Unlearning the Past: New Foundations for Online Student Retention

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Abstract

Many factors affect students selecting a university to attend and almost as many factors that can present challenges once they enroll and begin attending classes. Once they start taking courses, the next challenge is completing them, and this can be particularly taxing for online students. In the case of online universities, quality assessment criteria of the online courses and faculty may vary. Thus, it is important not only to get feedback from students, but also to look at course completion rates. The purpose of this paper is to share lessons learned regarding factors that significantly increased student online course completion rates at one online for-profit university. This study looked at a researcher's search for strategic factors that considerably increase course completion rates and identified assessment strategies to improve those course completion rates. The researcher's collaboration with researchers from another university led to findings that revealed best practices and assessments factors successfully applied in online courses. Administrative changes at the researcher's university led to retention efforts that have positively affected student retention. One major factor observed by the researcher included analytical writing assessments and their predictive value for doctoral student retention. Results of the implementation of the changes at the researcher's university included a 39% increase in retention of first year doctoral candidates, from a low of 39% in 2011 to 75% in 2012.

Keywords: Higher education administration, online student retention, collaborative research, assessment strategies, doctoral student completion rates

INTRODUCTION

How adults learn is more important now than ever before. A literate and successful online graduate student of the 21st century must not only learn, but also unlearn, and relearn (Toffler, 1998). Higher education's renewed emphasis on practitioner-based outcomes is gaining momentum at the graduate level across the United States. The first to feel the pressure to reform graduate education are small, for-profit universities under scrutiny by the U.S, Department of Education and regional accrediting agencies due to high attrition rates for online learners. This study focuses on a small, fully online private university in the Western U.S, which learned, unlearned, and relearned what a doctoral degree program should be for 21st century. Because of this research, the university transformed its online doctoral degree programs from traditional content-based programs with a research component to integrated research-based programs. These changes included sponsored research projects embedded throughout the curriculum and a final research component that resulted in a dissertation with practical recommendations for the research sponsor as well as adding to the body of knowledge. This study not only looked at the additional factors that positively influence student success, satisfaction, and retention and how to implement them in a virtual classroom environment, but also established a standard for future fully online doctoral programs.

Financial sustainability is forcing administrators, deans, and faculty oversight committees, more than ever, to focus on ongoing management requirements, regulatory and accrediting organization changes, income and expenses, student enrollments, completion rates, and instructor assessments, as well as other operational needs. Higher education leaders, in order to be prepared for uncertain futures and financial challenges, must be equipped with options to be able to meet

strategic plan goals. This study focused on factors that might positively affect online course completion rates at a Western U.S. private university; specifically, it looked at analytical writing assessments as predictors of success at the doctoral level (Gannon-Cook and Sutton, 2012).

The researchers investigated best online course practices as well as faculty and course assessments from a number of studies in addition to student analytical writing assessments at the university. The results provided insights into which factors might achieve the desired results of increased student retention in online graduate level courses. As a result, the university adopted a multifaceted approach to enhance student success and satisfaction, which begins with the admissions and orientation process. The analytical writing assessments resulted in a major factor as predictors of success for doctoral candidates (Sutton, Gannon-Cook, 2013).

Recommendations for future research include more research regarding analytical writing assessments as predictors of student success. Parceling out each assessment criterion as potential factors may be more effective in predicting the persistence of doctoral candidates in online courses. Additional assessments of both students and instructors could reveal more insights into student retention in online courses.

Definition of Terms

For the purposes of this study, the researcher used some terms interchangeably; the researcher used *online learning* and *e-learning*, and other terms, such as *distance education* and *Internet-* or *web-based* learning interchangeably throughout the research study.

Traditional student, according to the National Center for Education Statistics (NCES) (2008a, 2008b, 2010, 2011), is a person enrolled in the university in the age range from 17-19 years old. Additionally, the *Traditional student* has graduated from high school, has gone straight to college and "completes their bachelor's degrees in four or five years at a young age of 22 or 23" (Center for Institutional Effectiveness, 2004, p.5).

