Toward an Understanding of Faculty Perceptions about Factors that Influence Student Success in Online Education

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Abstract: This paper explores factors that faculty perceive as significant in influencing student success in online education. Technological support, degree of comfort with technology and a student’s personal characteristics were deemed by faculty as critical to success. Understanding these key factors could help to improve student success in online education.

More universities and colleges, approximately 70%, are turning to online education as part of their strategic plan to boost student enrollment (Allen & Seaman, 2013; Parker, 2012). As the online student population rises, faculty and administrators need to pay close attention to the conditions and factors that influence how well students perform in the online environment. Faculty are key actors who develop and deliver the curriculum as well as engage in numerous interactions with students. Accordingly, faculty are well positioned to provide depth of insight into factors that they perceive to be substantive in contributing towards student success.

Online education is defined in this study as a form of distance education where 100% of the instruction and interaction taking place between students and faculty is conducted in either a synchronous or an asynchronous manner via the Internet.

Several empirical studies have examined online education with much attention given to comparisons between online and face-to-face education (McGorry, 2003; Parker, 2012; Rovai, 2004). According to the literature, a marked difference exists in student performance between these two modes of delivery, with student online non-completion rates and failures being significantly higher than in face-to-face classes (Allen & Seaman, 2013; Latchem & Jung, 2012; Parker, 2012). Non-empirical studies that explore the phenomenon of student success from faculty perspective yield rich data that provide depth of insight into the essential factors that influence student success in online education.

Student Success

Student success is defined as academic success measured by student retention, fulfillment of course objectives, and final grade received (Kruger-Ross & Waters, 2013). In the literature, several barriers to student success in online education are identified including feelings of isolation, use of the technology, need for technological support, balancing time for other responsibilities, limited student-student interaction, and limited student-instructor (Kruger-Ross & Waters, 2012; Rovai, 2004). With the increasing numbers of students enrolled in online education, close attention must be given to removing these barriers and ensuring the academic success of this population of learners.

Successful online students exhibit the primary characteristics of taking ownership for their own learning, reading and writing proficiently, effectively managing their time, being self-directed and motivated (Kerr, Rynearson, & Kerr, 2006; Rovai, 2004). These are all essential characteristics for a quality learning experience that leads to student success in online education, but in the student success literature, frequent mention is made to self-directness of learners. Knowles (1975) describes self-directed learning as a process that involves learners taking the initiative on their own, recognizing areas for improvement and setting targets as well as adopting...
suitable learning approaches. The self-directedness characteristics identified in Knowles’ description are important in a student’s quest for success in either face-to-face or online education. However, because of the separation that exists between learning and instructors in online education, it would seem that the associated features of self-directedness would take on an even greater importance than in the traditional classroom.

The cognitive, affective, and psychomotor domains of learning developed by Bloom (1956) also hold great significance for student success in the online education. It may be argued that Bloom’s taxonomy holds even more significance for online education than for traditional education. Some of the barriers cited in the literature, for example—stronger feelings of isolation in online education and essential levels of interaction—are indirectly addressed in Bloom’s affective domain of learning, which explains the role and importance of valuing, reception, response, and internalization (Bloom, 1956). This application would be beneficial, particularly in instances when students enrolling in online courses are unable to receive adequate technological support or appropriate levels of instructor-student interaction when most needed. In these instances, students often tend to rely more on their own intrinsic motivation and self-directed learning capacity than they would in a typical face-to-face classroom (Latchem & Jung, 2012). These students would then need to draw upon higher levels of thinking in their self-reliance efforts.

Research Question

The primary research question explored in this study was: What are the factors that faculty consider essential in influencing student success in online education? Opened-ended interview questions were then designed around this research question to gain insight into the factors highlighted by faculty.

Method

This paper sought to identify the main factors that faculty perceived as significant in influencing student success in online education at a public university in the Southeastern region of the United States. A phenomenological framework (Patton, 2002) was adopted in order to understand how faculty described and experienced the phenomenon of student success in their online classes as well as what faculty believed were the key influencing factors in students being successful in online education.

