EXPLORING UNDERGRADUATE HOSPITALITY STUDENT ATTITUDES ABOUT ONLINE LEARNING

by

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Abstract

Distance programs in higher education have become commonplace in the United States because of developments in technology. Despite these advancements, hospitality programs have been reluctant to create fully online offerings for undergraduate students. This study wanted to focus on understanding the attitudes of undergraduate hospitality students about online learning. Specifically, the objectives of this study were to determine the attitudes of hospitality students about online learning, to analyze which technologies they have used during their academic careers, and to analyze which technologies are perceived as most useful to facilitate learning. Focus groups were conducted with a select group of students to better understand their attitudes and experiences with online learning and learning technologies. An online survey was distributed to undergraduate hospitality management students at five Midwestern universities. Means and standard deviations were used to measure overall student attitudes about online learning and to measure ratings of effectiveness and past use of selected technologies for online learning. An analysis of variance (ANOVA) was used to determine the relationships between educational levels of students and perceptions of online technologies, as well as the relationship between experience with online courses and attitudes towards online learning. A t-test was used to determine if a relationship existed between gender and attitudes towards online learning. Results from this study revealed that respondents preferred to use more familiar technologies such as slideshow presentations and email for online learning. Students reported that they would miss the interaction with their professors if they took an online course and would receive less help. Females and males differed in their attitudes about online learning. Results from this study will
assist hospitality curriculum developers to better understand the attitudes and needs of undergraduate hospitality management students in the online learning environment.

Keywords: Distance education, online learning, hospitality, undergraduate students, attitudes, technologies
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Dedication

I would like to dedicate this work to my parents, Janice and Randy Sparrow, and my sister Logan. You three have had a tremendous impact on my learning and my passion for knowledge. You have taught me that learning can take many forms, and that those with passion will always find a way to succeed. Thank you for all of your love and support.
Chapter 1 - Introduction

Distance instruction is nothing new in higher education. From the early days of correspondence study to the online learning systems of today, students have pursued the purpose of improving one’s own situation through education. Though methods and technologies have changed, the purpose of education and the dedication of students and instructors about learning have not.

With the advent of the Internet, universities have attempted to harness its power of connection and transmission of information. To aid in this endeavor, many universities are using third-party course/learning management systems to help create online courses and learning environments for students (Pollack, 2003). Through these systems and the power of the Internet, students can connect instantaneously with instructors across the globe to access course materials, communicate with their peers and instructors, and learn from anywhere they have access to a computer.

Unlike technologies of the past, the Internet has penetrated the university setting to the point that colleges and universities are using Internet tools and course/learning management systems to assist with on-campus courses (Pollack, 2003). Tasks such as grading exams, tracking attendance, and contacting students can now be done using these online tools.

One question that arises is how ubiquitous has online education become in colleges and universities across the United States (U.S.)? A longitudinal study conducted by Allen and Seaman (2010) has measured these trends in the U.S. over the past eight years. According to their results, the total number of students in post-secondary institutions taking at least one course online has increased from 9.6% in fall 2002 to 29.3% in fall 2009. Over 70% of public
institutions in the U.S. reported that online education is an essential component of the institution’s long-term strategy, though only 48% noted that online programs were included in the university’s strategic plan (Allen & Seaman, 2010). Public institutions are acknowledging the opportunities that online education presents, though not all of them have developed a strategic plan that includes these technologies.

The for-profit sector of higher education is challenging public institutions with their online course offerings. According to a recent report by Bates (2011), the for-profit sector is performing better than public institutions in offering online courses. Bates (2011) believes that populations typically underserved by public institutions such as lifelong learners, new immigrants, and learners with relatively little or any high school experience are being better served through the for-profit sector.

This belief also is supported by the findings from Allen and Seaman (2010) who found that the most recent growth of enrollment in online education in postsecondary institutions was due to growth in the private for-profit sector. Though only 60% of for-profit institutions reported that online education is an essential component of their institution’s long-term strategy, almost 58% of these schools have included online programs in their strategic plan. Based on these figures it would appear that students are demanding online offerings from higher educational institutions, and the private for-profit sector is currently meeting this need.

**Hospitality Programs in Higher Education**

Formal hospitality programs have existed in the U.S. since the creation of the hospitality and tourism program at Cornell University in the 1920’s (Millar, Mao, & Moreo, 2010). Today, 204 institutions offer degrees in hospitality management and related fields in the U.S. (International Council on Hotel, Restaurant and Institutional Education, 2010). The field even
has its own accreditation board, the Accreditation Commission for Programs in Hospitality Administration (Accreditation Commission for Programs in Hospitality Administration [ACPHA], 2011).

Academic programs in hospitality management generally take either a consumer science or business management approach. Though programs differ among universities, one common theme is present among all of them (and required for accreditation from ACPHA); the requirement for field experience before graduation. This field experience is typically completed as a full-time internship experience and requires students to reflect on the lessons learned from coursework while interning to better understand the needs of the industry.

Though business schools, nursing schools, and even engineering schools have created fully online programs for students (Allen & Seaman, 2010), hospitality programs have generally avoided offering online complete bachelor’s degrees. Top hospitality schools such as Purdue University (Purdue University School of Hospitality & Tourism Management, 2011), Cornell University (Cornell University School of Hotel Administration, 2011), Penn State University (Penn State School of Hospitality Management, 2011), Michigan State University (The School of Hospitality Business, Michigan State University, 2011), and University of Nevada Las Vegas (William F. Harrah College of Hotel Administration, University of Nevada, Las Vegas, 2011) do not currently offer complete online degree programs for undergraduates in hospitality.

On the other hand, the for-profit sector currently offers fully online degrees in hospitality. The University of Phoenix offers an Associate of Arts with a concentration in hospitality, travel, and tourism (University of Phoenix, 2011). DeVry University offers a Bachelor of Science in both Management and Business Administration with a specialization in hospitality management
(DeVry University, 2011). Though some for-profit programs require students to physically attend courses in an on-campus classroom, these two programs can be completed fully online.

**Justification**

Online programs in higher education continue to enroll increasing numbers of students each year, with growth outpacing that of on-campus enrollment (Allen & Seaman, 2010). Learning through online courses is becoming more popular with students, with almost 30% of students taking at least one online course in their program of study (Allen & Seaman, 2010). Furthermore, high school students are becoming accustomed to online learning due to K-12 programs currently being offered online tuition-free in 30 states (K12, Inc., 2011).

As students grow accustomed to learning online, it is time for post-secondary hospitality programs to assess the potential success for online degree offerings. Not only can online programs bring in additional revenue, but students can study at their own pace when it is convenient for them, even if they are working full-time (Kansas State University Division of Continuing Education, 2011). However, though there is much potential in online programs, it is ultimately the decision of the student as to whether or not to pursue online learning. That is why it is important to explore the attitudes and willingness of students to enroll in online programs.

Because each university department has its own approach towards teaching, attitudes about online learning technologies should be examined among students. Students enter educational fields with expectations about the learning environment; as such, student expectations towards online learning should be examined in order to offer programs that are attractive to both the student and the instructor.
Purpose of Study

The purpose of this study was to understand the attitudes and perceptions of undergraduate hospitality students towards online learning. Specific objectives of this study were:

1. Determine current student attitudes of online learning in university courses in hospitality management.
2. Analyze which technologies undergraduate hospitality students had been exposed to during their academic career.
3. Analyze which technologies undergraduate hospitality students perceived as most useful to facilitate learning.

Research Questions

This study addressed seven specific research questions:

1: What are the attitudes of hospitality management (HM) students about online learning?

2: Which technologies have HM students used in university classes?

3: Which technologies do HM students perceive as most useful for completing course objectives in an online course?

4: Which factors are perceived as most important among HM students to consider when exploring online courses?