Adult student, an adult student is a person at least 24 years of age up to 100+ years of age (Eastmond, Gannon-Cook, 2007).

A REVIEW OF LITERATURE

Literature Review as Research

The literature review as a form of qualitative methodology (deVito, 2009), and in this study the review included books, journal articles, and reports, based on the seminal value by expert authors in the field and the timeliness of academic currency (written within the last three years). Researchers collected data on students, instructors, and distance learning and divided the topics into sub categories and scaffolded to mine seminal data and important kernels of knowledge on e-learning (Howell, Williams, Lindsay, 2003).

Several research topics of particular relevance to this study included: what did the research reveal about student retention in online courses?; which factors increased student online course completion rates in other research studies?; and, did online instructor assessments provide an accurate representation of best teaching practices in online courses? The researchers looked for studies that could provide data to address these topics as well as research that could unearth any other topics that might surface in the research to shed light on student retention in online courses.

In addition, the researchers reviewed literature on adult learners and cognitive load, motivational theory, and socio-cultural factors, such as work, family responsibilities, financial stresses, and self-regulation, and their effects on students in online courses (Gannon-Cook & Sutton, 2012).

Research on Student Retention in Online Courses

During the 1980s and 1990s over 20 national study groups determined from research the need to put students first (Boston, Ice, Gibson, 2010;Schroeder, 2003). One of the most important findings related to student retention, in both on-ground (traditional) courses and on-line courses, was that institutions with the lowest selectivity criteria (open enrollment) also have the lowest retention rates. These programs were the least selective; in many cases with open enrollment, students only needed high school graduation certificates and minimal grade point averages (GPA's) for admission to the university (Sutton, Gannon-Cook, 2013).

The U.S. Department of Education isolated 51 common factors across thousands of studies of online courses at various universities and concluded that, online learning can be more effective than face-to-face learning (U.S. Department of Education, 2009), yet, despite this positive finding, there still remains a problem with high student attrition from online programs (Diaz & Cartnal, 2006). Patterson and McFadden (2009) found dropout rates to be six to seven times higher in online programs. Regarding online doctoral program persistence, research is very lean as most of the research focused on traditional residential programs. Most universities across the U.S. reported a 50% attrition rate for doctoral programs (Nettles & Millett, 2006) without any differentiation between online and residential programs. High rates of doctoral student attrition have persisted for the past 40 years with estimates across disciplines (education, engineering, humanities, sciences, mathematics, and social sciences) between 40 and 70% (Burkhalter, 2006).

Thus, online doctoral degree programs may have an even higher attrition rate than 50% (Sutton, Gannon-Cook, 2013).

Factors That Increased Student Online Course Completion Rates

Social Integration

Social integration and student enlistment in online courses contributed to increased (or decreased) student retention rates (Astin, 1993; Spady, 1970; Tinto, 1975, 1993) in many research studies. The seminal research of Tinto (1975, 1993) on student persistence revealed that the greater the level of academic and social integration, the greater the student's chances of persisting until graduation. Many studies since have echoed these findings regarding student cohorts (Gardner, 2008; Holmes, Robinson & Seay, 2010) as well as strengthening the bond between the doctoral candidate and the mentor or advisor (Cockrell & Shelley, 2010; Holley & Caldwell, 2012).

Online interaction gives students practice in communicating their ideas. Adults want and need to feel that they are included in a community of learners with whom they can share their ideas, their struggles, and their successes. Creating a sense of community helps to keep students focused and motivated. Faculty set the expectations for interactions that support equity, respect, collaboration, and sharing of multiple perspectives (Wlodowski & Ginsberg 1995).

Assignments in a community of learners, emphasizes a shift in authority from teacher to students. In collaborative learning, the student takes ownership of her or his own learning with tasks less structured by the professor (Cross & Steadman, 1996).   Class activities and discussions incorporate students' life experiences as much as possible. Students construct

knowledge as equal partners in a community of learners. Students actively participate and each student brings a unique culture, identity, and experience to the discussions and assignments. John Seely Brown explored how technology in the form of advanced multimedia information systems (Brown, 1997) can create what he called a collective social mind to create a community of learners. In Brown's book, *The Social Life of Information*, he discussed the ways in which learning communities are capable of generating, sharing and deploying highly esoteric knowledge (1997). In the learning community, the assignments and assessments are authentic and use real life examples and problems. Students are motivated and engaged because the learning is project based, and has value outside of the classroom. Boettcher and Conrad (2010) noted, "The goal of a community in an online course is twofold: building knowledge and competencies within learners and building a network of mutual respect and the share of ideas and perspectives" (p. 55).