The College of Education Teaching and Learning Department at this institution was selected as the research site, and the study was confined to professors teaching online courses, all of which utilized the Blackboard learning platform. The study included participation by professors who taught either or both undergraduate and graduate level online courses. Three participants were selected using criteria sampling (Patton, 2002). According to Patton (2002), criteria sampling refers to the selection of participants for a study based upon certain specified characteristics. The following criteria were applied in order to obtain a sample of faculty who would be capable of yielding rich data when interviewed in relation to the primary purpose of this study: (a) previously taught at least two online courses, (b) taught in the Teaching and Learning department, and (c) received at least 80% “very good” to “excellent” ratings on the overall assessment of instructor for the end of course student assessment of instruction.

First, data were collected from the Teaching and Learning department on all faculty who taught online courses during the 2012-2013 academic year. Next, a listing of faculty eligible to participate in the study, based upon the above mentioned criteria, was retrieved from public data available at the university’s Office of Institutional Research website. Based upon the scope of the study and the criteria, three participants were selected. Pseudonyms were used to protect the
identity of faculty. Professor Fisher was a tenured professor who taught two undergraduate upper division online classes during the semester in which the study was done. She taught online classes for one year and was instrumental in developing several new online courses in her program. Professor Smith was an adjunct who taught only graduate level courses and had approximately three years of teaching online. Professor Lee was an adjunct in his second year of teaching online with responsibilities for teaching lower division online courses. Collectively, the three participants had six years of experience teaching online courses.

A responsive interviewing method (Rubin & Rubin, 2012) was used to gather data. This interviewing method was intended as a “purposeful conversation” (Bogdan & Biklen, 2007, p. 94) and was selected because of its potential to gain much insight into an interviewee’s experiential knowledge (Rubin & Rubin, 2012). Each interview lasted for approximately one hour and sought responses on opened-ended questions, which probed factors that influenced student success. Thematic analysis (Patton, 2002) was then used to investigate the data.

Findings

Using thematic analysis (Patton, 2002), the following eight categories of themes emerged from the raw data: technological support, student degree of comfort with technology, ability to analyze and apply material presented, personal characteristics of students, faculty advance preparation, limitations, time management skills, and academic support. Faculty agreed that (a) technological support, (b) student degree of comfort with technology, (c) ability to analyze and apply material presented, (d) limitations, and (e) students’ personal characteristics, were the principal factors that influenced student success.

Technological Support

The professors interviewed all agreed that technological support was crucial to having a quality online experience, which in turn affects student success. However, professors all believed that this support started with the type of technological support offered to faculty. Once faculty received adequate support and became comfortable, they found it easier to engage in the teaching-learning process. Faculty recognized the problematic nature of inadequate support. With online learning, faculty felt that this support must be on demand and because problems could arise at any time, it was therefore critical to have an available and capable technological support group. According to one professor, students’ ability to learn what they needed to learn was premised upon adequate technological support being provided to the professor. All professors interviewed agreed that technological problems sometimes arise and support was not consistently available. For example, Professor Fisher pointed out that some students indicated that “they [students] were unable to access the test or they were unable to submit it. This year, this semester there were some issue with Blackboard and I am not the only professor who noticed that.”

According to the data, faculty believed that the technological support was invaluable to being able to access online classes. If students or professors are unable to access an online class because of some technological difficulty, then possibilities for student success become jeopardized. Professors also recognized the challenges involved in the provision of adequate support, citing that technology support staff were overworked.

Student Degree of Comfort with Technology

Relative comfort with technology was noted as an important factor for working successfully in the online environment. Professors believed that student needed to have a relative degree of comfort with technology in order to be successful students in online education. Professors agreed that students who possessed high technological skills were deemed more
comfortable with the technology and were thus able to function more effectively in the online environment.