5: Do the students’ grade level (e.g. freshman, sophomore, junior, senior) impact the perception of online technologies?
6: Do the students’ experience with online courses impact their attitude about online learning?

7: Is there a relationship between hospitality students’ gender and their attitudes about online learning?

**Significance of the Study**

There is currently little research available about attitudes of undergraduate hospitality management students about online learning. Although it is unknown why this gap exists in the literature, this study attempted to be an exploratory study of the topic. Understanding the attitudes and expectations of undergraduate hospitality students towards online learning and learning technologies will help program directors and instructors to make more informed decisions about online course integration. Research should be conducted among students before significant investment is made in the development of online course offerings for these students.

**Limitation of the Study**

This study was limited to on-campus undergraduate hospitality students at Kansas State University, Purdue University, the University of Missouri, the University of Arkansas, and the University of Central Missouri. Caution should be taken before generalizing the results of this study to all undergraduate hospitality students in the U.S. While this limitation is significant, with the current lack of fully online hospitality programs in the U.S. it was a sample of the population that is nearest to the intended population of this study.

In addition, this study was distributed to participants via email. As such, there is a response bias in this study, because students who were not interested in the topic did not need to complete the survey.
Definition of Terms

**Online Course:** A course where most or all of the content is delivered online, with no face-to-face meetings (Allen & Seaman, 2010).

**Distance Education:** Any form of instruction in which the learner and instructor are separated from one another through physical distance (Wang & Gearhart, 2006).

**Online Degree Program:** Programs in which all of the instruction is completed through online courses (Bejerano, 2008).

**Course Management System/Learning Management System (CMS/LMS):** A tool that allows an instructor to publish various types of course materials online for either distance education courses or to supplement face to face learning (Pollack, 2003).

**Attitude:** “A person’s general feeling of favorableness or unfavorableness toward some stimulus object” (Fishbein & Ajzen, 1975, p. 216).

**Non-for-Profit University:** An institution that grants bachelor’s, master’s and doctorate degrees which is supported either through the state or through a church or local community donations (U.S. Department of Education, 2010).

**For-Profit University:** An institution that grants associate’s, bachelor’s, and possibly master’s degrees which is managed by a business or corporation and receives no government, church, or local community support (U.S. Department of Education, 2010).
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Chapter 2 - Literature Review

Introduction of Distance Education Background

Distance education has played a part in education in the United States (U.S.) for over a century, though its exact age is disputed. From U.S. mail to electronic mail, distance education has changed and evolved with technology and the demands of the students it serves. Although the world today is very different from the late 1800’s, many of the problems and opportunities associated with distance education are still being discussed and deliberated by scholars and administrators today.

This section will outline the technologies that have served a role in distance education, as well as how distance education is conducted today. A discussion about the literature related to student satisfaction, student learning outcomes, and course design will be included. Finally, this section will conclude with an analysis of the literature regarding hospitality distance education.

Technologies Before Computers

Just as technology has evolved significantly since the 20th century, so too have distance learning methods. The first medium for distance education was the print correspondence system (Lease & Brown, 2009). Correspondence courses were made possible due to two major technologies at the time—the creation of an inexpensive and reliable postal service and the country-wide expansion of the railroad network (Moore & Kearsley, 2005). In this method of learning, students would receive course materials (including syllabi, assignments, and texts) via U.S. Mail. After completing assignments, students would submit their work for grading by mailing it back to the instructor. For the first time ever, students who could not meet face-to-face with a tutor or instructor could learn in the convenience of their own home.
Although not yet accepted by institutions of higher education, correspondence learning did provide educational opportunities for women through Anna Ticknor’s Society to Encourage Studies at Home (Casey, 2008). This was a charitable endeavor founded by Anna Ticknor, the daughter of a Harvard professor of modern languages and wife of a wealthy Boston Primary School Board member. In 1873, when the Society was founded, women were not allowed to enroll in universities, so Anna persuaded her friends to help create a means for women to learn using the resources afforded to them. In order to remain legal in the eyes of larger society, Ticknor’s “school” was labeled as a Society, and its “teachers” were called “correspondents” (Bergmann, 2001). It is estimated that in its 24-year existence, the Society educated around 10,000 members (Casey, 2008).

Although correspondence study at the university level began with experiments by Illinois Wesleyan College in the 1880’s, programs were not fully established until the University of Chicago developed correspondence courses in 1890 (Mood, 1995; Moore, 1990). This was the first time a correspondence course offered a degree upon completion of study, up to and including the Doctorate of Philosophy (Ph.D.). It is estimated that during the academic year of 1898-1899 forty-eight colleges and universities in the U.S. were granting Ph.D.’s to correspondence students (Portman, 1978). All of these institutions were recognized by the Bureau of Education and most of them required Ph.D. candidates to be proficient in French and German, a bachelor’s degree from a known university, as well as requirements seen today such as research experience, preliminary exams, as well as a thesis (Portman, 1978). These correspondence programs were later discontinued due to scrutiny regarding academic rigor and adherence to standards.
For non-degree seeking students, options for continuing education appeared towards the end of the nineteenth century. Concerned about the lack of safety training for both foremen and workers, Thomas J. Foster created a safety training course for miners in 1891 (Verduin & Clark, 1991). Response to this initial course was so positive that Foster expanded this course and created other courses in engineering, drafting, and machinery (Porter, 1978). Foster’s endeavor later became the International Correspondence Schools of Scranton, Pennsylvania (Verduin & Clark, 1991) which had served an estimated 250,000 students after ten years of operation (Portman, 1978).

The next major technological breakthrough in distance education was the advent of radio broadcasting (Casey, 2008; Lease & Brown, 2009). Radio delivery allowed students to hear their instructor and reduced the delivery time for content (Casey, 2008). Between 1929 and 1975 in the U.S., the School of the Air movement delivered educational content to K-12 schools from commercial broadcast networks, universities, and local school boards (Bianchi, 2008). A comparison to draw between the School of the Air movement and the online technologies of today is that radio was believed to be the breakthrough teaching medium for future generations (Bianchi, 2008).

Television was the next technology to be used for distance education delivery. In 1934, the University of Iowa became the first university to broadcast courses using television, but it was not until 1970 that a more robust television delivery curriculum was offered by Coastline Community College in Orange County, CA (Casey, 2008). Coastline Community College was the first college without a physical campus. However, due to the cost of this technology, as well as the less-than-sophisticated means by which students could provide feedback to instructors, television delivery declined once computer technology became more accessible (Casey, 2008).
Technologies: Computers and Beyond

The creation of the computer opened limitless possibilities for distance education courses. Casey (2008) claims that the computer was the technology that changed the way students would communicate with instructors and fellow students, though others might argue that it was the power of the Internet that really defined this communication tool.

Before the widespread development and use of the World Wide Web, a number of institutions (both public and private) used satellites to distribute educational material to learners (Casey, 2008). These materials were often videos playable on television sets, either through real-time synchronous transmission or pre-recorded video. In some cases, students could call the instructor during a broadcast to ask questions and participate in a live, synchronous discussion (Casey, 2008).

The most ubiquitous technology found in distance education today is the learning management system/course management system. Popular companies today providing these services include Blackboard, Moodle, Axio, and Sakai. Benefits of these systems go beyond those of previous distance education distribution systems. Students can now access course material from almost any computer connected to the Internet (Bigony, 2010). Furthermore, not only can students connect with the instructor through these portals, but students can also interact with one another online. Instead of the closed loop of distribution of material between instructor and student, the Internet and learning/course management systems technologies have created opportunities for instructor-student and student-student communication (Pollack, 2003).