Financial and Employment Status

In a very recent study, Ampaw and Jaeger (2012) identified the importance of financial aid in predicting degree completion. The researchers determined research assistantships have "the highest likelihood of degree completion" (p.1) compared with students who had other forms of student financial aid. They also investigated whether the labor market affected persistence, and they determined that market conditions also influence persistence rates for doctoral candidates in the later stages of the program. Gittings (2010) found that the employment status as well as the age of the student "may have a positive influence on doctoral degree completion" (p. viii). Specifically, Gittings (2010) determined that paired with satisfaction with the dissertation chair, doctoral candidates employed full-time produced a significant positive relationship with doctoral degree completion (Sutton, Gannon-Cook, 2013).

Sociocultural Factors

Many online course developers overlook cultural factors in online courses, largely because a wide array of students from many cultures must take those courses; and the truth is that 80% of the online programs, until recently, have been in English. In some cultures, in addition to online courses being provided in another language, the lack of computer access and technology tools have made access to online learning difficult. Thus, efforts to get communities involved, churches, community centers, and programs that enlist parents all have excellent results because when the community members surrounding learners become involved, it is much easier to keep the learners involved too. In many instances, the culture of the community may not have been inclined to encourage learning beyond 6xth - 8th grades, or beyond high school, but by getting families and social environments involved and supportive of these learners, those communities can learn to be supportive of their progeny (Sutton, Gannon-Cook, 2013). Without the social support, online students not only face isolation, but also often stress and overload from the additional requirements of online learning.

Vygotsky (1978, 1985, and 1986) offered the basis for a culturally grounded theory of cognition, with the concept of "mediated tools" linking culture to the functions of consciousness. There is an ongoing need to guide the development of online coursework, and take into consideration not only historic references, or new technologies, but to monitor the structure of learning management systems (LMS) systems and how they frame student presentation of new content materials in online courses. Moreover, course developers can establish a standard that would also

enlist students' participation and help bridge gaps that might exist from a result of lack of face-to-face contact with instructors (Sutton, Gannon-Cook, 2013).

The first researcher conducted research on the societal, economic, and every day influences that affect students coming into online courses but which course developers often leave out of courseware design. Many researchers (Salomon, 1997; Eisner, 1997; Gannon-Cook, 2012; Jonassen, 1999; Richey, Klein, & Tracey, 2011) indicated that sociocultural influences reflected strong effects on learning. Often, however, instructional designers begin the course development process with a view of the course, content, and technology requirements, so these sociocultural influences are seldom considered in the initial course design considerations, yet the research supports their inclusion could be beneficial, particularly for online learnrs. These factors seem to become even more important in on-line course design because of the inability to see the instructor and/or other students (Sutton, Gannon-Cook, 2013).

The second researcher reviewed whether online courses included assessments of not only the students, but also the instructors. He also reviewed the knowledge content to be sure that there was sufficient transference (adequate acknowledgement of understanding by the students) to comply with his university's assessment requirements. His findings reflected that, not only did assessments reinforce learning, but also reinforced greater interactivity between the students and instructor and helped students feel more connected to both the course and the instructor (Hirumi, 1999).

The team members reconvened and discovered in the sharing of their findings that there were factors in their research that may need more in-depth exploration. In order to discern which factors were significant in affecting students' learning, researchers needed to conduct additional studies.

The second researcher found that assessments, like those used in his research, did seem to reinforce learning. He felt additional research could be done to see which type of assessments might be more effective in online courses; while specific formative and summative tests had merit, authentic assessments, such as portfolios, and other assessment tools, could target students to demonstrate mastery of learning and encourage them to complete their online coursework (Sutton, Gannon-Cook, 2013)..