In online classes taught by two of the three professors, a 2-3 minute video presentation was a course requirement. Professors felt that students’ ability to complete this task well was either linked to their ability to navigate the technology or work with other knowledgeable classmates in group settings to complete the task. When asked about the demographics of students who were relatively comfortable with using the technology to navigate the online environment, professors expressed divergent views. Professor Smith pointed out that there was no one student demographic that could be deemed more technologically proficient. She further noted that some students were uncomfortable with the technology, whereas some other students were capable. On the other hand, Professors Fisher and Lee felt that their students were technological proficient. Professor Lee noted that “this generation of college students live and breathe and sleep with technology so the online sort of classroom is really comfortable, surprisingly comfortable to the students.” Professor Lee’s statement introduced the notion of millennials’ relative comfort with technology and being to navigate the online learning environment well.

**Ability to Analyze and Apply Material Presented**

In sharing their understanding of what embodies student success, professors reported that successful students demonstrate commitment to concentrating, analyzing, and reflecting on concepts taught. According to Professor Smith, successful online students “grasp new information, apply new information, and complete all of the assignments that are required for the course…I am more of a constructivist type professor, where the construction of meaning by students is really my bar of success.” This professor pointed to the need for students to comprehend new information and then to apply it to critical tasks. Professor Smith also reinforced this point by indicating her bar of success as being higher order thinking, demonstrated when students construct meaning and integrate key concepts into their various spheres of life.

**Limitations**

Faculty perceptions of limitations that influenced student success included language barriers for students who spoke English as a second language (ESL), difficult life circumstances confronting students, and faculty members’ inability to navigate the online learning platform well. Work commitments and other responsibilities were cited as limiting students’ participation in the online class. With these limitations, some professors felt that students did not perform as well as they could.

The language barrier was primarily referenced by the faculty teaching undergraduate courses, who all felt that language was a critical factor. They explained that concerns existed about students’ ability to express themselves in standard American English. According to one professor, Fisher:

They are students in my classes that I can barely understand because of the language background and even though they had passed the TOEFL standards, the TOEFL standards are very low and it becomes problematic when they take a test. They are reading what I write but they are not understanding it the way that somebody who is an English speaker would understand it.

With the exception of faculty teaching at the graduate level, faculty felt that because of the strictly text environment for their online classes, the language barrier limitation tended to be amplified.
Students’ Personal Characteristics

Very evident in the data about online learners was the theme of students’ personal characteristics in relation to student success. The characteristics identified were self-directedness, motivation, pro-activeness, insistent, participatory, and attentive. Professors singled out the top characteristics as self-directedness, pro-active, and insistent for success in the online environment. In addition, professors agreed that students who were thoughtful in that they paid keen attention to details and were analytical were most likely to be successful and perform far above minimum requirements.

Analysis and Interpretation

In arriving at a clearer picture of factors influencing student success in online education, participants were asked to highlight demographics about successful learners. From participants’ responses, no common demographics such as age, race/ethnicity, or gender were identified. Professors felt that there was no single demographic that related to successful online students. Professor Lee noted that females were more likely than males to be successful students based on the fact that there were more female than male students pursuing education as their major at the university. No solid evidence was given to support this view and this position can be deemed flawed because greater numbers from one gender do not automatically signal better performance than the other gender.

Technological support was repeatedly identified in the data, but the focus was more on faculty’s need for technological support instead of student’s need for it. Although faculty recognized the importance of students’ need for adequate technological support, faculty believed that students’ ability to learn was compromised when faculty were unable to incorporate effective instructional design, utilize key functions of Blackboard, and receive on demand technological support.

There were conflicting views about the degree of students’ comfort with technology, which could have implications for professors’ expectation of students’ success. For example, professors who taught undergraduate courses felt that undergraduate students were more comfortable, and their classes required students to produce a video presentation on a particular topic. Faculty did not indicate their measuring stick for recognizing students’ degree of comfort with the technology. However, there appeared to be an assumption on the part of faculty that if students did not complain about the technology and were able to post critical tasks, participate in discussions, and complete online tests, then they demonstrated comfort with the technology.

