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Article #1:

Lim, D. H., & Kim, H. (2002-2003). Motivation and learner characteristics affecting online learning and learning application. *Journal of Educational Technology Systems*, 31(4), 423-439. Retrieved September 25, 2009, from Professional Development Collection database.

Summary

Researchers conducted a study utilizing quantitative and qualitative analysis to understand learner characteristics and motivation when taking online classes. The participants of the study are undergraduate students. One assumption of the study is that motivational variables are unique to online learning as compared to traditional classroom setting and therefore, require a different perspective. Researchers looked at five motivational factors to analyze as well as how well females and males learn in an online environment. The findings proved that the learners where benefiting from the course and females learned better in online environments. Additional discussion focused on learners continuing to learn if they receive rewards such as grades, and instructor feedback. In analyzing this article, the purpose, the methodology and the results of the findings are valuable to understanding the impact of motivation and learner characteristics when studying online.

Analysis

This article is peer reviewed and is presented in an academic journal that discusses systems where technology and education interface. Authors Hyunnjoong and Lim are interested in motivation and learner characteristics of online learners and have developed three research questions as the hypothesis of this study:

- 1. What is the degree of learning and application of learning perceived by a group of online learners in taking an online course?
- 2. What kinds of learner characteristics affect the online learners' learning and learning application?
- 3. What types of motivation affect the online learners' learning and learning application?

Furthermore, the authors feel that the study will reveal valid motivation and learner characteristics variables that influence online learners' application of learning as well as learning achievement (Lim & Kim, 2003, p. 424).

The study utilized quantitative and qualitative research methods and analyzed the results of a questionnaire given to seventy-seven male and female subjects (twenty-three male and fifty-four females). They were given a pre and post questionnaire pertaining to their online course at the beginning and the end of the semester. There were three parts to the questionnaire that looked at degree of learning, learning application and motivation. There where also five types of motivation variables course relevancy, course interest, effect/emotion, reinforcement and self-efficacy included in the questionnaire along with other learner characteristics - gender, employment status, and age. After

reviewing the responses, motivation variables influenced students' learning as a whole while gender and employment status affected learners' characteristics and application.

Among the five motivation variables, CR was indicated as the most important factor followed by SE and RI. To identify how each motivation variable affected students' learning and application of learning, the motivation scores were tabulated by the low and high motivation group where the two groups were divided by the median of the motivation scores (Lim & Kim, 2003, p. 430). After results where reviewed, the major findings of motivational variables affect students' learning while reinforcement and self efficacy influence students' learning application. The bottom line of the study then is how can online learning be designed to accommodate those differences of learner characteristics and motivation thus providing better learning outcomes that can promote transfer? It is suggested that instructional strategies include enough opportunities to practice learning critical to meaningful learning and transfer and increase student collaboration of class projects/ assignments that incorporate real life scenarios. The article also points out that instructors should provide feedback in a timely manner through grades or email so as to increase motivation and help students stay connected so that a positive online experience is achieved.

The article provides an effective discussion on the characteristics of learners and presents gender based findings for online learning. It states that females' success derives from external sources such as instructional design that incorporate motivational items.

On the other hand, males attribute their success to internal sources such as personal interest along with motivation. Despite gender differences, students need effective strategies to be successful in online learning because the computer is the classroom with

remote classmates and instructors. Thus, it is important to understand the unique characteristics that the learner faces. Furthermore, I disagree with the findings about males; I think that both females and males can be successful in online learning through good, solid instructional design.

Article #2:

Sims, R. (2003, May). Promises of interactivity: aligning learner perceptions and expectations with strategies for flexible and online learning. Distance Education, 24(1), 87. Retrieved September 25, 2009, from Academic Search Complete database.

Summary

The purpose of this article is to explore the expectations that people have about interactivity in the context of non traditional learning environments. In order to be successful in the learning outcomes, online students benefit from interactivity with one another through communication and collaboration. Interactivity prevents learning from becoming boring and increases retention of newly acquired material thus promoting continued motivation to learn. Participants were given a survey and asked to respond to three questions that focused on benefits, characteristics and structure of interactivity. As a result of the survey, participants identified their expectations of interactivity in terms of engagement, control, communication, design and individual learning.