Democratization

Another factor that can have a pervasive effect on course completion is basic access to higher education. Access gives students opportunities that transform their lives; the outcomes of which are intellectual growth; improved economic opportunities; a higher level of critical thinking and problem solving skills; higher expectations for future generations; and global awareness. In his seminal work, John Dewey (1938) believed that access to education and institutional flexibility had a democratizing effect on society. He proposed a holistic approach to education - non-standardized for all, in which each individual should have the opportunity to develop to his or her full potential. The historic marginalization because of class, race, gender, or ethnic origin has precluded many individuals from realizing their full potential. Greene said, "If one human being is demeaned, if her or his family is delegitimized, crucial rights are being trampled on. This is partly because persons marked as unworthy are unlikely to feel good enough to pose the

questions in which learning begins, unlikely to experience whatever curriculum is presented as relevant to their being in the world" (Greene, 1993, p.2).

Paulo Friere describes the different ways in which people respond to an educational setting. The entire college experience intimidated returning adult students; they have families and jobs that compete for their time. They are often self-deprecating and do not recognize the full extent of their own knowledge, skills, and abilities. In a college class, they perceive that their professors have all of the answers and that professors are the owners of the knowledge and the students are simply receptacles (Friere, 2000). Learning is an experience that causes permanent change to an individual, after the mind cannot be closed again once opened to different perspectives and new ideas. An online learning environment provides students with safe and convenient access to an education, in which they can reflect on their ideas and refine them before sharing with their classmates or the professor (Sutton, Gannon-Cook, 2013).

Democratization, however, does open the door to individuals who may not be as well prepared as others for the rigors of an online doctoral degree program, which may negatively influence persistence. As noted earlier, with most universities across the U.S. reporting a 50% attrition rate for doctoral programs (Nettles & Millett, 2006) and online programs possibly having an attrition rate higher than 50%, possibly as high as 70%, universities unlearning what does not work is the challenge without denying access to those underserved and underrepresented in higher education (Gannon-Cook, Sutton, 2012; Sutton, Gannon-Cook, 2013).

Theories Supporting the Research Conducted in this Study

Motivational Theory

Motivation theory has evolved from human behavior research in the scientific study of human psychology. The meaning of the word, motivate, is "to provide with a reason to act, to cause or impel to action" (The Online Merriam Webster Dictionary, n.d.). In the field of psychology, French (1990, p. G-14) defined the term "motivation" as "the desire and willingness of a person to exert effort in order to achieve a particular goal or outcome." In *The Adult Learner* (1998), Malcolm Knowles noted that adult motivation occurs because adults, in general, become ready to learn when their life situation creates a need to know (Sutton, Gannon-Cook, 2013).

Motivation theory looks at the factors that influence "an individual's willingness to exert effort to achieve…goals, conditioned by this effort's ability to satisfy individual needs" (DeCenzo, 1996, p.327). Motivation theory also poses that humans are motivated by two basic levels of human needs: lower level needs of physiological (food, sex, security), and then higher level needs (love, belonging, self-esteem, and self-actualization) (Maslow, 1970). These needs motivate humans to work, and develop relationships, based on each person's hierarchy of needs. The first level of needs involved basic survival needs; the needs for food, shelter, safety, exchange currency, all extrinsically motivate a person to perform the actions of work. Once the person's basic physiological needs are met then one moves on to desire the next level of needs, those of acceptance, love, higher self-esteem and self-actualization (Bruner, 2007; Gannon-Cook, Crawford, 2004; Gannon-Cook, 2010; Sutton, Gannon-Cook, 2013; Maslow, 1970).

