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Student Success in an Online Course: A Student Perspective



Key Words: Online Course, Student Success, Student Perspective, Student Learning Objectives, Online Course Navigation, Online Discussions

Introduction to the Research

History

I am interested in exploring how students can become more successful in the LRC320 fully online course called *Teaching with New Technologies* offered at the University of Arizona. I would like to find out if course navigation, learning objectives, online discussions and faculty feedback are key factors in students being successful in this online course. Many students become frustrated in the online learning environment. I want to uncover the reasons for their confusion and frustration within this specific learning environment. It is often difficult for students to make a smooth transition from the traditional face-to-face classroom to the fully online classroom. I want to focus on a few elements that might make this transition problematic for students.

The major goal of this research is to discover issues that students might have with navigating this online course, understand the learning objectives, perceptions around the online discussions and the usefulness of faculty feedback.

Positionality

Currently, I am the preceptor, which is the technology expert for this LRC320 course. This semester I am helping Dr. Betts with his office hours, technology issues and facilitating the discussion groups. As an Instructional Designer for the University, I have also helped Dr. Betts to design and facilitate this course for the past couple of semesters. This course is very different from most courses that students encounter at the University. It has a graphical interface that

guides students through the content. This could have both a positive and negative effect upon student success in the course.

As one of the designers and facilitators of this course, I may be too close to see some very obvious solutions to the issue of navigation, learning objectives, discussions and feedback. I would like to take an ethnographic approach in researching this course, so that I can understand some of the underlying issues that I may be missing as a preceptor and course designer.

As a special note to this semester, Dr. Betts relied heavily on my assistance more than usual as he had an injury in late January. This allowed me the unique opportunity to gain more access to students, thereby making my data collection a deeper and richer experience.

Tension/Goals

There were a couple of tensions I discovered while conducting office hours for the LCR320 course. It appears students are uncertain about how to navigate the course. They are unclear about the learning objectives of some modules. They don't understand how to achieve the outcomes for certain assignments. I find that students are confused about what they need to do in order to successfully accomplish the goals for this course. I believe that if I can discover the reasons why students are having trouble with the course learning objectives, then we can take steps to improve the course, which might lead to students being more successful in accomplishing the course goals.

The learning objectives are posted in each module, however some students come to office hours confused about both the navigation and the objectives of the course. I want to explore how we can improve the course by seamlessly guiding students through the content and making the

learning objectives more transparent. To do this I need to gather data from the students in regard to their experience in this online course.

Another area that will I want to explore are the online discussions. Research suggests that online discussions help students to build community and be more successful in an online course. I want to find out from the student's perspective, if this research is valid for this course.

Finally, I want to gain some insight into the student's experience in regard to the feedback they received from the professor, the teaching assistant and the preceptor. This is one issue that could make or break a student's success in this or any fully online course.

Governing my Gaze

There are a few key perspectives that influence my gaze in regard to this research. First, my Master's Degree from Northern Arizona University was conducted in the online classroom, so I truly understand the student experience in this environment. Next, would be my position at the University of Arizona. My main focus is working with faculty helping them to make the transition from the traditional face-to-face classroom to a fully online setting. Finally, as a new researcher in the field of New Literacies, I am intrigued with the evolution of technology in the various learning environment, including traditional, hybrid and online and from the lens of both faculty and student.

Research Questions

My main research question is:

- What factors in this LRC320 fully online course hinders students from successfully achieving the course goals?

From this main question, I have branched out into four areas of interest: course design, learning objectives, discussions and feedback. The following four questions center around these interests:

- How can the design of the LRC320 fully online course help guide students to the learning objectives/outcomes of the course?
- How can the learning objectives help the students achieve the learning goals of the LRC320 course?
- How can the online discussions assist students in achieving the learning goals of the LRC320 course?
- How does feedback from the faculty, teaching assistant or preceptor help student achieve the learning goals of the LRC320 course?

