STEM online programs.
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Creative Strategies to Support Student Engagement While Expanding Resources

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Abstract

Graduate faculty utilized an instructional design course to foster the engagement of students during a team project, ultimately building the skill sets and portfolios of the students. When a graduate online course needed re-shaping, the instructional design students were assigned the project, leading to the application of their skills. The end result led to the creation of a more engaging course design.

When student evaluations from an online course lend themselves to course improvements, a design thinking approach can become the solution to creating a more engaging course structure. Due to the completion of a learner analysis, involvement of key stakeholders, and review of learning technologies, student success outcomes become the priority (Stone, 2017). Design thinking allows room for creativity and innovation and builds on failed attempts (Gilbert, Clark, Crow, Anderson, 2018; Gobble, 2014). In this best-practices paper, the processes taken by faculty who utilized design thinking to reshape a distance graduate course in evaluation will be shared, including the necessary steps taken to model a course design reflective of student input.

Design Thinking

Improving online course delivery through design-based approaches supports case study findings which demonstrate that courses taught online must be flexible - when based heavily on text delivery, learning falters, students are disconnected, and communication among instructors and students suffers (Boling, Hough, Krinsky, Saleem, & Stevens, 2012). When applied to higher education as a whole, design thinking lends itself to growth, meeting social demands, and creating solutions to the challenges many institutions face (Gilbert et. al., 2018). Faculty were prompted to utilize design thinking due to its reputation for solving problems of practice. As leaders and faculty of distance education programs, the role of relying on the process of design thinking is appropriate. A study centered around using design thinking as a method of teaching a course provided themes relevant to course redesign (Henrikson, Richardson, and Mehta, 2017). Using design thinking to update a distance course took on a problem-solving approach, leading faculty to exchange ideas with students, incorporate new technologies, and refresh assignments to provide a more practical approach to solving problems faced in the classroom. While design thinking has predominately been used in business models, the educational realm is learning to embrace its practicality.

Research describes a problem of practice as a “complex and sizable, yet still actionable, problem which exists within a professional’s sphere of work” (Henrikson, Richardson, and Mehta, 2017). The Stanford Model of Design Thinking incorporates five phases: define (identify the problem and stakeholders), empathy (understand the problem, behaviors, and people), ideate (brainstorm), prototype (build a plan), and test (learn by implementing the plan); by the end of the five-stage cycle it is critical to revisit the define phase to re-envision what can be done to improve upon the design in place (Plattner, Meinel, Leifer, 2010).

The Project

The redesign of a graduate online course focused on three key elements: 1) meeting the learning outcomes of graduate students enrolled in an online instructional design course, 2) developing opportunities to promote a course re-design, and 3) implementing an effective model promoting student engagement. Assessment of the newly designed course is in progress and data will be collected at the end of the Fall 2019 semester. The goal of this paper
is to share the process followed by faculty to build course revisions based on the design thinking model while engaging students in the process.

The first stage of the design thinking model, the “define” phase, involved determining which course needed revising. This step was relatively simple because student evaluations from a previous semester from the course revealed telling signs that a need existed for more integrated technology and more interaction among students and the instructor. The second phase, “empathy”, was based on valuing the feedback provided by the students’ evaluations, but also allowed room to consider how students, currently enrolled in an instructional design course, would benefit by serving as informal evaluators for the program offering suggestions for revisions based on the skills they were acquiring in their course. Phase three, “ideate”, involved two faculty members determining the best approach to include students in the design process. A plan was developed and the instructor who sought the course restructure provided examples of what was needed in the course and requested their perspectives as students in promoting student engagement opportunities in the course. The fourth phase, “prototype”, is the one in which a plan was developed. The instructional design students provided a report, which outlined a plan for incorporating new techniques and technologies for the course, as well as ideas for more interactive assignments. This allowed the instructor to build the course according to both their suggestions and the evaluative feedback from previous students. Currently, the “test” phase is underway. The instructor has plans to request student feedback through a mid-term evaluation, which will shed light into their satisfaction level with the course so far.

**Concepts for Improving the Course**

Various contributions from the instructional design students made their way into the restructure of the course. Revisions to the course included: switching from narrated PowerPoint lectures to VoiceThread, moving traditional discussion boards to Google Slides, incorporating opportunities for visual learners through Sketch notes, and revising assignments to incorporate practical learning with real clients.

**Concluding Thoughts**

Approaching this project took forethought about meeting the needs of students while seeking to understand the process that would lead to success. By incorporating a design thinking model, transformation is occurring in teaching and learning, and the goal to improve the chances for student success, inclusiveness, and outcomes is becoming a reality. The use of design thinking is a strategy that can be applied to projects spanning across the disciplines in higher education.

**References**


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Designing Recruitment Strategies to Advance Diversity in Distance Programs

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Abstract

Increasing the diversity among applicants in a distance graduate program can be achieved by implementing strategies designed to provide outreach to minority populations. This paper presentation will share examples of how the diversity in a doctorate distance program changed because of recruiting with purpose.

As online graduate programs develop recruitment plans there are many ideas to consider; the overarching question is what population is missing from those who are employed in the job market in the particular field of study? For example, one research study addresses the lack of cultural diversity in school psychology jobs, which led to a multilevel framework for the recruitment and support of a more diverse graduate student population for the program (Grapin, Lee, and Jaafar, 2015). The development of recruitment strategies for distance programs can depend upon a multitude of concepts and requires thought beyond getting students in the door. This paper will provide the strategies one distance graduate program implanted to support a more diverse student population.

Plan for Recruiting

The plan of recruitment for a hybrid doctorate program focused on gaining access to alumni and stakeholders who could be strong advocates of the program. Since the program is structured to see value in equity, diversity, and inclusivity, it made sense for the recruitment plan to embrace those characteristics in the outreach to potential applicants. Stakeholders and alumni were included in the process and were asked to make recommendations to the program. Service in this form served two purposes: to identify potential applicants who may not otherwise consider the program, and to make connections with potential applicants from rural areas of the state.

Incorporating Evaluation

Program evaluation is critical in organizations to mitigate failures and to propel success. The program selected a widely respected practitioner in the field relative to the program to conduct an external evaluation, which ultimately offered guidance on supporting the application process for potential students. Part of the recommendations included: visibility at minority-led events and conferences connected to the program discipline, feature minority students on marketing and communications materials, seek opportunities for training on equity and diversity, and measure demographic data over time for the program’s students.

Plan Implementation

Guided by the external evaluation, and preliminary planning discussions among faculty, recruiting efforts were geared towards visiting rural counties to extend information about the distance program with interested individuals, offering professional development in addition to program information, which allowed potential applicants to learn more about concepts and topics which may be covered in a course, and establishing outreach opportunities for recruitment sessions at minority-led conferences. In addition to the strategies mentioned, faculty who serve the role of recruiter also host virtual information sessions and seek the support of currently enrolled students to stretch the efforts of recruiting to a more diverse population of potential applicants.
Concluding Thoughts

Adding strength to the processes of recruiting for distance programs can be the determining factor of success. Aligning the recruitment process with the vision of the program is critical (Rovai and Downey, 2010).

References


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