Adult Learning Theory

There are fundamental differences between how children learn and how adults learn. Adults are intrinsically motivated to learn, they are interested in real world applications of knowledge, they want to feel a sense of ownership of the learning process, and they want to enjoy the learning experience (Knowles, 1998). To provide stimulating and engaging opportunities for adult learners, the university endorses a project-based framework as its teaching model. Project-based applied learning supports students in their cognitive development and motivates them to persist. Through experimentation and collaboration, students take ownership of creating, rather than mimicking knowledge. They learn to weigh arguments carefully, ask questions, suggest answers, and think independently. This flexible thinking teaches students that there are a number of solutions to any given problem. Some solutions may be better than other solutions, but there is more than one way to approach and solve any given problem. This practice will give them the tools they need to be successful in the future. Psychologist, Jean Piaget (1976) said, "A student who achieves certain knowledge through free investigation and spontaneous effort will later be able to retain it; he will have acquired a methodology that can serve him for the rest of his life" (p.107)

Brooks and Brooks (1993) reiterated the value of experiential learning when they stated, "For students, schooling must be a time of curiosity, exploration, and inquiry, and memorizing information must be subordinated to learning how to find information to solve real problems" (p.9). There are many important aspects of learning; however, it will serve students well in the future if they have the ability to apply the knowledge they have gained to many different scenarios and problem solving. Jerome Bruner (1963) believed that the first object of any act of

learning, beyond pleasure, is that it should serve us in the future, and that learning should allow us later to go further more easily. To prepare students for the rapidly changing world, we encourage experimentation; and independent thought is crucial in student and individual development to be successful people in the future (Sutton, Gannon-Cook, 2013).

Cognitive Load Theory

John Sweller (1988, 1994) first used the term cognitive load to describe the amount of pressure related to the mind and its working memory (WM). The theory associated with cognitive load contends that the more stress, activities, and information added to a person's short-term memory, the more that person has difficulty processing and retaining the information and becomes overwhelmed by too much information. There are varying numbers as to how much information becomes too much, before overload, but the general consensus is that of around seven pieces of information the mind can retain before it begins to feel overloaded and stressed (Miller, 1956). However, cognitive overload is often difficult to identify in students, particularly online students. A researcher generally cannot directly observe cognitive overload in an online course except in some kind of a synchronous or voice-over-Internet (VOIP) environment (Gannon-Cook, 2012). Students are usually monitored solely by the instructor auditing students' participation in online course discussions and other interactivities, by assessing their homework assignments, by evaluating their emails and interactions with the instructor, and, ultimately, by the students' successful (or unsuccessful) completion of the course.

In online courses, students not only need to learn the new course materials, but also have to know or learn how to use the technology in order to navigate the course effectively. This with the processes related to higher-order thinking, such as problem-solving, knowledge transfer, and the

complexities of learning, leads to a multiplier effect that can exacerbate the effects of all these concurrent activities on learners (Cooper, 1998; Pavio, 1990; Baddeley, 1992). This can lead to cognitive overload and discourage, even overwhelm, students early in the course so that, by the time key assignments are due, the students may already be experiencing burn out (Sutton, Gannon-Cook, 2013).

METHODOLOGY

Design Development Research

The second qualitative methodology (the first being the historical review of literature) utilized in the study was a developmental research design (Richey & Klein, 2007; Richey, Klein, & Tracey, 2011). "Design and development research seeks to create knowledge grounded in data systematically derived from practice" (Richey & Klein, 2007, p.1). The researcher's observations of online courses in both of their home universities supported the findings of prior research in several key areas. First, students seemed to be more interested in interaction with the instructor and desirous of meaningful feedback from the instructor, not just a post saying "good job" or "receipt acknowledged"; and despite so many students having exposure to personal email and texting, even technologically sophisticated students sometimes seemed confused and frustrated by inconsistent information and formatting in their online courses.

The development design research included a review of some of the courses in the study so the researcher could search for elements that could positively affect or potentially frustrate students in online environments (Sutton, Gannon-Cook, 2013).

Design and development theory "can be informed by contextualized findings as well as those generated by data derived from traditional sampling techniques" (Richey & Klein, 2007, p.130). This type of data can provide important insights, and found in online courses in areas, such as the discussion threads of the courses as well as in the emails, chats, blogs, and Skype sessions with students. The findings suggested that the human need for approval, as well as the need to be heard, were very much present in these students' minds, even more so than just their expressed desires for quick response time from instructors, or for more technologies.