The Inquiry Process

Site and Demographics

I will be studying a fully online course called LRC320 - Teaching with New Technologies. In this course, students learn about new technologies and how to implement them in K – 12 classrooms. This course is administered through the Desire2Learn (D2L) course management system. The study will be conducted during the spring semester of 2012 with students enrolled in the LRC320 fully online course. Most of these students are between the ages of 19 – 23 and are juniors or seniors in education or related fields of study. I will ask for volunteers to participate in this study. These students are main campus students at the University of Arizona, so even though this is a fully online course they do have the opportunity to come and talk to the professor and teaching assistances in face-to-face office hours. Virtual office hours are also available to these students. The curriculum is project based with some online quizzes. Proctored exams or synchronous meeting are not a requirement for this course.

Data Gathering Methods

I used a mixed method approach for this research study. At the beginning of the semester I kept a journal of questions and comments brought up during exchanges with students in office hours. From this journal, I discovered tensions and created my research questions (Appendix A).

For the quantitative side of my research, I collected data from students via an online survey tool called Qualtrics, an Internet survey research tool. Through this survey tool, I asked a series of twenty-five questions using a Likert scale asking about students about their experience in the LRC320 fully online course (Appendix B). All of the students who participated in the survey did so anonymously. The first question of the survey asked students to give consent and verified that they were at least 18 years of age. This satisfies the IRB requirements.

For the qualitative side of my research, I conducted recorded interviews of students during my office hours (Appendix C). There were four students who volunteered for this interview. They signed a consent form before the beginning of the interview (Appendix D).

This mix methods approach fits my research design well for gathering both qualitative and quantitative data about the student's experience in the LRC320 fully online course. I believe gathering both types of data allows me to get a good snapshot picture of the whole student experience in LRC320 online course.

Data Analysis

I reviewed my journal notes collected during the first three weeks of office hours. From these notes I looked for similar issues, patterns or trends. I found there were some issues that kept coming up for students. These issues lead me the four sub-research questions about course navigation, learning objectives, discussions and feedback.

With this information in hand, I created my questions using the Qualtrics online survey tool. The statistical results from the survey were generated inside of Qualtrics. Seventeen students responded to the survey with the mean, variance and standard deviation produced for each question. Based upon this data analysis, I was able to add the student's responses to the categories created from the journal. At the end of the online survey, I created one open-ended question for students to type additional comments. About ten students took the opportunity to comment. These responses were also added to the categories.

After all four of the interviews were conducted, I played back each of the recordings, transcribing word for word the conversation. I reviewed the transcripts several times looking for key words and concepts. The insight gained from the interviews created new categories that have been added to original categories.

Through triangulation (Hubbard, 2003) comprised of journal notes, survey and interviews I discovered some emerging patterns, insights and trends that fell into categories worthy discussing in my findings.

Narrowing

For the purpose of this paper, I only collected seventeen responses from the online survey tool based on a student population of 60. I also limited myself to just four student interviews. I would like to continue this type of research in the coming semesters, as we make changes based upon student's responses.

To expand my data collection, I would go to the discussion boards and emails for comments from students. In reviewing the discussions, I found more positive comments than

negative one. This study mainly focused on problems students were encountering, instead of successes they having in the course.

To taper my gaze even further, I will turn my attention to the assignment students struggled with the most, the website project. Since this is the major part of the class, focusing on this issue will bring the most benefit in this abbreviated write up.

Bring It All Together

Share my story

I have been interested in gathering information about the student experience in the LRC 320 course for several semesters. Back in 2010, I was assigned to Dr. Betts as a preceptor. During that semester we designed a new course homepage for students to navigate to the content through a graphical interface. This is so unique from other online courses offered at the University that I wondered how the students reacted to this navigation model. Then from my interaction with students in office hours I heard issues that students were having with the course.

