Management Training in Hospitality Schools: A Comparative Study of Instructional Methods

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Abstract

The article examines management education for Tourism and Hospitality students in higher learning institutions. It provides the findings of a comparative study of two instructional methodologies—traditional classroom and online courses. The study compared cognitive retention learning outcomes of a sample of students in both modalities over a single academic year. The overall results indicate similar efficacy between the two instructional techniques for participants within the sample.

Introduction

Higher education institutions train certain tourism researchers to publish macro-economic related studies associated with the industry. Competencies associated with micro-economic outcomes are learned through business courses within Hospitality management programs that provide training for leadership positions within the industry related commercial enterprises.

Management educators provide training for leadership positions in organizations that range from multinational conglomerates to smaller domestic operations through the increasing use of online education delivery methods within institutions [1]. About 96 percent of colleges provide online management courses within current higher education institutions [2].

This delivery method provides education to learners that are physically dispersed from each other and the instructors [3]. Online training programs implement technology networks used to transfer knowledge and course content to participants [4]. Substantial research has evolved based on the increasing academic interest in online education [5].

A variety of outlets within the business literature frequently report the findings of studies concerning relevant scholarship of teaching and learning (SoTL) to include comparative online learning studies. This is true to a much lesser extent within the hospitality and tourism literature, which includes just two internationally known academic journals with specific domains concerning SoTL studies. The current article for this special issue articulates the findings of a related comparative study of online courses that implemented a unique methodology designed to control for specific exogenous factors.

Online Learning Studies

The U.S. Department of Education compiled a number of empirical studies of online learning during a recently published meta-analysis [6]. About ninety of these studies were published between 1996 and 2008. All of them employed experimental or quasi-experimental design to compare various outcomes of online or blended learning modalities with face-to-face (f2f) instruction of students in higher educational institutions. All of the investigations demonstrated that students who participated in online conditions performed equally or slightly better than those engaged in f2f settings (d=0.05; k=27; p>0.05). This concurred with a prior meta-analysis that showed a substantial comparative dispersion range (from –1.31 to +1.41) suggesting significant factors that might be moderating learning outcomes in online education. These and other studies present relevant implications concerning the current movement of competency-based learning among business and hospitality schools [7].

Consensus appears to exist within the overall management education literature with regard to the attributes of learner cognition sets, affective thinking and skills inventories as central criteria of learning outcomes [8]. Similar factors can be observed in the [9] classification of training criteria wherein trainees' reactions (affects), learning (cognitive retention) and behaviors (skill development) primarily indicate the effectiveness of an intervention.

Management education and training are considered to be classified within the domain of professional studies providing the logic behind the use of experiential exercises, group work, and case studies that can be observed in management education and corporate training [10]. Such training requires a systematic approach to learning to improve individual, team, and organizational effectiveness [11]. Education intended to develop abilities for career progression involves activities resulting in the acquisition of new knowledge, skills, and/or abilities to augment personal growth [12].

The American Society of Training and Development (2012) estimated that 30 percent of organizational training hours are delivered exclusively online with an expected increase with younger workers entering the workforce. Recently, it has been argued that comparative studies between online and classroom delivery of instructional methods have been saturated [13]. Contrarily, new research has been published to investigate educational success factors associated these learning modalities consistent with the continuing trend of online learning proliferation [14]. As the number of online course offerings in

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higher educational institutions continues to expand, additional studies are added to the literature with the intent to determine success factors for learners that participate in these environments.

One study determined that a majority within a sample of students preferred to take management courses in traditional classrooms versus online venues [15]. Yet, a long standing consistent pattern within the literature indicated students enroll in online asynchronous formatted courses for the convenience factors of completing coursework at any time from any location [16]. Online education appeals to institutional administrators as a means to enhance enrollments with limited overhead expenses associated with course delivery [17]. In addition to numerous preceding studies, [18] found that online course delivery overcomes student geographical barriers concerning frequent commuting times and logistically isolated locations. Reports from investigations of student course evaluations conclude that management students are generally satisfied with outcomes associated with online courses [19]. There have been a number of investigations concerning difficulties affecting learning outcomes of online courses.

It has been noted in the literature that one negative factor associated with online course delivery involved time-delayed course feedback from instructors and peers resulting in perceptions of anxiety among learners [16]. It has further been suggested that student involvement may be minimized due to perceived isolation and the absence of peer socialization that would enhance learning in traditional settings [20]. For these reasons, Sapp and Simon [21] argue for disproportionally high drop-out rates within these environments. More recently Chau [22] argued against the expansion of online education noting a lack of quality in this instructional methodology.

Of course these findings failed to control for the exogenous factors related to instructor and learner training associated with the engagement in online education techniques, as noted by Smith and Mitry [3]. Published reports concerning the need for online learning competencies/certifications have existed in the literature since the days of the early adopters of the delivery format [23]. Online learning environments require training for instructors and students to attain quality of learning outcomes in this format [24].