Predictors of Student Satisfaction in Distance Education

Before discussing student satisfaction in the realm of online distance education, it is important to examine student satisfaction in context of the previous distance education
technologies. A meta-analysis of the distance education literature from 1985 to 2002 was conducted by Bernard et al. (2004) which examined 232 published studies. A comparative analysis of the literature between synchronous (live, real-time class sessions) and asynchronous (class sessions accessed at the student’s convenience) distance education courses revealed that students had a higher positive attitude towards distance education courses when supplementary one-way videos were introduced, regardless of synchronicity (Bernard et al., 2004). It also was found that asynchronous students had a higher level of satisfaction with a course when interaction between both the instructor and fellow students increased.

A number of studies have been conducted that attempt to identify predictors of student satisfaction in online learning (Battalio, 2009b; Gunawardena, Linder-VanBerschot, LaPointe & Rao, 2010; Liu, Magjuka, Bonk, & Lee, 2009; Puzziferro, 2008; Reisetter & Boris, 2009; Sadik & Reisman, 2009; Swan et al., 2000). As a note, in most research studies the authors make the clarification as to whether a given variable is a predictor of student satisfaction with the online course or a predictor of student learning in the online course. This section will discuss the literature relating to student satisfaction in online courses.

Self-efficacy is a topic often studied in regards to student satisfaction in. Self-efficacy has been measured in different ways; however. McQuaid (2010) measured self-efficacy in relation to student confidence in his or her ability to complete the course successfully. Gunawardena (2010) measured self-efficacy in relation to learner confidence in using technology, ability to learn from online discussion, and confidence to transfer what was learned to the workplace. Lim (2001) measured self-efficacy in relation to academic self-concept, years of computer use, and Internet experience in a class. A study conducted by Puzziferro (2008) found that results on the Online Technologies Self-Efficacy Scale showed no significance in relation to student satisfaction with
the online course. This scale measures a person’s confidence in skills such as conducting an Internet search, attaching a file to an email message, and using a bulletin board on an online conferencing site. However, one could argue that the study’s findings are mixed because the Online Technologies Self-Efficacy Scale measures a person’s confidence in skills that are more commonplace today. The scale does not measure self-efficacy in skills used in online Course Management Systems, such as completing an online quiz or exam, watching a lecture online, or publishing a blog or wiki (Miltiadou & Yu, 2000). Overall, however, McQuaid (2010), Gunawardena (2010), and Lim (2001) all found that self-efficacy of online learners was a predictor of student satisfaction.

Another predictor of student satisfaction in online courses is student interaction with the course instructor (Battalio, 2009b; Northrup, 2009; Swan et al., 2000). Students appear to value the feedback and support they receive from instructors, because there is no classroom environment to receive this type of interaction. As Battalio (2009b) says, “Only instructors can provide the encouragement, guidance, and reassurance that online students need to be assured they are progressing successfully” (p. 454).

Another finding from the literature is that results are mixed regarding student interest in student-to-student interaction in online courses (Battalio, 2009b; Cameron, Morgan, Williams & Kosteleck, 2009; Gunawardena et al., 2010; Liu et al., 2009; Northrup, 2009; Puzziferro, 2008; Swan et al., 2000). When asked if they enjoy working with other students, most online learners reported that they prefer to work alone (Battalio, 2009b; Gunawardena et al., 2010; Northrup, 2009). In Cameron et al.’s (2009) study, qualitative responses towards group work revolved around the task given to the group, with little focus on the social benefits. Puzziferro’s (2008) study found that students did not actively engage in learning methods that involved seeking help.
from other students or collaborating with others. These findings support the study conducted by Battalio (2009a) that found that reflective learners—those who prefer to think and reflect on their learning—may be best suited for online learning.

These findings regarding student interaction become mixed when trying to define meaningful student interaction. As mentioned previously, studies have found that group work is not valued by online learners. However, interaction in the form of discussion and message boards is valued (Swan et al., 2000; Northrup, 2009; Liu et al., 2009). In the study conducted by Northrup (2009), results showed that students valued being able to discuss their thoughts and ideas with classmates and that students perceived sharing information with other students as important, but working in teams is difficult. Northrup (2009) and Liu et al. (2009) found that students perceive developing an online community is important, it is a predictor of student satisfaction, and that this community can be developed through online discussion boards and posting profiles for other students to view.

A number of course design features have also shown to be predictors of student satisfaction in online learning. One of the most significant predictors of student success in course design is the organization and layout of the online course site (Gunawardena et al., 2010; Reisetter & Boris, 2009). Students reported higher levels of course satisfaction if the course website was easy to navigate and they were able to understand the design of the course. McQuaid (2010) recommends instructors spend time at the beginning of the course to show students where to find course content, assignments, etc. In fact, in McQuaid’s study, a majority of students found that online tools were more challenging to master than the course material itself. McQuaid also found that students felt that there was insufficient time spent on orienting students to the online learning environment—in particular if this was the student’s first course
online. This finding is in alignment with Gunawardena et al.’s (2010) study which found that a contributing factor for student drop-out in online courses before the end of the course was a lack of understanding of the technologies and layout of the course learning site. Reisetter and Boris (2009) stated that almost 75% of their sample indicated that technology assistance was important throughout the semester. Reisetter and Boris (2009) summarized this topic in their findings that, “Students were less impressed with bells and whistles than they were with clarity, usability, and coherence” (p. 174).

One study examined the types of learning modules students preferred in an online course (Cuthrell & Lyon, 2007). Graduate students were required to complete six online modules; two modules were passive (reading and writing a response), two modules were group-based (work was completed as a group) and two modules were technology-based (students were required to use technologies such as video and audio recording to complete their work). It was found that students rated the passive learning modules the highest, but only for factors related to convenience and ease of completion. Students reported higher levels of learning in a blend of the three types of modules, though technology-based modules were rated the lowest in terms of student satisfaction (Cuthrell & Lyon, 2007).

**Predictors of Student Learning/Success in Online Education**

Perhaps one of the most significant research topics in regards to online learning in higher education is which variables are predictors of student learning. Researchers are interested in identifying any common elements that increase learner success in online courses, as well as which elements of an online course would increase retention rates.

Battalio (2009a) conducted a study with undergraduate students in nine sections of an online communications course to examine if student learning styles had any influence on student
success in an online course. Students were from a wide range of majors, and more than half of these students were over 26 years of age. The results of this study were inconclusive, stating that although reflective learners may prefer the environment of online learning (where they have the opportunity to think and reflect on the material before providing answers) learning styles were not found to be predictors of student learning.

Puzziferro (2008) examined 815 students enrolled in 163 different online courses at a community college in one semester. Results from this study found that students who received better grades in an online course were more likely to manage both their time and learning environment effectively. These findings echo the results of Northrup’s (2009b) findings that students felt self-monitoring of their course progress as well as their study time was important to their overall success in the online course environment.

Swan et al (2000) found a number of online interactions were predictors of both perceived levels and actual levels of student learning. Their study found that students who had a higher perceived level of interaction with the course instructor had higher levels of actual learning than those students who had lower perceived levels of instructor interaction. Students with a higher level of interaction with classmates had higher levels of learning. Furthermore, online courses with a higher percent of the grade determined by group work resulted in a lower perceived level of learning by students. Overall, Swan et al. (2000) found three factors that significantly contributed to online learning success: transparent course interface, instructors who interacted frequently and constructively with students, and a valued and dynamic discussion within the class.

In a 2000 study, Arbaugh found that students reported higher levels of perceived learning when an instructor used an interactive teaching style, or when instructors attempted to create an
interactive online classroom environment. In a follow-up study (2001), Arbaugh found that instructor immediacy behaviors such as using humor, providing timely feedback, and providing personal examples, as well as student attitudes towards course software were significant predictors of student learning. These results regarding instructor immediacy behaviors are supported by Northrup’s (2009) findings that students wanted feedback from an instructor at least two times per week, but not on a daily basis.

Liu et al. (2009) found that a sense of community in online learning courses lead to higher perceived levels of learning among students. Students with a higher perceived sense of community had lower feelings of isolation, and were less likely to drop the course. This study also recommended that ways to develop online learning communities include discussion boards, posting of student profiles, and collaborative assignments for students.