I developed my research questions around these concerns. As I was designing my research I looked to several theories to frame my thoughts and ideas around. I started with Malcolm Knowles theory (Knowles, 1978) on the adult learner as all of the students in the LRC 320 course fall into this category. I believe we should be moving toward an andragogical approach in the online course, instead of a pedagogical stance. In pedagogy, teachers are responsible for the decision-making about learning content, method, timing and evaluation. In the andragogical model, the learner becomes the one responsible for making these decisions. The trick lies in designing a learning path that will motive the student, or rather enlighten the students about why the information at hand is worth taking the time and effort to

learn. In the Adult Learning Theory, teaching moves from one paradigm to another. "Education emphasizes the educator, while the learning emphasizes the person in whom the change occurs or is expected to occur" (p. 147). Learning in this context becomes the process of gaining expertise or knowledge in an area of study. Knowles makes a statement that dovetails well into the Funds of Knowledge (Gonzales, 2005), "In an adult class the student's experience counts for as much as the teacher's knowledge" (p. 39). There are other factors that play into this model, such as learner responsibility, the learner's own experience, learner readiness, learning relating to life and internal motivators.

Which leads to my next theoretical framework around the Learning Cognitive Taxonomy (Bloom, 1976) developed by Benjamin Bloom. Bloom's taxonomy is one of the major resources I use as an Instructional Designer to develop online courses. Bloom takes into account student characteristics, instruction and learning outcomes in his model of learning. Student characteristics emphasize the background of the student. He states, "...if all the students have the necessary prerequisites for a particular learning task, they would be able to learn it with less variation in levels or rate of learning..." (p.31). With instruction he calls for a learning task in the form of a unit or module for a topic within a curriculum. In these modules, there are ideas, procedures and behaviors for students to learn. For quality instruction to occur he believes there must be: cues or directions, active participation, feedback and reinforcement. Finally, he points to learning outcomes as demonstration of the learning, which has a causal relationship with the other two variables.

I also turned to Jerome Bruner and the Constructivist Theory (Bruner, 1966) for guidance. Bruner's approach to teaching is through discovery and inquiry method. He believes in self-directed learning or problem solving learning. He looks at learning from a cognitive

perspective. His theory of instruction or inquiry based learning include: creating experiences that encourage a learner to want to learn, structure the knowledge so that the learner can grasp the learning, present the material in effective sequences, and make the rewards and punishments transparent to the learners. (p. 40-41) I can see how Bruner's theory of instruction can be used in an online course to help students successfully learn the content of the course. Some of the questions to be asked are: 1) Am I using materials that will increase a student's desire to learn? 2) What can be done to encourage students to learn? 3) What is the best way to present this material to inspire students to want to learn? Bruner also discusses "spontaneous learning – curiosity, a desire for competence, aspiration to emulate a model, and a deep-sensed commitment to the web of social reciprocity." (p. 125-126). I am interested in learning how to create an online environment where this type of learning can flourish.

Finally, I was inspired to think about my research by a quote from the book, "*How learning works: Seven research-based principles for smart teaching*". They define learning in the following way, "Learning is a process, not a product. Learning involves change in knowledge, beliefs, behaviors, or attitudes. Learning is not something done to students, but rather something students themselves do" (p.3).

With this structure in mind, I searched for insights from my research on LRC 320 from a student's perspective. I will begin where I first recognized the tension, which was in office hours. I must preface these findings with something I recognized toward the end of the study once I took an overview of the entire research. Office hours are set in place for students who are having trouble with the course. Out of the approximately, fifty-five students enrolled in the course less than twenty students came to office hours seeking assistance. Toward the beginning of the study I was so focused on the problems students were encountering, I assumed that all students were

struggling with the course and this is just not the case. However, I did not see this until I analyzed all of the data, both quantitative and qualitative.

The issues students did come to office hours about mainly focused around the assignments. Actually, there was one assignment, the website project that most students were frustrated with throughout the semester. The comments from the office hours included these words: difficult, frustrating and confusing. They had difficulty activating the server site called the U-Account. They were frustrated with the process of creating the webpages and uploading files to the server. Many were confused about the scope of the website assignment. They did not understand what to put on the webpages and the purpose of the website, in general. Comments included: 1) I don't know where to begin (with the webpage). 2) What do I put on the webpages? 3) How am I getting graded on this website assignment? I don't know what you want. I am so confused.