What are the quality related measures that exist among reports in the business/hospitality literature? As may be expected, empirical studies of online versus classroom learning in the hospitality/business school context have focused on outcomes to include grades, project/exam scores, student satisfaction perceptions and other related factors commonly measured by institutional course evaluations [25]. For the purpose of this investigation, the author found that 21 pertinent studies were accessible, of which fourteen focused on some aspect of learning outcomes. Many among the total number of reports demonstrated no significant difference between traditional and online learning modalities. Twelve of the learning outcomes studies claimed a positive difference between the modalities in even proportion of 6/6 (traditional/online) in terms of learning effectiveness. Just two of the studies provided specific focus on principles of management classes [15,23]. Table 1 presents a summary of previous studies and literature review of Online Learning versus Classroom Learning Empirical Studies in the Business School Context.

The Study

One noted gap in the literature concerns the absence of studies (2 that are known) comparing online and classroom courses in principles of management. This study focuses specifically on a sample comparison in this area. The study is a similar replication of an investigation

Empirical Study	Study Variables	Findings	Assessment
Arbaugh [20]	Discussion patterns and student learning	Online=Classroom	Questionnaire
Campbell et al.[19]	Student performance; Student satisfaction	Online>Classroom Online=Classroom	Course exam; Course evaluation
Chen and Jones [26]	Student perceptions	Online=Classroom	Questionnaire
Dellana et al. [24]	Student performance	Online=Classroom	Course score
Drago et al. [18]	Perceived course quality and effectiveness	Online=Classroom	Questionnaire
Gagne and Shepherd [11]	Student performance; Student satisfaction	Online=Classroom Online=Classroom	Student exams; Course evaluation
Grandzol [27]	Student performance; Student satisfaction	Online=Classroom Online=Classroom	Student exams, Course evaluation
Hay et al.[18]	Student interaction and course quality	Online>Classroom	Course evaluation
Hay et al. [28]	Reflective learning	Online=Classroom	Questionnaire
Hiltz and Wellman [16]	Student performance, Student satisfaction	Online=Classroom Online>Classroom	Questionnaire
Kock et al. [29]	Student performance; Student perceptions	Classroom>Online Online=Classroom	Student grades; Questionnaire
McFarland and Hamilton [30]	Student performance, Student satisfaction	Online=Classroom	Course grades, Questionnaire
Nemanich et al.[15]	Student performance; Student perception	Classroom>Online Classroom>Online	Student exams; Questionnaire
Ponzurick et al. [31]	Student perceptions and preferences	Classroom>Online	Questionnaire
Sapp and Simon [21]	Student performance	Classroom>Online	Student grades
Smart and Cappel [32]	Student perception	Online>Classroom	Questionnaire
Sonner [33]	Student performance	Online>Classroom	Course grades
Stansfield et al.[34]	Student performance	Online>Classroom	Course grade
Sweat-Guy and Wishart [35]	Student performance	Online=Classroom	Student grades
Terry et al. [36]	Student performance	Classroom>Online	Final exam
Tesone [23]	Student performance	Classroom>Online	Student exams; Course grades
Vamosi et al. [37]	Student perceptions	Classroom>Online	Questionnaire

Table 1: Literature review of online learning versus classroom learning empirical studies in the business school context.

completed during the online early adopter years [23]. It extends that process to include a comparison of courses conducted over a one year period of time. The methodology controlled for one confounding exogenous variable relative to previous studies, in that the comparative courses used a single instructor who replicated all components of the courses in both modalities. These include texts, power point slides, practice questions, articles, case studies and examinations. The researcher strictly held the course materials and delivery style constant across six sections of classes.

Hypotheses

H1: Classroom students will demonstrate a positive difference in learning outcomes relative to online students.

H2: Older students will demonstrate a positive difference in learning outcomes relative to younger students in online classes.

Online learning requires self-discipline and self-motivation to set the pace of course progression [17]. This is in contrast to classroom courses in which an instructor physically guides each process. It may be argued that mature students will perform better than those possessing less maturity levels. Higher levels of maturity should come with increases in chronological age and college experience levels.

H3: Hospitality majors will demonstrate a positive difference in learning outcomes relative to other majors.

Another potential reason for variations in student performance in online management education may be the perception of relevance or importance that is mentally assigned by each student to the class [15].

Methodology

The study took place within a hospitality management college at a large U.S. university. The majority of students at this publicly funded institution are of traditional age cohorts for undergraduate and graduate level degrees. The sample consisted of 90 upper-level undergraduate students per semester over a period of two semesters. Fifty percent of students were enrolled in either a classroom or fully online version of the principles of management course (45 per course section). Both sections were taught by the same instructor who delivered each course in mirror image fashion. A total of 180 students had enrolled in the four course sections over the two-semester academic year of the quasi-experiment. The data were computed at the completion of each semester and aggregate scores were computed at the end of the experimental year.