A recent article by Wagner, Garippo, and Lovaas (2011) examined the performance of students in on-campus and online sections of the same course. The study was conducted over ten years (2001-2010) for a business application course that taught students to use word processing, database, and spreadsheet software. Over ten years, 606 students were studied (435 of which were enrolled in the on-campus sections of the course, and 171 were enrolled in the online sections). Results showed that there was no significant difference in student performance in online sections versus on-campus sections though actual average grades of online students was 84.2% compared to 87.7% for those on-campus (Wagner et al., 2011). These findings were similar to those by Fortune, Spielman, and Pangelinan (2011) who found no significant difference in student perception of learning success in on-campus versus online course sections of the same introduction to hospitality course.
Online Course Elements & Design

A number of books and studies have been published that discuss the elements and best practices of online course design and content. Though opinions regarding aesthetics differ from author to author, a few key concepts have emerged in the literature.

First and foremost it should be noted that quality course design is more important than the technology used to deliver the course (Bernard et al., 2004). Although media plays an important role in course delivery, the research has not shown that it alone has a major impact on student learning. Some have argued that this is not the case, and even Clark (1994) admitted that meta-analyses have been conducted that found computer-mediated courses promote higher scores on final exams when compared to classroom instruction. However, Clark (1994) was quick to address this issue by discussing it with the authors of these meta-analyses, who later admitted that it was likely the way in which the technology was used, not the technology itself that impacted student learning.

Vai & Sosulski (2011) provide guidelines for new instructors in online course layout and design. When developing text materials, for example, the authors suggest using smaller blocks of text to make reading materials more approachable. This actually was found to be consistent with Sadik & Reisman’s (2009) study that found students in online courses do not like to read large blocks of information in web pages. While Sadik & Reisman’s recommendation focused primarily on web page length and the amount of scrolling involved when navigating a web page, Vai & Sosulski’s recommendation applies to written text in items such as course notes and discussion. Vai & Sosulski also take this a step further and advocate that online materials require more white space to be effective, since online learning requires more reading as the main presentation of new information (2011). They recommended that space be added to the left and
right of the text, and that large paragraphs be divided into multiple smaller paragraphs. Vai & Sosulski believed this added space would emphasize the text and not overwhelm students with large paragraphs of text.

Moore, Downing, and York (2009) recommended instructors include a syllabus, introductory quiz (over the details of the course), a regularly-updated page of frequently asked questions, and a course schedule, in addition to the course content. Although the authors believed that the syllabus is one of the most important documents in an online course (so important that it should reside outside of the hierarchy of content folders) they also felt that a syllabus would be enhanced with additional items such as the frequently asked questions, as well as the introductory quiz. Reisetter & Boris (2009) recommended including an introduction to the course for students that orients them to the course site. Though the authors state that introducing students to the technology of the online course would be beneficial, this could include items such as how to navigate the course website, where to find learning modules, how to access and submit assignments, and how to contact the instructor from the course site. McQuaid (2010) also suggested that any introduction to a course website should incorporate graphical representations, such as screen images or even a video introduction.

**Synchronous vs. Asynchronous Learning**

In online learning today, courses often distinguish themselves by being synchronous (live; real-time) or asynchronous (students complete at their own convenience). Many classes will actually be a blend of both synchronous and asynchronous, giving students a week or so to complete a lesson and the work associated with it. The main concern addressed when deciding to conduct a class either synchronously or asynchronously is that of time (Finkelstein, 2006). Is it
important for students to meet at the same time when learning, or are the students primarily concerned with trying to fit class time into their own busy schedules?

A meta-analysis of distance education research by Bernard et al. (2004) indicated that synchronicity was not conclusively significant as a predictor of student success or learning. The studies in this meta-analysis revealed that synchronous distance education methods were associated with a negative significant relationship with student success and asynchronous methods were associated with a positive significant relationship with student success. However, the variability in both sample sizes and groups studied do not make this finding conclusive (Bernard et al., 2004). It was found, though, that student satisfaction was higher in asynchronous courses, but asynchronous courses also had a higher dropout rate than synchronous courses. The authors believed this was due to the sense of group belonging and social pressure that is inherent in synchronous distance education.

Finkelstein (2006) addressed some of the basic premises for teaching in a synchronous environment. One prerequisite for teaching in a live, synchronous setting is to consider why it is necessary for students to all gather at the same time. Finkelstein provided a number of potential answers to this question, including that lessons are best learned from group discussion, to spark a deeper understanding of the subject matter, the information is complex, and when learners must comprehend certain material before proceeding. Finkelstein (2006) argued that although much of the online learning has been created for an asynchronous community, the technologies available today (such as video conferencing, virtual classrooms, and online chat rooms) are making synchronous learning more affordable and more practical for online learning.

Mabrito (2006) studied the communication behaviors of students in asynchronous versus synchronous communication tools. Students were enrolled in an online business writing course
and were divided into small groups to collaborate on two assignments. For one assignment students collaborated with one another via the live chat room feature in the learning management system, and for the other assignment students used the message boards to collaborate. Results showed that although students communicated more in the synchronous communication environment, their topics of conversation varied greatly, and students often went off-topic (discussing things such as personal life). Conversely, in the asynchronous environment students generated less conversation, but the topic of conversation was primarily focused on the assignment. Mabrito found student perceptions to be surprising. Although students were more on-task in the asynchronous environment, only 50% of students felt that the asynchronous group meetings were productive. In contrast, 75% of students felt that the synchronous group meetings were productive, even though conversation in this environment focused more on the group itself rather than the assignment.

Though synchronous communication is a valued tool for students, there are times when asynchronous communication may be better suited for a specific task. Moore & Kearsley (2005) included testimonials from both instructors and students about their interactions with asynchronous communication tools. A student instructor in mathematics said, “…instead of [students] raising their hand and saying ‘I don’t get it’ as they can in a face-to-face class, they have to start solving the problem and explain where they run into trouble…They do this under no time pressure” (p. 150). Another student (whose first language is not English) said, “In the face-to-face classrooms, I could hardly catch up [sic] what everybody is saying…In the online classes…I can read your postings, questions, thoughts, again and again…” (p. 150).

One consideration that needs to be made when deciding between asynchronous and synchronous formats is the schedule of the learners in the course. Besides the typical time
constraints that online students face, including work schedules, families, and other duties, accommodating different time zones with synchronous communications is a challenge. Palloff and Pratt (2007) found that if a course is being taught to students in multiple time zones, then an asynchronous delivery is best to implement. When teaching a synchronous course instructors should decide whose schedule needs to be followed when planning a time to meet with the class. Will meeting times be best for students? Will meeting times force some students to wake up in the middle of the night to log in and participate? Although a number of technologies have made communicating synchronously more convenient, the challenge of time still remains (Palloff & Pratt, 2007).

**Student Attitudes towards Online Learning**

Knowles and Kerkman (2007) conducted a study with students enrolled in the online section of an undergraduate art history course (n=29). The authors noted that this was the first time this course was offered in an online format. Traditionally, the course was offered only through on-campus sections. Students were polled at the beginning and end of the semester regarding their attitudes towards the online format. Results from the two tests revealed a number of changes in student attitudes towards online learning. The number of students agreeing with the statement, *I will miss the interactions with other students in an online course* increased by 31% from the beginning of the semester (from approximately 44% to approximately 75%). Furthermore, the number of students agreeing with the statements, *I will not get as much information in an online course* and *It will be easier to review materials in an online course* both decreased by 25% at the end of the semester (Knowles & Kerkman, 2007). These results suggest that students perceived online courses to be more organized and less intensive than on-campus courses, at least before beginning the course.
Harrington and Loffredo (2010) examined the motivations for students to enroll in online courses. This study examined 166 undergraduate students in psychology, nursing, and education programs who had all taken at least one online course before the survey was distributed. The authors found that the four primary reasons these students enrolled in online courses was because of convenience of schedule, convenience of travel, interest/enjoyment of computer technology, and interest in innovation (Harrington and Loffredo, 2010). It was also found that 98% of the students in this study listed one of these four variables as their primary reason for enrolling in online courses.