When I reviewed the interviews I found similar comments in regard to the website assignment. One student's comment was, "I wish I could have learned more relevant data concerning websites. I don't think going through all this rigmarole (the U-Account) is as necessary as it should be." She went on to say that there are other websites that are easier to create and she would use these sites in the classroom. Another student stated that even though she had "some difficulty with the website assignment, she learned quite a bit and the course met her expectations". While another student liked the webpage assignment saying, "Well, I will definitely use the webpage, which I can tell people and that is kind of cool. So for my own classroom I can make my own webpage..."

From the online survey, there was a comment that this was an extremely difficulty course for those of us who have never made a website. The comment goes on to state, "I felt like a fish

out of water with little or nothing to go on.” Another student from the survey writes, “ Once I was given aid and instructions (verbally), the website assignment and course materials were easy to understand and implement.” Many of the comments from the survey included the need to make the instructions more clear or even to add direction videos. One the quantitative side of the survey, when asked about the effectiveness of the assignments and projects, most scored them in the average range.

My conclusions on this particular issue within this study are that some students have difficulty with the instructions provided for creating a website, especially if they are not familiar with technology or feel awkward exploring new technologies. Teaching a technical process like website creation and uploading to a server proves to be difficult for students who are uncomfortable with technology in the first place. The students who came to office hours were the ones who I have just profiled. However, there were some comments from the interviews and the survey that point to the website assignment being more difficult than it may need to be for this online course.

Perhaps there are some other options to explore with this assignment. Instead of using the U-Account, which throws many students, the course could use a free Web 2.0 tool like Google Sites or Weebly.com. This would be less technical in nature and the assignment could focus more on the webpage content, flow and navigation. These tools would also relate to the real world or classroom as many schools provide these kind of website tools for their teachers. As the Internet expands and becomes more user friendly, teachers need to be taught less about the tech side of the technology and more about the best way to drive the content on the website.

The idea of video instructions is one that Dr. Betts has incorporated with some of the assignments including activating the U-Account. For some reason, students are disconnected

with the instructions and this assignment. Maybe a transcript could be added to the video to help students make the connection. However, I believe there are many variables including computer systems, platforms, and Internet connections that throw a wrench into a seamless U-Account experience for students.

There were other areas of this research that I did not get to report my findings including the course navigation, and the effectiveness of the learning objectives and the discussions. For a global overview, I discovered that students found the navigation to be relatively easy to follow. Most thought the learning objectives were helpful in making the modules meaningful and that the discussions, especially the webliography discussions added to the overall experience of the course.

As I review my findings and my theoretical framework, I discover Knowles thoughts about learner responsibility, their own experience, relating to real life and readiness, are key factors for helping to motivate students to be successful in this course. I also see that Dr. Betts has structured this online course toward Bruner's Constructivist Theory by creating assignments that encourage students to learn, then structuring the assignments so students can learn. I do think presenting the material could be sequenced more effectively and the rewards and punishments could be more transparent to the students.

I will end with a quote from one of the student interviews. She sums up very well what I found throughout this research study, when she says, "It is a great course and with some minor adjustments...it might be one of my favorite courses I have taken at UA." She goes on to say, "Technology is the future and if you don't know this then you will be left behind especially when employers are looking to find teachers that are innovative."

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Epilogue

This type of research is very exciting to me as I deal with these issues everyday. If I have research findings to show faculty as I assist them in online course design, then they will have solid evidence to base decisions about course design on and this will make my job much easier.

The potential impact of this study will be a better-designed course that will lead to a more positive online experience for the student. As more and more courses are being developed for an online audience this type of research will assist both faculty and designers in creating a more effective online environment. This study will be of interest to others who teach and design online courses. I will share this research with the university community and all who teach and design in an online environment.

Appendix

- A. Copy of the Field Notes from Office Hours
- B. Online Survey Questions
- C. Interview Survey Questions
- D. Consent Form for Interviews