# A STUDY OF PERCEPTIONS OF ONLINE EDUCATION AMONG PROFESSIONALS

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#### ABSTRACT

In this paper we research the perceptions of professionals towards the acceptability of online degree programs in their work profession. Although online education is prolific, its acceptability has been slow and has often been attributed to be a poor quality alternative to traditional brick and mortar education. In this paper we attempt to understand the reasons behind the lack of acceptability and set future directions for remedying some of the adverse perceptions. We develop and research an approach for measuring background, online technology familiarity, characteristics of instruction and distance as primary drivers that would affect online education effectiveness and its resulting perception.

#### **KEYWORDS**

Online Education, Perceptions of Quality, Empirical Study

#### 1. INTRODUCTION

Online accessibility to higher education has allowed working professionals, military personnel in isolated locations and those living in rural areas to earn degrees that were wholly inaccessible just a few years ago (Grenzky and Maitland, 2001; Li, 2007). Furthermore a number of traditional institutions report that residential students, seeking to increase their course load, or take advantage of the flexible scheduling and convenience of online programs, account for a significant portion of their online sections (Carnevale and Olsen, 2003; Rungtusanatham, et al., 2004). The objective of the current study is to assess the role that perception plays in the acceptability of online offerings in a higher education setting. Although technology proponents have advocated the use of online learning over the past two decades, its acceptance in academia as a quality offering has been very slow (Adams and Maitland, 2007). Traditional, well-regarded academic institutions have been very skeptical regarding its effectiveness and have converted few if any degree programs to online instruction.

When students' perception of quality, and their performance, were compared during traditional and online deliveries in the same course (the blended or hybrid model), it was found that the online segments were as effective as the traditional segments (Kock, et al., 2007; Meyer, 2003; Ryan, 2000). The next logical step is a comparison of online and traditional offerings of the same course. A study by Gagne and Shepherd (2001) compared two class sections in an introductory graduate level accounting course, one section was traditional, the other online. The performance of both groups was similar. Furthermore, student evaluations of the respective instructors were similar. The only caveat was that students in the online section were less satisfied with instructor availability than the traditional offering.

### 2. AN EMPIRICAL STUDY OF PERCEPTION

The literature indicates that there are several factors that influence the effectiveness of online instruction. One of the clear indicators seem to be exposure and experience in online education (Sonner 1999). In order for online education to be effective both instructors and students must have experience with online instruction. It is expected that the perception towards online education is influenced by experience. Other factors influencing the effectiveness of online instructions are technology background, familiarity with online technology, and distance.

## 2.1 Online Education – A Case Study

Around the year 1999 the Commonwealth of Virginia in the United States asked one of its large state universities to develop a fully online degree program in information technology to meet the growing demand for IT professionals in the Commonwealth. The university responded to the need by developing a fully online Masters in Information Technology program. This program is an interdisciplinary degree program consisting of courses in business, computer science, and electrical engineering. The curriculum design for such a program required consideration to be given to variation in content and format among the three disciplines. For example, courses in computer science and engineering typically involve higher degree of quantitative and scientific content than those taught in business. Often computer science and engineering courses rely heavily on lecture-based presentations and hands-on laboratory experiments. Whereas, business courses involve greater level of faculty-student interactions on such things as group presentations and case analyses.

Courses in the program are designed to meet live over the internet using software called Centra Symposium allowing direct interaction between students and faculty. These sessions are recorded allowing students to play and replay the lecture sessions as needed. Course materials are posted on software like Blackboard. To create a classroom "feel" the online technology used for instruction enables student teams to set up discussion forums. It permits texting between the instructor and students during class meetings, and enables case and project presentations in real-time by student groups using PowerPoint slides or dynamic web pages. For example, the Cyber Security course within the engineering discipline includes students accessing a virtual computer to hack a pre-designed system (environment). This simulation activity is performed real-time by students while simultaneously participating in the live class lectures delivered online.

Initially there was faculty resistance to the program based on the perception that a fully online program would not be able to meet desirable quality standards. However, because of the Commonwealth's mandate the program moved forward and was successfully implemented. The program has enjoyed several years of success and has continued to grow. Quality issues have been resolved using technology and appropriate training of faculty. To date over 600 students have graduated from the program and enrollments keep increasing.

Based on the success of the online implementation of this program, it was then considered for possible delivery to students in Mumbai, India in collaboration with a reputed business school. In spite of India's rapid growth in the information technology area, there has been little acceptance of online degree programs in that country. As such, program delivery format was modified from a purely online format to a hybrid approach. In this delivery method at least 30% of the course is offered online and the remainder is delivered using traditional in-class instructions by U.S. faculty traveling to Mumbai. Over the last few years, following the initial offering of the program in India, Indian students and faculty have developed a favorable perception toward online courses and are willing to accept that online programs can be offered without jeopardizing quality. As an indicator of program quality, students in India have been placed in highly desirable jobs and are recruited into corporate positions that offer competitive salaries similar to graduates of highly respected institutions in India. Another measure of success for this program is the exponential growth in the number of applications received from prospective students. Similar to their counterparts in the U.S., students in India are able to participate in class meetings with the faculty lecturing online from the U.S. home base. Course materials, classroom discussions, lectures and presentations, and other requirements have remained identical between the two groups despite the online format and geographical and cultural differences.

Despite the favorable perception of the program among applicants and students, and the successful placement of its graduates in the IT industry, it is not yet clear whether the perception and acceptability of online education among corporate managers and executives who hire graduates of such programs has improved. To examine the perception of professionals with respect to effectiveness of online degree programs data was collected by trained investigators in data collection using a questionnaire. One hundred and fourteen professionals agreed to participate in the experiment and were interviewed.

This paper will analyze the perception of online learning using data collected from the subjects described in the case study. Using regression analysis the relationship between experience, technology background, familiarity with online learning, professional characteristics and distance are tested and analyzed. Results of the study indicate that with the exception of background in information technology all other factors play an important role in the perception of learners toward online courses. These results will be demonstrated in more detail in the conference presentation and recommendations will be made for possible extensions to the methodology used in this paper.

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