Chapter 6

What Can College Teachers Learn From Students’ Experiential Narratives in Hybrid Courses? A Text Mining Method of Longitudinal Data

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ABSTRACT

Thanks to the rapid development of asynchronous and synchronous instructional technologies (such as Blackboard and Moodle), many college instructors have flipped their classrooms to create a more student-centered learning environment. The emphasis on cultivating students’ life-long learning abilities through the enhancement of information literacy or technology-enabled learning has transformed the pedagogical approaches used by many college instructors. This text mining study was based on a corpus of a three-year experiential narrative collected by the instructor from over 15 college-level courses to identify keywords, main topics/themes, and associations of these topical concepts in students’ experiential narratives during and after taking these hybrid classes. QDA Miner text mining software was used to analyze these experiential narratives. Results, implications, and limitations were presented.

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INTRODUCTION

Technology-Enabled Hybrid Pedagogy

Technology-enabled classroom has recently attracted attention for many educators (Ramey, 2012). Its wide application in both professional and higher educational contexts has made e-learning technologies a global phenomenon (Esnault, 2008). Technologies in the classroom include computers, class websites and blogs, digital microphones, mobile devices, online media, and online study tools (Ramey, 2012). These technologies and their applications have grown exponentially (Dexter, 2017). Web 2.0 technologies and many emerging applications (e.g., chat room, Facebook, tele-conferencing, e-mails, Wi-Fi, mobile devices, etc., to name a few) have increasingly gaining momentum in many traditional and non-traditional classrooms (Buchholz, 2019; Dexter, 2017; Jones & Vollmers, 2008; Murray & Jackson, 2009; Ramey, 2012). For example, the incorporation of these technologies has become widespread among Australian universities (Gosper, McNeili, Woo, Phillips, Preston, & Green, 2011). Similar technologies have been used in the U.S. college classrooms (Jones & Vollmers, 2008). Canada’s OCAD University’s website also claims the administration’s support in creating technology-enabled learning and teaching, ranging from “from hybrid courses that combine face-to-face and online components to fully online courses……through resource sharing, training workshops, and one-on-one consultations” (https://www.ocadu.ca/services/faculty-curriculum-development-centre/e-learning.htm). In the business and professional setting, it is estimated that users of e-learning can increase their productivity over 50%, while this mode of learning will save between 50% and 70% in on-the-job training (Dexter, 2017).

As a growing industry sector, Pappas (2015) reports that, according to a 2013 report by e-learning Industry, in 2011, about $35.6 billion was spent on self-paced E-learning across the globe (Pappas, 2013). In the U.S., e-learning market is estimated to be around USD$190 billion in 2018 and will grow at 7% from 2019 to 2025 (Global Market Insights, 2015). Pappas (2015) observes that around 46% college students have taken at least one online course and it is estimated by 2019, around half of all college classes will be built on a variety of E-learning platforms. e-learning technologies have been extended to a professional setting. It is reported that about 41.7% of Fortune 500 companies use education technologies to train their employees (Pappas, 2015).

According to Global Market Insights (2015), the e-learning market includes three areas of players: technology, providers, and end-user. In terms of the technology players, it includes online e-learning, learning management system (LMS), mobile e-learning, rapid e-learning, virtual classroom, and others (Global Market Insights,
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