Fortune et al. (2011) examined student attitudes of online versus on-campus learning environments in an introductory hospitality management course. A total of 156 undergraduate students were studied, with 95 students enrolled in the online section and 26 students enrolled in the on-campus section. Both groups of students believed that the learning environment that they chose to enroll in would be less difficult than the alternative. Furthermore, both groups of students believed that the learning environment they selected would be more conducive to communicating with and asking questions of the instructor. Results of this study also echo the findings of Harrington and Loffredo (2010) that students in the online section selected this learning environment for reasons pertaining to convenience of schedule and being able to take the course without traveling to campus (Fortune et al., 2011).

Online Versus On-Campus Instruction

Another topic of interest in distance education research is the comparison of student performance in online and on-campus courses. It should be noted that Bernard et al. (2004) addressed in their research that many comparative studies are not scientifically rigorous. Many comparative studies do not outline the methodologies of both the online and the on-campus
course to the point where a clear comparison between the two can be made. As such, the authors recommended that future researchers use caution when using results from these studies to make claims for previous research results.

In a longitudinal study by Wagner et al. (2011), online and on-campus sections of the same introductory business course were studied for a period of ten years. The total sample for this study was 606 students, with 435 students enrolled in the on-campus sections and 171 students enrolled in the online sections. Independent sample t-tests between the mean course scores and course sections revealed no significant difference between the two (M=88.66, SD = 13.35 in on-campus sections and M=86.61, SD = 17.19 in online sections). The authors of this study also identified the materials used in the online sections of the course for delivery, which included online lecture notes, multimedia presentations, clear instructions, reasonable assignments, quality textbooks, and ability to email the instructor through email (Wagner et al., 2011).

A study conducted by Reuter (2009) compared on-campus students with online students in a soil science lab and field course for two spring semesters. A total of 97 undergraduate students were studied, 47 enrolled in the online sections and 50 enrolled in the on-campus sections. Online students were required to purchase a lab kit for the course, along with household items such as a ruler, digital scale, and measuring cup. On-campus students utilized the resources of the campus labs. Lecture notes and instructors were the same for both years and for both online and on-campus sections of the course. Results showed that there was no significant difference found in overall course grades between the online and on-campus students (M= 85.0% online; M= 84.4% on-campus) (Reuter, 2009). However, levels of improvement between beginning of the semester pre-assessment to end of semester post-assessment were significantly
different between the two groups. Online students improved scores by 42%, whereas on-campus students improved scores by 21% (Reuter, 2009).

**Teaching in Hospitality and Tourism**

Hospitality and tourism curriculum in higher education focuses on both classroom and experiential learning. Many college and university programs in the U.S. require students to complete an experiential learning experience, usually through an internship. It is generally believed that learning in hospitality and tourism is not relegated to only the classroom. Much of what is taught in the classroom was developed through partnerships with the industry at large. Ever since its founding in the 1920s, Cornell University’s hospitality program has worked closely with industry leaders to help direct the program’s learning outcomes (Kay & Russette, 2000). More recently, a study conducted by Millar, Mao, and Moreo (2010) investigated the beliefs of industry professionals against the beliefs of educators regarding learning outcomes for students in hospitality and tourism. Educators in topics related to food and beverage were in agreement with food and beverage industry leaders, with both groups reporting that students should have knowledge and skills relating to food safety laws, understanding general foodservice operations, communication skills, and finance skills. However, lodging industry professionals had different beliefs than lodging educators; educators believed technical skills (such as front desk operations and marketing skills) were more important than industry professionals believed (Millar, Mao, & Moreo, 2010).

These results were echoed in a study by Wang, Ayres, and Huyton (2010) which examined the beliefs of tourism educators and industry managers about the effectiveness of higher education degrees and curriculum in tourism in Australia. Only 52% of tourism managers agreed that the current curriculum in tourism meets the needs of the industry whereas 9.5% of
managers disagreed that current curriculum was relevant, and 35% were neutral. Industry managers believed the most important topics to teach in a tourism curriculum were marketing principles; tourism and hospitality marketing; principles of management; risk, crisis and disaster management; and strategic tourism and hospitality management. Comparatively, tourism educators identified sustainable tourism; international trends and global issues in tourism; tourism planning and environment; strategic tourism and hospitality management; and principles of management as the most important topics (Wang et al., 2010). The authors suggested that a partnership between academia and the tourism industry should be forged to better understand the needs of the industry and the guiding principles of academia.

Though industry and higher education may disagree at times as to what is most important to teach students, there is some agreement among industry leaders and executives as to what higher education is effectively teaching. Solnet, Kralj, Moncarz, and Kay (2010) surveyed hotel managers and executive board members in the U.S. regarding what skills they perceived higher education had the most impact on in their day-to-day jobs. Higher education was believed to have the most impact on financial management skills (M=3.82, SD=.829), followed by marketing (M=3.63, SD=.863), leadership and management skills (M=3.55, SD=.829) and service centered mentality (M=3.37, SD=.994) (Solnet et al., 2010). It was found that these ratings were not significantly different due to degree program (4-year/non 4-year), amount of industry experience, or current level of management. These findings were in agreement with the findings of Millar et al. (2010) that hotel managers believed teaching financial skills was important to student success, though marketing skills in the Millar et al. (2010) study were not believed to be important to teach in higher education.
To help bridge the gap between classroom and industry experience, Lee and Dickson (2010) believed that a learning environment that involved learning in the “real world” may prove beneficial to students. In this study, the researchers surveyed students in a hospitality and tourism curriculum to determine if students who had participated in experiential learning experience had significantly higher levels of certain skills than those who had not yet completed an experiential learning experience. The results showed that students who had participated in such an experience (typically as an internship) rated their oral presentation skills, writing skills, ability to make decisions, self-confidence, and time-management skills higher than those students who had not yet completed the experience (Lee & Dickson, 2010). This industry experience is vital to hospitality students and programs, especially considering that the Accreditation Commission for Programs in Hospitality Administration mandates that an accredited hospitality program requires students to complete a work experience in the industry prior to graduation (Accreditation Commission for Programs in Hospitality Administration, 2008).

Regarding classroom learning, Deale, O’Halloran, Jacques, and Garger (2010) conducted a survey among hospitality instructors in the U.S. Results from this survey showed that lectures were the most common teaching technique, with 83.7% of respondents reporting that they use this method regularly (this method was followed by discussion and student presentation to form the top three methods used by hospitality instructors). The most utilized support media in this study were electronic slide presentations (82.6%), web-based communication systems (52%), and a chalkboard/whiteboard (44.4%). Finally, when asked what instructors believed were the most effective teaching methods for hospitality and tourism education, the top three results were as follows: a combination of techniques (24.5%), experiential hands-on learning (23.3%) and a combination of lecture and activity (18.2%) (Deale et al., 2010). The use of web-based
communication systems was supported in a study by Robinson (2011) which found that 86% of students in an on-campus hospitality course believed using asynchronous discussion boards to conduct group communications was useful, and 73% of students said that they would use this method of communication again if it were offered.

**Online Education in Hospitality Management**

Although a great deal of research has been conducted regarding online education at the college and university level, little research exists in the realm of online education in hospitality management in higher education. In a study involving senior-level students in hospitality management over a 10-semester period, researchers found no significant difference in ratings of the instructor between students who took the same course online or on-campus (Tesone & Ricci, 2008). Rimmington (1999) concluded that the flexibility and access of online learning would be beneficial for hospitality students working in their internship experiences and for students working full-time in the hospitality industry.