Assessment Data of Online Course Instructors and Best Online Teaching Practices

Gannon-Cook and Sutton (2012) determined that reviewing assessment data is a vital element in establishing best practices for online educators. The researchers collected data from each online course at both universities, and then distilled into reports for each quarter. While most instructors received above-the-median assessment scores for their teaching, it was difficult to glean additional information from the data. Students were quick to complain if the technology faltered, even for a few minutes, and quick to report if an instructor did not respond to them within a 24 hour business day period. However, they were not as quick to provide insights into instructors' teaching, unless they were angry with the instructor, and then perhaps they would post some additional remarks. After reviewing the literature on student retention in online courses, and in reviewing data on design development research, both researchers felt the encouragement of students' voice and the encouragement of safety zones to speak freely within the online course environments would help encourage richer dialog as well as authentic assessment of students' attitudes and reactions to the courses. The hope would be to catch students who were flailing or beginning to drop out before it was too late and they left the course. Future research could assess whether certain measures designed to thicken the dialog and interactivity of students in targeted online courses could be successful in retaining students through to the end of those courses. If so,

other online courses in the program could incorporate those course measures.

One of the universities retrained faculty members who teach exclusively in the doctoral programs in various aspects of on-line teaching, which incorporated findings from the research. In addition, course developers redesigned initial course offerings to provide the additional support needed by on-line learners (Gannon-Cook & Sutton, 2012). Preliminary data indicate a substantial increase in student retention since initiating these changes as well as changes to admissions.

Advisor-Advisee Relationship

The bond between the student and the student's advisor or mentor is an essential factor affecting retention. Many researchers identified the relationship between doctoral students and faculty members as a key component of a successful graduate school experience. Holley & Caldwell (2011) indicated that the high student attrition rate from doctoral degree programs in the United States remains a troubling aspect of higher education with over half of the students who begin a doctoral program ultimately failing to complete their degree. They noted that efforts to improve degree completion generally focus on financial support, academic preparation, professional development, and mentoring relationships, which emphasized the significance of mentoring relationships between graduate students and their professors as a critical factor in determining the successful completion of graduate programs.

Barnes, Williams and Archer (2010) noted that the relationship doctoral students develop with their advisor is one of the most important of their graduate education. Their research indicated that advisors play a critical role in many aspects of the doctoral degree process; and they noted

that doctoral students regarded their advising experiences as positive when advisors were accessible and helpful as well as socializing and caring. However, they identified being inaccessible, unhelpful, and uninterested as negative attributes of advisors.

Reflective Writing

Educators often used writing to reflect systematically on the student learning process "to develop the aptitudes, skills and habits that come from critical reflection" (Zubizaretta, 2004, p.15). Learners need time to consider a question before answering, so students are encouraged to take time to formulate answers. Outside of the classroom, there is more than one solution to any problem. There are multiple ways to look at life and it is good intellectual exercise to try to see that there is more than one correct answer when solving problems. Thus, students elaborate on their initial response to any question to refine or broaden their answers.   Faculty members model reflective thinking throughout the learning process. Metacognition, as defined by Cross (1996), consists of two parts; an awareness of one's thinking and reflection on that process as well as learning methods to control the thinking process. Students think about how they think and learn how to use the process to their best advantage. Independent learning and reflective thinking result from greater autonomy in learning (Sutton, Gannon-Cook, 2013).

Reflective journal assignments include a recitation of facts plus the students' interpretation of the ideas, events. Students write about what they learn, but also what they thought about the topic or the idea. Students process the information to write a narrative that state the facts, but also what the facts mean, and why it mattered. Students use higher level thinking skills to evaluate, synthesize, and analyze information from multiple resources (Bloom, 1956). In his 1933 treatise, *How We Think*, Dewey said, "We state emphatically that, upon its intellectual side, education

consists of the formation of wide-awake, careful, thorough habits of thinking" (pp. 78-79).

Habits of thinking are borne of reflection (Sutton, Gannon-Cook, 2013).