Although difficult life circumstances confronting students were identified by faculty as one of the main factors influencing student success in online education, this factor was equally applicable to face-to-face instruction. Limitations of language barriers for students who spoke English as a second language could be also regarded as equally applicable to face-to-face instruction. The underlying thread with both of these limitations was that the technology separated the student from the instructor. The distance resulting from the online instructional format posed a problem with providing the type of support for students in these instances. The lack of access to a wide range of student support services is regarded as one of the most significant gaps in online education (LaPadula, 2003). The issue of accommodation, a form of student support for distance learners, must therefore be properly incorporated in plans that seek to improve student success in online learning.

The professors all felt that faculty the play a meaningful role in cultivating successful students in online education. The literature revealed that the nature of the student-instructor interaction was principal to student success (Marks, Sibley, & Arbaugh, 2005; Rovai, 2004;
Rovai & Downey, 2010). Consequently, when faculty and students were both highly invested in the online setting, students were likely to succeed. However, particularly with the undergraduate classes, language barriers imposed limitations for effective instruction, which meant that faculty at this institution needed to spend more time decoding what students mean in their text submissions in the online environment.

Of significance in the data was the blurred distinction between student characteristics and factors. When asked about factors influencing student success, participants frequently highlighted the personal characteristics of students thus shedding light on an interaction between student characteristic as a crucial aspect in student success within the online environment. Although faculty discussed other factors, these other factors were mostly presented upon further probing, whereas characteristics of students were readily presented. This pattern would seem to suggest that although extrinsic factors play a role in student success in online learning, the most important factors were intrinsic factors expressed through students’ personal characteristics, which is consistent with the literature on student success (Kerr, Rynearson, & Kerr, 2006; Rovai, 2004; Rovai & Downey, 2010).

**Implications**

The findings of this study suggest that there is a need for further research on the role that demographics play in relation to student success in online education. Previous research has indicated mixed findings about demographics and student success in online education (Angiello, 2002; Volery & Lord, 2000; Yukselturk & Bulut, 2007). Having extensive knowledge about the demographics of successful students in online education will give institutions the advantage to target underperforming students and establish systems to enhance students’ chances of being successful.

Of importance, this study brings into focus the ubiquitous subject of technological support in the online environment for both faculty and students. Faculty in this study felt they received inadequate technological support for themselves and their students, which has implications for faculty, administrators, and students, as well as the level of resourcing associated with technology for online education. A significant finding of this study revealed that in the online environment, students’ personal characteristics appeared to be more of a key factor in student success than external conditions within the learning environment. Therefore, although emphasis may be given to creating the optimal learning condition for online students, students’ intrinsic factors such as self-directedness and motivation have an equally important part to play in how well they perform in online education, and as such, it is imperative that these innate student characteristics be cultivated by students and fostered by faculty.

**Conclusion**

This study sought to understand the essence of student success in online education by considering faculty perceptions of the principal factors that influence student success in online education. According to the literature, successful students in online education demonstrate personal characteristics of self-directedness, motivation, and strong engagement with faculty as well as with other students (Kerr, Rynearson, & Kerr, 2006; Kruger-Ross & Waters, 2013; Rovai, 2004). The literature also showed that successful students operated with higher ordering thinking capabilities and proficient reading skills, which supported the study’s data.

From the data, five principal factors were identified as critical to student success in online education. Knowledge of these factors will be especially valuable for faculty and digital instructors when delivering, developing, and revising online courses to ensure that student success is catered to in the courses. Researchers can extend this study to test these factors for
various levels of online education such as graduate or undergraduate studies. Following further research, a theoretical model of student success for online learning could be developed based upon the factors identified or additional factors discovered. Moreover, language barriers in online learning that rely mostly on text based interaction was noted in the data as worthy of further research particularly with diverse universities and colleges.

References