Instead, current research focuses on the prominence of online education in professional and corporate hospitality settings. Researchers today are finding that a number of prominent hospitality organizations are offering e-learning solutions to supplement training and professional development courses for their employees and managers (Cho & Schmelzer, 2000; Fjelstul, Tesone, & Bougae, 2008; Homan & Macpherson, 2005). Cho and Schmelzer (2000) took this finding a step further to suggest that institutions of higher education should explore the possibility of offering online courses to hospitality management students to prepare them for the type of education that their employers will provide when they enter the industry. With prominent corporations such as Disney and Marriott exploring the opportunity to train and educate
employees via e-learning (Rimmington, 1999), it is worth understanding how current undergraduate students in hospitality management view online education.
References


Harrington, R., & Loffredo, D.A. (2010). MBTI personality type and other factors that relate to preference for online versus face-to-face instruction. *Internet and Higher Education, 13*, 89-95.


Chapter 3 - Methodology

Introduction & Purpose

This chapter will discuss the methodology, including targeted population and sample, survey design, pilot study, data collection, and planned statistical analyses. The purpose of this study was to examine the attitudes of undergraduate hospitality students about online courses, which technologies they had used during their academic career, and which technologies they perceived would be most useful to facilitate learning in the online environment. The research study sought to answer the following questions:

Q1: What are the attitudes of hospitality management (HM) students about online learning?

Q2: Which technologies have HM students used in university classes?

Q3: Which technologies do HM students perceive as most useful for completing course objectives in an online course?

Q4: Which factors are perceived as most important among HM students to consider when exploring online courses?

Q5: Do the students’ grade level (e.g. freshman, sophomore, junior, senior) impact the perception of online technologies?

Q6: Do the students’ experience with online courses impact their attitude about online learning?
Q7: Is there a relationship between hospitality students’ gender and their attitudes about online learning?

**Population and Sample**

The target population for this study was the on-campus undergraduate students enrolled in hospitality management programs at Kansas State University, Purdue University, the University of Missouri, the University of Arkansas, and the University of Central Missouri. The total sample for this study was approximately 792 students. The number of available students from each institution was: Kansas State University (250), University of Missouri (425), University of Arkansas (40), Purdue University (25), and University of Central Missouri (52).

The reason for selecting this population for the study was that there is currently no distance degree program for any of these five institutions. In order to measure the attitudes, perceptions, experiences, and needs of hospitality students in online courses, on-campus students must be used.

**Focus Groups**

Prior to survey distribution, focus groups were conducted to finalize and clarify the instrument. A total of three focus groups were conducted, each focus group containing between three and seven participants, for a total of 13 participants.

Focus groups were recorded and participants were asked a series of open-ended questions relating to online courses and technologies used in previous courses. A moderator guided the discussion, asking probing questions based on the responses of the participants. Notes were then taken of the responses given during the focus groups. Questions asked in the focus groups are located in Table 3.1.
Table 3.1: Focus Group Discussion Questions

<table>
<thead>
<tr>
<th>Technology Use &amp; Effectiveness</th>
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<tbody>
<tr>
<td>• Which specific technologies have you used in university courses?</td>
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<tr>
<td>• Which specific technologies do you feel would be the most effective in helping you to learn in online courses?</td>
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</table>

<table>
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<tr>
<th>Attitude</th>
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<tbody>
<tr>
<td>• What are some good things about taking an online course or completing a degree online?</td>
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<tr>
<td>• What are some bad things about taking an online course or completing a degree online?</td>
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<table>
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<tr>
<th>Motivations</th>
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<tbody>
<tr>
<td>• What are some reasons why you would choose to take courses online?</td>
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</tbody>
</table>

Focus Group Responses

Each of the focus groups involved students of different ages, experience with online courses, and year in school. However, every focus group reported some common responses and themes. Table 3.2 documents these common responses.

Survey Design

The survey instrument utilized for this study (Appendix A) was developed based on an extensive literature review and responses from the focus groups and used the Axio Online Survey software from Kansas State University. The first section of the survey included a questions pertaining to the extent that respondents had interacted with online technologies for previous coursework (responses included I have not used any online tools in my courses, I have taken on-campus courses that use some features of a course management system, and I have taken an online course that does not meet on-campus (all work is completed online).)

42
The second section of the survey asked students specifically which online technologies they had used in a classroom setting. This section was gated so that students who responded with 

*I have not used any online tools in my courses* in the previous section did not respond to this portion of the survey. The purpose of these questions was to determine which technologies students had used in a learning environment.

The third section of the survey instrument measured their attitudes and perceptions regarding online courses. Students were asked to rate on a 5-point Likert-type scale how much they agreed with statements such as - Online courses take less time than on-campus courses and 

There is more information presented in online courses than on-campus courses. Questions used in this section of the survey tool were developed using examples from the study by Knowles and

<table>
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<tr>
<th>Table 3.2: Responses Reported by All Focus Groups</th>
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<tbody>
<tr>
<td>Which specific technologies have you used in university courses?</td>
</tr>
<tr>
<td>• PowerPoint</td>
</tr>
<tr>
<td>• Online quizzes</td>
</tr>
<tr>
<td>• K-State Online (learning management system)</td>
</tr>
<tr>
<td>Which technologies do you feel would be the most effective in helping you to learn in online courses?</td>
</tr>
<tr>
<td>• Video lectures (from an in-class lecture)</td>
</tr>
<tr>
<td>• Lecture notes</td>
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<tr>
<td>• Email</td>
</tr>
<tr>
<td>What are some good things about taking an online course or completing a degree online?</td>
</tr>
<tr>
<td>• Flexibility to complete work according to your schedule</td>
</tr>
<tr>
<td>• Convenience to schedule classes each semester</td>
</tr>
<tr>
<td>• Convenience of location (no need to be at school)</td>
</tr>
<tr>
<td>What are some bad things about taking an online course or completing a degree online?</td>
</tr>
<tr>
<td>• Easy to fall behind/procrastinate</td>
</tr>
<tr>
<td>• Not as much information presented online</td>
</tr>
<tr>
<td>• More difficult to have student-to-teacher interaction</td>
</tr>
<tr>
<td>• No interaction with fellow students/classmates</td>
</tr>
<tr>
<td>What are some reasons why you would choose to take courses online?</td>
</tr>
<tr>
<td>• If I could not fit the course into my schedule</td>
</tr>
<tr>
<td>• If I was completing courses while away from campus (e.g. on internship)</td>
</tr>
<tr>
<td>• If it was for a general elective credit (or a course not for my major)</td>
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</tbody>
</table>
Kerkman (2007) where the authors examined student attitudes about online courses both before and after completing an online course. The purpose for this section was to determine what attitudes students currently have about online courses, which could prove useful for curriculum developers creating an online degree program. It would be beneficial to know if students have realistic expectations regarding online learning, or if specific student perceptions need to be addressed before beginning online coursework.

The fourth section of the instrument identified common motivators for students to take an online course. Students were asked to rate a selection of motivations for taking an online course from most important to least important on a 5 point Likert scale. Factors for rating included flexibility of scheduling, ability to take courses off-campus, and cost of online courses compared to on-campus courses.

The fifth section of the survey asked students to select which technologies they feel would help them learn most effectively in an online environment. This section of the survey asked students to rate on a 5-point Likert-type scale how important certain technologies would be in helping students to complete an online course. Results from this section would assist online instructors in the selection of technologies to use in their online courses. Although it is difficult for students to accurately identify which technologies are most useful in achieving learning objectives, it does provide a guiding point for distance instructors.

The final section of the survey gathered demographic information, including age, year in school, and gender. This section of the survey helped to answer the final research questions for the study.
**Approval for Study**

Before collecting data, approval for research was obtained through the Kansas State University Institutional Review Board. A copy of the approval letter is included in Appendix B.