OLS equation: To test the first hypothesis the researcher used the following OLS equation: Average Exam Score = $\alpha + \beta_1 GPA + \beta_2 Age + \beta_3 Major + \beta_4 Online ID$. For the dependent variable in the model, average exam scores were used (average score per student). The independent variables in the model were as follows: GPA is the student's cumulative college Grade Point Average, Age is the student's age (in years), Hospitality is an indicator variable set to one for students who are hospitality majors (as opposed to tourism and related sector majors). The remaining independent variable, Online ID, is an indicator variable set to one for students in the online sections of the course and zero for those in the traditional course. This last variable, therefore, represents the marginal difference in the cognitive outcome for students in the online sections after controlling for student characteristics. A statistically significant positive coefficient for Online ID, for instance, would indicate that students in the online course typically performed better on the exam questions than students in the traditional section. To test the remaining hypotheses, the researcher eliminates the Online

ID variable and re-runs the regression on only the online students. Descriptive statistics from the study are listed in Table 2.

Learning outcomes

Student learning outcomes were measured with scores on five interval exams, as well as a single comprehensive final examination. Testing procedures were controlled for exactness between quasi-experimental groups in terms of content, format (multiple choices), timing and equally random generation from a testing database. Scores of zero for missed exams were eliminated from the data aggregation with mean and median scores specifically reflecting averages for attempted examinations. The protocol implemented in the study follows those implemented in prior investigations in which test score averages served as a proxy for the cognitive retention aspect of learning outcomes [38]. Conceptually, this measure represented retention of course material on the part of the students (the Learning Domain, as mentioned earlier).

Experimental issue

The fact that students frequently withdraw from courses introduces a factor of range restriction or survivor bias, which tends to challenge this form of analysis. In the case of this study, student attrition has been shown to bias ordinary least squares (OLS) regression estimators [39] and hence this problem is noted.

Results

The overall results demonstrate evidence against Hypothesis 1—classroom students had more positive outcomes than online students. In fact, the raw score averages demonstrate the opposite reflection, although these were not found to be statistically significant. To test hypotheses 2 and 3 the researcher dropped the OnlineID variable to run the model for those students excluded from the classroom sections. No significant evidence was found for Hypotheses 2 and 3. However, raw data illustrates casually observed minor differences within these two categories as well. In summary the evidence suggests that both online and classroom learning methodologies were somewhat equally effective for this sample of students regardless of chronological age or choice of academic major.

Discussion

The summative intent of the investigation was to examine the effectiveness of online learning within the context of a single micro-economics related business management course. Hospitality educators and scholars sometimes overlook the reality that the hospitality management side of tourism education includes the delivery of industry-specific business administration skills. These courses enable competencies among hospitality school graduates to implement strategies to add economic value to the enterprises of our customers (the industry). Over the past fifteen years, the online delivery method has gone main-stream across all business training sectors.

Variable	Traditional Class (n=90)				Online Class (n=90)			
	Mean	Median	SD	%	Mean	Median	SD	%\
Exavg	78.10	76.67	9.32	-	78.42	77.67	8.87	-
GPA	2.76	2.73	0.51	-	2.93	2.83	0.52	-
Age	20.00	20.00	5.11	-	21.00	22.00	8.33	-
Male				42				32
H. Major				48				62

Note: Exavg=exams average; GPA=Grade point average; H. Major=business major

Table 2: Descriptive statistics of the study variables.

Advantages and disadvantages for online learning in corporate management education are similar to those reported in higher education. Online learning may be more cost effective in reaching geographically dispersed workers and may be more convenient for trainees because of its inherent on-demand any time/any place availability in asynchronous activities [40]. The online delivery of instruction approach provides learners with the possibility of sharing information and working together with fellow learners, instructors, and subject matter experts, and the opportunity to explore links and visit web sites [41]. Kraiger [42] asserts that in some ways interaction among participants is easier online (e-mail, chat rooms, and instant messaging) than in the classroom, which may lead to more interaction among learners, especially in the case of younger learners.

Online learning facilitates the ability to adapt to individual learners [43] This ability leads to an increase in learner control [44], which refers to "a mode of instruction in which one or more key instructional decisions are delegated to the learner" [45]. This learner control allows trainees to proceed at their own pace within instructional guidelines. While learner control may lead to enhanced motivation for trainees, learner control is not always beneficial and may have negative effects [46]. Given greater control of the learning process through the use of the computer, learners may make poor decisions and fail to exercise sound judgment [47]. Therefore, instructors should provide adaptive guidance toward their trainees in this context [1].

Trainees who are high in ability, have experience, are highly motivated, or believe that the subject matter is relevant to their work, may find greater learner control in online learning more beneficial [40]. Improvements in hardware and software capabilities have allowed for improved delivery of online instruction [1].

Conclusion

New revelations concerning the online delivery format continue to appear across the interdisciplinary academic literature with no indication that the publication of findings has reached a saturation level. Despite contrary prognostications, any topic so closely related to technological developments will be likely to continue to proliferate at a pace that will be consistent with the tenets of Moore's Law. For instance, many earlier notations of pedagogical deficiencies concerning online learning environments (OLE) have been overcome through technological advancements. This is predicted to be a continuous pattern for SoTL researchers as related to OLE scholarship.

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