Analytical Writing Assessments

Multiple forms of assessment allow students to select the methods that best demonstrate their learning. In most online course offerings at the researcher's university, a portfolio is required on the last day of class that includes a table of contents, an introduction, a conclusion, and a selection of assignments from each course. These analytical writing assignments include reflective journals, essay writing, portfolios, and cooperative efforts on critical thinking questions.

The researcher in this study also wanted to know whether an evaluation of the student's writing skills might have predictive value regarding doctoral program persistence. Lin, Baker, and Dunbar (1991) described five elements of performance or skill assessment: (1) focus on complex tasks, (2) practice critical thinking and problem solving skills, (3) require active student involvement, (4) explore multiple processes, and (5) encourage students to expend considerable time and energy. Reflective journals, essay writing, portfolios, and cooperative efforts on critical thinking questions are authentic methods of assessment.

The administration and faculty members collaborated to design an assessment to determine the doctoral candidate's ability to write professionally prior to program matriculation. Course designers embedded the analytical writing assessment into the mandatory orientation course in two stages. In assessment one, the student completed a short essay from a selection of pre-approved topics and received formative feedback. The students were then required to

incorporate the feedback in a second essay, which was assessed on multiple criteria, including grammar, critical thinking, APA, etc. Doctoral faculty rated students as Basic, Developing, Proficient, or Advanced as writers. The university did not allow "Basic" writers to matriculate. "Developing" or "Proficient" writers completed two doctoral foundations courses in writing and research in their first term to solidify and sharpen their skills. Candidates assessed as "advanced" were not required to take the foundational courses. Doctoral faculty conducted a second writing assessment at the end of the students' first term, which faculty analyzed and compared with the first writing assessments. The university then added a third writing assessment to the end of the candidates' first year of doctoral classes. Additionally, the university created a doctoral success team to monitor and intervene if candidates showed signs of disengagement. The team consisted of doctoral faculty, admissions counselors, student success counselors, and administration (Sutton, Gannon-Cook, 2013). Early monitoring by a doctoral success team, based upon a successful undergraduate success team model, indicated positive student retention trends with future research to follow the student cohorts longitudinally.

Findings

After implementing the writing assessments, doctoral success team, and other curriculum changes at the university, doctoral student retention increased significantly. Only 58% of the fall 2011 doctoral cohort, who matriculated prior to the changes, completed their first 16-week term and only 39% completed their first year of doctoral level classes. Conversely, 100% of the fall 2012 cohort, who completed the series of writing assessments and were monitored by the doctoral success team, completed their first term and 75% completed their first year of doctoral classes. When compared to the previous doctoral cohort, the researchers noted a 39% increase in retention for those who completed the series of writing assessments in fall 2012. The fall 2013

cohort of doctoral candidates followed suit with 100% completion of their first term (Sutton, Gannon-Cook, 2013).

SUMMARY

The researcher in this study found from ther research on other studies of student online course retention that, first; students seemed to be more interested in interaction with the instructor and meaningful feedback, than just quick responses from the instructor; then second, they want to have their voices heard and not be just a name on a discussion board. Students see the faculty members' role as that of coach and mentor. Students appreciate the opportunities to be a valued member of a learning community that is flexible and asynchronous with vast and flexible learning resources, and authentic assessments. E-learning can facilitate adult students by increasing interactivity and depth of discussion. Students to engage in the coursework, to participate with faculty and their peers in a learning community may be more likely to persist until they have completed their degree programs.

Other findings from the research reinforced using authentic assessments and provided insights into which factors course designers applied to online courses, including the encouragement of student voice and of their narratives.

This study looked at a faculty researcher's search for strategic factors that could contribute to increased online course completion rates at one university and how to assess both students and instructors more effectively on a timely basis. The efforts at collecting this data were to improve student participation and increase online course completion rates. Administrative changes at the

university included implementation of these factors, and monitoring of the initiatives reinforced that the changes were having positive impacts on student retention. Faculty and administration implemented the first major change, the adoption of an Analytical Writing Assessment as part of a mandatory orientation. As a result, the university recorded a substantial increase in student retention in first term and first year doctoral online courses.

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