Chapter 14
Technology–Infused Education:
The Influence of Course Environment Factors

Tim Klaus
Texas A&M University – Corpus Christi, USA

Chuleeporn Changchit
Texas A&M University – Corpus Christi, USA

ABSTRACT

Technology can be a useful tool to educate students. Online courses take advantage of these tools and provide students with the flexibility to complete the courses remotely. However, student perceptions of online classes will not be the same as they complete the course remotely, rather than interacting with other students and the instructor in a traditional classroom. This study seeks to better understand the factors of the online course environment and examines the impact that various online environmental factors have on student satisfaction. This study identifies factors that affect students' satisfaction toward the online class. These findings should help instructors teaching online classes concentrate more on factors that are considered to be important to their students.

INTRODUCTION

There continues to be a steady increase in online course enrollment over the last decade. 27% of public institution students, 23% of private non-profit institution students, and 60% of private for-profit students are enrolled in at least one distance education course (Allen et al., 2016). Advances in communication technologies, such as ubiquitous availability of the Internet, have opened new avenues for continuing higher education. These advances have allowed educators to provide for and satisfy individual variations in learning. Colleges and universities around the world now offer higher education courses to students online.

Work and family commitments, increased course offerings, greater availability of technology, and the growth of an international online community are among the factors contributing to the growing

popularity of online courses. This gives more flexibility to students as they pursue their education goals, and resolve issues that may hinder education, such as the commute time to and from campus as well as the ability to communicate with others. The removal of the physical barriers to higher education through online courses not only provides the opportunity for postsecondary education to many people, but it also provides the flexibility for people to meet their educational needs at various stages in their life (Koller, 2015).

Although the origins of distance learning can be traced to the postal service and correspondence courses, online classes take distance learning to an entirely new level. The instantaneous interaction capabilities of the Internet lower barriers to enrollment and participation. Instead of waiting for days or even weeks while correspondence travels through the postal system, today's online learners have the opportunity to communicate much more rapidly using tools including email and real-time chats. Furthermore, streaming video and access to other resources allow for easy sharing of files including students submitting their work.

The increase in online course offerings and enrollment can be tied to necessity. Higher education institutions have faced changes in their student demographics in recent years as more and more students no longer fit the traditional profile of a young, full-time, in-residence student. As the demographics change, so do the education needs. There is a higher demand for more flexible and convenient methods in obtaining a higher education. Also, there is a demand by organizations today for a more technologically savvy workforce. Even if traditional methods are preferred, there is a need to teach students to incorporate technological proficiency into their everyday education.

With these types of considerations, educational institutions are looking into incorporating online capabilities into their courses. However, there are questions regarding the ability of institutions to afford the cost of successfully implementing and coordinating online courses, and the appropriateness of online learning in meeting institutional goals. Furthermore, the benefits that online courses can provide may be dependent on the individual; what may be beneficial to one student may be a hindrance to another. For example, some students may not find online courses beneficial to their educational needs and prefer the person-to-person interaction of a traditional course. Others may find the convenience of online courses as an important factor in their course format decisions. These and other factors can be highly influential to decisions to provide a desirable online course.

Since students have perceptions about online courses that influence their subsequent decisions whether or not to take online courses, it is important to understand the factors that surround perceptions of benefit toward an online course setting. Designers of higher education courses can better create course options and curriculum for their students that address higher education needs. The purpose of this paper is to understand the factors that affect a student's perception of online courses as well as the factors that are perceived as important for online courses. In pursuit of this objective, this paper first discusses prior studies that address issues related to online courses and students' perceptions. This is followed by the study's methodology. Next, the results of the factors correlated with satisfaction are identified and discussed. In conclusion, the usefulness of the significant factors which can be utilized by those in higher education is discussed as well as future research development in this area.

Although previous research has considered many factors influencing online student satisfaction, no prior studies revealed the specific factors which contribute to overall satisfaction. By identifying and studying such factors, this study strives to suggest areas on which educators may focus to improve the satisfaction levels of their online students and the success of their online programs.

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/technology-infused-education/171939

Related Content

Time for a Change: Designing a Mobile Application to Assist People With Intellectual Disabilities
Rotem Israel Fishelson (2019). *Mobile Technologies in Educational Organizations (pp. 211-232).*
www.irma-international.org/chapter/time-for-a-change/227231

The University Challenge in the Collaboration Relationship With the Industry
Marcello Chedidand Leonor Teixeira (2021). *Handbook of Research on Modern Educational Technologies, Applications, and Management (pp. 449-465).*
www.irma-international.org/chapter/the-university-challenge-in-the-collaboration-relationship-with-the-industry/258786

Is Schema Theory Helpful in Teaching and Learning Based on Visualizing Research?
Xinhong Xia, Xianglan Chen, Jing Zhang, Hongliang Louand Yachao Duan (2022). *International Journal of Technology-Enhanced Education (pp. 1-15).*
www.irma-international.org/article/is-schema-theory-helpful-in-teaching-and-learning-based-on-visualizing-research/300332

Teaching Through Mobile Technology: A Reflection From High School Studies in South Africa
Mmaki Jantjiesand Mike Joy (2017). *Handbook of Research on Instructional Systems and Educational Technology (pp. 299-312).*
www.irma-international.org/chapter/teaching-through-mobile-technology/181399

A Bibliometric Analysis of Automated Writing Evaluation in Education Using VOSviewer and CitNetExplorer from 2008 to 2022
Xinjie Deng (2022). *International Journal of Technology-Enhanced Education (pp. 1-22).*
www.irma-international.org/article/a-bibliometric-analysis-of-automated-writing-evaluation-in-education-using-vosviewer-and-citnetexplorer-from-2008-to-2022/305807