**Pilot Study**

The pilot study used for this research was administered using the Kansas State University Axio System. Undergraduate hospitality students were emailed the link through a specific course listserv. The pilot study asked students to list the time it took to complete the survey, if there were any questions that were unclear and/or should be rewritten, and if there were any terms used on the survey that they did not understand.

A total of 42 usable responses were gathered through the online survey to assist in testing the reliability of the survey instrument. According to the pilot study results, questions in section three, which were developed using the questions from Knowles and Kerkman (2007) had a Cronbach’s Alpha of 0.783.

Section four of the survey, which asked students to rate how important certain factors are when deciding to take an online course, had a Cronbach’s Alpha of 0.625. Though this number is lower than anticipated, it was determined that these items did not necessarily need to be correlated with one another. As such, the questions were left untouched in the final survey instrument.

Section five of the survey, which asked students to rate the usefulness of technologies for learning and communicating with the instructor in an online course, had a Cronbach’s Alpha of 0.882. Section six, which asked students to rate the usefulness of technologies for communicating with other students in an online course, had a Cronbach’s Alpha of 0.759.
Survey Distribution

The final survey tool (Appendix C) was developed and distributed through the Kansas State University Axio System. Faculty representatives from Kansas State University, the University of Missouri, the University of Arkansas, the University of Central Missouri, and Purdue University were contacted to request that the survey be sent to all undergraduate hospitality management students in their department. Students were sent an email from the researcher (Appendix D), which included a link to the online survey. A reminder email (Appendix E) was sent twice after the initial email to increase student participation. To further increase student participation, students were given the option to enter their university email address at the end of the survey for a drawing to win a Starbucks gift card. Students who participated in the pilot study were excluded from final survey distribution and were not sent an email to the final survey.

The goal of the study was to collect 150 usable surveys, which would signify a 19% response rate for this population. This figure was obtained through Dillman (2009) with an estimate for 5% margin of error at a 95% confidence interval. Though that percentage is high for survey data collection, the researchers believed it was possible to collect with the assistance of faculty members in partnering institutes.

Statistical Analysis

Data analysis was conducted using IBM SPSS Statistics (Version 19). Descriptive statistics were used for the first section of the survey, including demographic variables and experience with online technologies in university courses (RQ2). Means and standard deviations were tabulated for student attitudes about online learning (RQ1), student perceptions of technologies (RQ3), and ratings of motivators for taking an online course (RQ4). An analysis of
variance (ANOVA) was used to determine the relationships between level of student and perception of online technologies (RQ5), as well as the relationship between experience with online courses and attitude towards online learning (RQ6). Finally, a t-test was used to determine if a relationship existed between gender and attitude towards online learning (RQ7).
References


Chapter 4 - Exploring the attitudes of undergraduate hospitality management students about online learning

Introduction

Higher education has been using distance education to help instruct students for years. Instructors have often worked with the newest technologies to help meet the goals of higher education and accommodate students who are not often able to learn at the physical campus. Each new wave of technology has brought with it the questions of how can instructors use this advancement to teach students and how can they create an effective learning environment using this new tool?

The first method for distance education used at the college and university level was correspondence courses, which began at the University of Chicago in 1890 (Mood, 1995; Moore, 1990). At the time, this medium was effective because of the inexpensive and reliable postal system and the recent expansion of the railroad network (Moore & Kearsley, 2005). In today’s world of distance education, the physical mail has been largely replaced by e-mail and instructors can communicate with students faster than ever thanks to the creation of learning management systems (Pollack, 2003).

Today, distance technologies are often used to accommodate on-campus students as well. According to a longitudinal study by Allen and Seaman (2010), 29% of undergraduate students have taken at least one fully online course, meaning that the work is completed online with no on-campus class sessions. These authors suggested that the percentage of students who have taken an online course will increase as more universities see the potential benefits of creating effective online learning environments for on-campus students (Allen & Seaman, 2010).
Due to increasing online enrollments in higher education, a number of studies have examined the learning environment to discover predictors of student online learning. Battalio (2009) examined several online sections of an English course with a mix of students from various majors to determine if learning styles impacted learner success in online courses. According to his results, reflective learners may perform better in an online course, though there are ways to accommodate students with other learning styles, such as creating a more collaborative environment among students.

Though some feel the online environment is isolated, Swan et al. (2000) found that students with a higher perceived level of instructor interaction and student interaction had higher levels of actual learning in an online course. Arbaugh (2001) also identified that instructor behaviors such as using humor, providing timely feedback to students, and providing personal examples to students were significant predictors of student learning in an online course.

Research has shown that course design is more important to student success than the technology used to teach a course (Bernard et al., 2004). One primary concern in the design of an online course is that of synchronicity—whether or not an online course should be conducted in real-time or if students should be able to complete the work at their own convenience. Finkelstein (2006) warns that instructors should carefully consider whether or not students would receive real benefit from meeting at the same time, and if those benefits would outweigh the inconvenience of working across multiple time zones. That being said, a meta-analysis of distance education research has shown that synchronicity is not conclusively a significant predictor of student learning in the online environment (Bernard et al., 2004).

Student attitudes about online learning are also important to consider. Knowles and Kerkman (2007) examined students in an online art history course both before and after
completing the course. Results showed that after completing the course, a majority of students (75%) believed that they would miss the interaction with their fellow students in the online environment if they were to take another online course, and that students did not believe online courses were as organized as they thought before taking the course. After taking the online course, the number of students who believed that online courses did not present as much information as the on-campus course decreased from over 60% to almost 40%. In a study examining the motivations for enrolling in online courses, students from psychology, nursing, and education reported that convenience of schedule, convenience of travel, interest/enjoyment of computer technology, and interest in innovation were the four primary reasons (Harrington & Loffredo, 2010).

Differences in student performance between online and on-campus sections of the same course have been an area of interest for research. A ten-year longitudinal study among students enrolled in an online and an on-campus introductory business course found no significant difference in the mean course scores of students between the two sections (Wagner et al., 2011). Student learning in a lab-based soil science course revealed no significant differences in final course grades between the online and on-campus sections (Reuter, 2009). It was noted, though, that students in the online course improved more from pre-test scores over the semester than did their on-campus peers.

Teaching and learning in hospitality programs in the United States have focused primarily on classroom and experiential learning, not online coursework. One contributing factor to this resides in the accreditation standards by the Accreditation Commission for Programs in Hospitality Administration (ACPHA), which state that students must complete a field experience prior to graduation (ACPHA, 2011). In a study by Deale, O’Halloran, Jacques, and Garger
In 2010, instructors in hospitality programs reported that lecturing was their most used teaching technique, and the most utilized support media were electronic slide presentations, web-based communication systems, and chalkboard/whiteboards.

Currently there is no fully online degree program for undergraduate hospitality students at some of the most well-known schools for hospitality management in the United States, including Purdue University (Purdue University School of Hospitality & Tourism Management, 2011), Cornell University (Cornell University School of Hotel Administration, 2011), Michigan State University (The School of Hospitality Business, Michigan State University, 2011), University of Nevada Las Vegas (William F. Harrah College of Hotel Administration, University of Nevada, Las Vegas, 2011), Penn State University (Penn State School of Hospitality Management, 2011), and Kansas State University. However, online hospitality management degree programs have emerged at for-profit institutions DeVry University (DeVry University, 2011) and University of Phoenix (University of Phoenix, 2011). Are these for-profit institutions finding an opportunity in an untapped market, or is online education in hospitality management appropriate for non-profit institutions of higher education?

