Increasing Student Engagement through the Use of Virtual Case Studies

Gi-Yong Koo, Troy University
Sara Shoffner, Troy University
Jeeheon Ryu, Chonnam National University

Teaching/Learning - Teaching strategies/methods (Other)  Thursday, June 1, 2017
20-minute oral presentation (including questions)  4:20 PM
Abstract 2017-076  Room: Wilson

Online courses are becoming more common in higher education and even in the field of sport management. As a result, educators are becoming concerned with how students’ learning may be impacted by this change and how teaching strategies may not be as effective in comparison to traditional classes (e.g., face-to-face). Thus, researchers should explore how current teaching methods may need to be altered in an effort to motivate and engage online learners. For instance, written case studies have been frequently used to teach face-to-face sport management classes (Veltri, Iyers, Miller, & Moody, 2010) and are a great way familiarize students with industry issues and encourage analytical thinking to solve the presented problems. However, it is unknown whether this method is equally successful for online learners.

A weakness of distance education may be that the course content is not engaging for students and the delivery of written case studies are not effective for online learners. Therefore, multimedia instruction may be a solution to the presented issue and has been explored in previous research (Koskela, Kiltti, Vipola, & Tervonen, 2005; Mapuva & Muyengwa). For example, multimedia learning environments utilize technology and software programs to assist student learning and are becoming a more popular teaching strategy for distance education. Social interaction may also be a potential problem pertaining to written case studies for online learners. Although written case studies have been successful in a traditional classroom, distance students may not be motivated or engaged by this method since there is no interaction with the material, teachers, and other students. Consequently, multimedia learning environments delivered via animated characters may be a better approach in comparison to the traditional case study (Koskela et al., 2009; Mapuva & Muyengwa, 2009). In support of this reasoning, research indicates that animated characters, also known as an animated pedagogical agent (APA), will positively impact student engagement, and increase learner-content interaction.

The purpose of this study is to evaluate written case instruction in comparison to virtual case instruction with an APA and examine differences in students’ situational interest (SI) for each method. Furthermore, students’ SI can be assessed by three factors that include: triggered-SI, maintained-SI-feeling, and maintained-SI value (Hidi & Renninger, 2006; Linnenbrink-Garcia et al., 2010). More specifically, the current study seeks to determine how the APA effects each dimension of students’ SI in an online environment. Prior studies indicate that virtual case instruction influences students’ SI more positively and increases student engagement with the course material.

To test the proposed hypotheses, sport management students were used to examine differences between the written case and virtual case to determine the best method for distance learners. Sport management programs were used for this study and 10 programs were chosen from the NASSM Listserv. The total sample for the study included 211 students with an average age of 22.62 (SD=3.81). Additionally, the study included 82 female students (38.9%) and 129 male students (61.1%). Each classification year was represented as well and was comprised of 10 freshmen (4.8%), 33 sophomores (15.6%), 79 juniors (37.4%), and 89 seniors (42.2%). The traditional method and experimental condition (i.e., virtual case) were evaluated by a between-group design and was tested by an online survey. The main premise of the study was to determine the best teaching method for distance learners so an online environment was simulated through the use of an online survey. The survey included demographic questions, the virtual or written case, and questions related to students’ SI. Moreover, students’ SI was measured by a previously developed 5-point Likert type scale from Linnenbrink-Garcia et al. (2010), which included the three dimensions of students’ SI. The multi-item scale was anchored by not at all true (1) and very true (5) and was modified slightly to fit the context of this study.

While the written case study was presented in the online survey with only text, the virtual case study included...
animated characters (i.e., APAs) that acted out the written case. The case was designed to demonstrate a meeting between an athletic director (male character) and marketing director (female character). Also, a moderator (female character) was used as an instructor and introduced several sections of the case study so that students could easily follow along and listen to key aspects of the case. In regards to the content, the case presented an issue about student attendance at college football games and was intended to demonstrate a realistic scenario.

The findings of this study revealed that triggered-SI and maintained-SI value were more positively impacted by the APA than the traditional case study and significant differences existed between the two methods. The results supported the findings of past research (Linnenbrink-Garcia et al., 2010; Subramaniam, 2009) and were consistent with the hypothesized predictions that virtual case instruction was a more appealing delivery method and the content of the virtual case was more meaningful with the APA. While the first two factors of students’ SI were enhanced when using the virtual case instruction, maintained SI-feeling was not significant. However, maintained SI-feeling is more concerned with the actual content of the case study and not necessarily the delivery method. The two case studies consisted of the same text and content so for that reason this dimension may not be a significant factor related to students’ SI for virtual case instruction.

Overall, the findings support notion that virtual case studies with an APA increase students’ SI, which has been deemed a predictor of student engagement. Also, methods using technology should be utilized to improve case instruction since the APA is more engaging and increases students’ interest to learn. Therefore, online course design should be developed with the student in mind and learning differences between face-to-face students and online students should be considered. The results of the study prove that traditional methods utilized in a classroom do not lead to the same outcomes in an online environment and pedagogical practices should be tailored to fit the needs of each student.