Analysis

The purpose of this study is to investigate the link between people's expectation of interactivity and the theoretical characteristics involved. Author Rod Sims points out that there are factors that affect the impact of interactive learning. Five factors that where used to support this hypothesis are educational psychology, theory and research, technology, communication and collaboration and the last focuses on the way learning environments are designed, deployed and maintained. To gather information to support the hypothesis of this study, a survey was given to sixty eight undergraduate students

studying multimedia at an Australian University. The participants where grouped according to Prior Experience (PE, n=21), or No Prior Experience (NPE, n=47) and by gender (male: n=40; female: n=28). Three open ended questions where asked based on specific aspect of the relationship between interactivity and learning:

- 1. What do you see as a major benefit of interactivity to the learning process?
- 2. What do you see as the major characteristics of interactivity?
- 3. What makes an educational multimedia product interactive?

The responses were analyzed using a qualitative approach. The first question included six parameters – that relate to the major benefits of interactivity – engagement, communication, control, design, individual and learning (Sims, 2003, p. 92). The highest response was engagement among all participant groups. Question one – was used to identify each participant's elements and how it fits into learner content interactions. Responses for this question were consistent with current learning theories and proved that instructors needed to be aware of individual differences.

Question two focused on the specific characteristics of interactivity. This question was to reinforce the need for instructional design to provide a proactive learning environment by giving individuals opportunities to master content and participate in collaborative work. Communication, engagement and design interlink together to support the learning experience received from online learning. On the other hand, questions three identified factors that help in understanding the extent to which different conditions exist and their effectiveness for the online experience. The overall results of the responses were that instructional design is a strong factor when one thinks of interactivity and the learning process.

In summary, Research findings where analyzed using a qualitative research paradigm based on three questions with themes/nodes. The findings where distributed among the themes/nodes where participants consistently gave their answers as to what they expected from interactivity and online learning. Furthermore, interactivity is a crucial component of the learning process. Although interactivity and motivation are two separate concepts, each is a part of an online learner's unique characteristics when it comes to acquiring new knowledge. While students are learning instructional material they are benefiting from collaboration too. Without motivation and interactivity during an online course there would be little impact on student learning.

Article #3

Hughes, M., & Daykin N. (2002, August). Towards constructivism: investigating students' perceptions and learning as a result of using an online environment.

Innovations in Education & Teaching International, 39 (3), 217-224.

Summary

This article presents a first hand account of setting up an online course without an organized and strong instructional design, motivational tools or interesting interactivity. Administrators decided to introduce undergraduate students to an online nursing management module. Originally, this particular module was not engaging to students because of lack of a way to practice the theories. Online learning was introduced in an effort to change the mode of delivery. Unfortunately, the students where not comfortable with the online approach due to the fact that they were isolated and only had to write and critique each other's essays and look up information.

Analysis

The study began with a random sample selection of seven groups out of thirty seven groups for evaluation to see how effective and comfortable the students became with online learning at the end of the module. Additionally, two focus groups interviews were conducted at the end of the module – they represented a purposive sample from three groups. They were selected based on those who had read and posted the most communications in comparison to those who posted hardly any communications. The author points out that the analysis was conducted by a colleague who had no direct connection to the module (Daykin and Hughes, 2002, p.217).

One year prior to the study, the staff made the decision to introduce the nursing module and discussed staff development issues and academic procedures. The online class began with three short assignments that included work that would generate higher order thinking skills. Many themes emerged as a result of this new mode of learning with nursing students. The first review of the discussion board, students used it as a social or greeting message initially. The groups also had no idea of how to collaborate to complete assignments. Another theme that emerged was anxiety over assignments. The point of the discussion was to move students to a more constructivist approach to learning – more engagement, more learning, etc. Also evident was that since students had problems organizing themselves, the facilitator's skills needed to be revisited. Online leaning requires a strong instructional design plan as well as a skilled facilitator.

I thought the article presented a good scenario that can be related to why it is important to have a strong instructional design that encompasses elements such as interactivity, motivational design, instructor feedback, graphics, grades and a ground rules for lively discussions. These strategies support the research question as to why it is imperative to have certain elements in place in order for online learning outcomes to be effective.