Chapter 9
Learning Behavioral Differences Among Students and Ethical Issues in a University Cloud Classroom System

Zhi Liu
Central China Normal University, China

Hao Zhang
Central China Normal University, China

Hai Liu
Central China Normal University, China

Sannyuya Liu
Central China Normal University, China

ABSTRACT

In a private learning environment, each learner's interactions with course contents are treasured clues for educators to understand the individual and collective learning process. To provide educators with evidence-based insights, this chapter intends to adopt sequential analysis method to unfold learning behavioral differences among different groups of students (grade, subject, and registration type) in a university cloud classroom system. Experimental results indicate that sophomores undertake more learning tasks than other grades. There are significant differences in task-related and self-monitoring behaviors between liberal arts and science learners. Registered learners have higher participation levels than non-registered ones. Meanwhile, a user study aiming to analyze students' learning feelings indicates that a fraction of students have dishonest behaviors for achieving a good online performance. Finally, this study discusses behavioral ethical issues emerged in cloud classroom, which deserve the attention of educators for regulating and optimizing the online learning process of students.

INTRODUCTION

With the increasing advancement of information and communication technologies, Massive Open Online Course (MOOC) platforms began to emerge and draw much popularity beginning in 2012 (Pappano, 2012). Hereafter a large number of learners spontaneously participated in these platforms, in which rich behavioral data have been continuously generated. It should be noted that these data are simultaneously produced along with learning processes of students. In this sense, these learner-generated data could offer a great deal of opportunities for researchers and instructors to investigate students' learning traits and regularities.

In March 2012, the U.S. White House Office of Science and Technology Policy launched the "Big Data Research and Development Initiative," which aims to harness big data technologies to improve security, science, education and economic development. One crucial goal of this project is to transform teaching and learning with scientific discovery and innovation in educational data. With the popularity of online education, an increasing amount of behavioral data are emerging in online contexts. Considerable interest in effectively using these data to intervene, predict and improve learner performance has drawn unprecedented attention in the field of educational technology (Ferguson, 2012; Siemens & Long, 2011).

At present, online education is developing towards a localized and regional tendency. Especially, as for a university or college, administrators and instructors hope to effectively combine MOOC resources with classroom teaching to optimize the organization and process of teaching in formal education. Some educators attempt to transform MOOCs into the restricted learning environment to serve on-campus students. To this end, Fox (2013) proposed the idea of Small Private Online Course (SPOC), which considers the engagement with MOOCs as a supplement to classroom teaching. In this mode, instructors can sufficiently establish various interactive learning activities and students can conduct self-regulated learning under a feasible instructional scaffolding. Compared with the MOOC mode, the SPOC only allows for a limited number of enrollments aiming at a certain group of learners, and it can effectively improve retention and academic success of learners in online learning (Zhang et al., 2015). Additionally, rather than purely duplicating the classroom teaching into online environments, universities prefer to utilize the SPOC mode to establish diverse learning contexts and improve the level of educational informationization. Simultaneously, they also could master data sources of students to facilitate further analyses/diagnoses on teaching-learning processes for the purpose of promotion on teaching quality in universities (Combéfis, Bibal, & Van Roy, 2014; Zhang et al., 2015; Guo, 2014).

30 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/learning-behavioral-differences-among-students-and-ethical-issues-in-a-university-cloud-classroom-system/207667

Related Content

A New View of Privacy in Social Networks: Strengthening Privacy During Propagation

Wei Changand Jie Wu (2019). *Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 517-541).*

www.irma-international.org/chapter/a-new-view-of-privacy-in-social-networks/228743

Ethics and Social Networking: An Interdisciplinary Approach to Evaluating Online Information Disclosure

Ludwig Christian Schauppand Lemuria Carter (2019). *Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 346-374).*

www.irma-international.org/chapter/ethics-and-social-networking/228735

Penetration Testing Building Blocks

Abhijeet Kumar (2023). *Perspectives on Ethical Hacking and Penetration Testing (pp. 255-279).*

www.irma-international.org/chapter/penetration-testing-building-blocks/330268

Privacy and Territoriality Issues in an Online Social Learning Portal

Mohd Anwarand Peter Brusilovsky (2019). *Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 675-693).*

www.irma-international.org/chapter/privacy-and-territoriality-issues-in-an-online-social-learning-portal/228750

Ethical Considerations in the Educational Use of Generative AI Technologies

Burak Tomakand Aye Ylmaz Virlan (2024). *Exploring the Ethical Implications of Generative AI (pp. 49-62).*

www.irma-international.org/chapter/ethical-considerations-in-the-educational-use-of-generative-ai-technologies/343698