Furthermore, hospitality companies and professional organizations are currently incorporating online learning opportunities into professional development and employee training (Fjelstul, Tesone, & Bougae, 2008; Rimmington, 1999). With the success of these e-learning initiatives, some researchers believe that higher education should prepare students to learn and train in this environment (Cho & Schmelzer, 2000). Preparing these students for learning online would not only help students to compete in the business world of today, but would assist hospitality management schools in staying current with the industry needs and expectations.
The purpose of this study was to explore the attitudes of undergraduate hospitality management students about online learning. While exploring these attitudes, this study sought to identify which technologies students had used in on-campus courses during their academic careers and to analyze which technologies students would perceive as most useful to facilitate learning online. If undergraduate hospitality management students had positive attitudes towards online learning, it would be beneficial to know which technologies they would perceive as useful to facilitate learning in that environment.

Specific research questions for this study were as follows:

Q1: What are the attitudes of hospitality management (HM) students about online learning?

Q2: Which technologies have HM students used in university classes?

Q3: Which technologies do HM students perceive as most useful for completing course objectives in an online course?

Q4: Which factors are perceived as most important among HM students to consider when exploring online courses?

Q5: Do the students’ grade level (e.g. freshman, sophomore, junior, senior) impact the perception of online technologies?

Q6: Do the students’ experience with online courses impact their attitude about online learning?

Q7: Is there a relationship between hospitality students’ gender and their attitudes about online learning?
Methodology

The target population for this study was on-campus undergraduate hospitality management students. Prior to survey administration, focus groups were conducted at one university with on-campus undergraduate hospitality students to determine final questions for the instrument and identify any questions that had not been included from the review of literature. Students in focus groups were asked what they believed were positives and negatives about taking online courses, which technologies they enjoyed using in their current courses and which would help them learn if they were to take an online course. Responses from the focus group echoed those from Knowles and Kerkman (2007).

Focus group responses impacted two changes to the final survey tool; first, the question relating to usefulness of technologies was divided into two questions; one focused on learning and communicating with the instructor and the other focused on communicating with other students. The other change to the final survey tool was to distinguish between text and audio/video chat tools online.

The survey for this study consisted of six sections. The first section of the tool asked students to mark their level of experience with online courses. Responses for this section included I have not used any online tools in my courses, I have taken on-campus courses that use some features of a course management system, and I have taken an online course that does not meet on-campus (all work is completed online). The second section of the survey (which was not administered to students who said they had no experience with any online tools for their coursework) asked students to list which online technologies they had used in their previous courses. The third section of the survey tool asked students to rate their level of agreement with certain statements about online learning on a scale of (1) strongly disagree to (5) strongly agree. These statements were originally developed by Knowles and Kerkman (2007) and included
statements such as: *Online courses take less time than on-campus courses,* and *There is more information presented in online courses than on-campus courses.* The fourth section asked students to rate how important certain factors on a 5-point Likert type scale - were to them if they were asked to decide to take an online course. Factors listed included convenience of schedule, convenience of location, and cost of taking an online course.

The fifth section of the survey asked students to rate how useful they would find certain technologies for learning, communicating with the instructor, and communicating with fellow students in an online course on 5-point Likert type scale from (1) Unimportant to (5) Critical. The final section of the survey included demographic variables, such as age, gender, and year in school.

The final instrument was approved by the Institutional Review Board at the sponsoring university. The survey was then pilot tested with 42 on-campus undergraduate hospitality students. A Cronbach’s alpha was used to determine the reliability of sections three and five of the survey tool. Section three, which asked students to rate their level of agreement with certain statements about online learning, had a Cronbach’s alpha of 0.783. Section five, which asked students to rate the usefulness of technologies for learning, communicating with the instructor, and communicating with other students was also found to be reliable. Usefulness of technologies for learning and communicating with the instructor had a Cronbach’s alpha of 0.882, and the usefulness of technologies for communicating with other students had a Cronbach’s alpha of 0.759.

The survey was administered through a university-sponsored online survey system. Students were contacted via email with an introductory letter about the purpose of the survey, were given four weeks to complete the online survey and sent reminder email messages each
week to obtain a better response rate. A drawing for Starbucks gift cards was offered to students who completed the survey to increase participation in the study.

Means, standard deviations, and frequencies were used to gather information about student experience with online courses, previous technologies used in courses, attitudes about online learning, factors to consider when deciding to take an online course, and usefulness of technologies for learning and communicating with the instructor and students online. An analysis of variance (ANOVA) was used to determine the relationship between level of student and perception of online technologies, as well as the relationship between experience with online courses and attitude towards online learning. A t-test was used to determine if a relationship existed between student demographic variables and attitude towards online learning. SPSS (version 19.0) for Windows was used to analyze data.

Results

Demographic Results

A total of 792 students were contacted via email about the survey. From this number, a total of 95 responses were received, of which 86 were usable, for a response rate of 10.8%. The majority of respondents were female (78%), 21 years of age or older (63.1%), and were upperclassmen (75.6%) (Table 4.1).

The number of students reporting no previous experience with any online tools in courses was 2 (2.3%). A total of 40 students (46.5%) reported that the extent of their online course experience was using features of an online learning system in an on-campus course. The percentage of students who had reported taking at least one fully online course (51.2%--a total of 44 students) was higher than the national average of 30% reported by Allen and Seaman (2010).
### Table 4.1: Demographic Characteristics (N=86)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%)</th>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>18 (21%)</td>
<td>Freshman</td>
<td>11 (12.8%)</td>
</tr>
<tr>
<td>Female</td>
<td>67 (78%)</td>
<td>Sophomore</td>
<td>9 (10.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Junior</td>
<td>27 (31.4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Senior</td>
<td>38 (44.2%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>7 (8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>9 (10.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>15 (17.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>21 (24.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>15 (17.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥23</td>
<td>18 (21.3%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Numbers may not total 100% due to non-response and/or rounding error*

This difference in percentage may be due to the high proportion of junior and senior students, because they would have been more likely to have taken an online course during their university career.

**Technologies Used in Courses Today**

Students reported that the technologies they used most for their university courses were slideshow presentations (94.2%), online quizzes (91.9%), and email (90.7%) (Table 4.2). The technologies that students reported using less for their university courses were Blogs (18.6%), Wikis (15.1%), and Skype (Audio and/or Video Chat) (12.8%).

**Student Attitudes About Online Learning**

Student attitudes about online learning are presented in Table 4.3. Students agreed most with the statements that there is more interaction with instructors in on-campus courses than online courses (M=3.95±1.05), and indicated they would know their instructor better in an on-campus course than they would in an online course (M=3.85±1.01).
Table 4.2: Technologies Used in Previous University Courses (N=86)

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slideshow Presentations (Microsoft PowerPoint)</td>
<td>81 (94.2%)</td>
<td>5 (5.8%)</td>
</tr>
<tr>
<td>Online Quizzes</td>
<td>79 (91.9%)</td>
<td>7 (8.1%)</td>
</tr>
<tr>
<td>Email</td>
<td>78 (90.7%)</td>
<td>8 (9.3%)</td>
</tr>
<tr>
<td>Word Processor Documents</td>
<td>77 (89.5%)</td>
<td>9 (10.5%)</td>
</tr>
<tr>
<td>Online Readings (PDFs)</td>
<td>73 (84.9%)</td>
<td>13 (15.1%)</td>
</tr>
<tr>
<td>Message Boards</td>
<td>68 (79.1%)</td>
<td>18 (20.9%)</td>
</tr>
<tr>
<td>Lecture Notes/Outlines</td>
<td>68 (79.1%)</td>
<td>18 (20.9%)</td>
</tr>
<tr>
<td>External Websites</td>
<td>61 (70.9%)</td>
<td>25 (29.1%)</td>
</tr>
<tr>
<td>Recorded Lectures from an In-Class Session</td>
<td>43 (50.0%)</td>
<td>43 (50.0%)</td>
</tr>
<tr>
<td>Narrated PowerPoint Presentations (Not including course lectures recorded from an in-class session)</td>
<td>32 (37.2%)</td>
<td>54 (62.8%)</td>
</tr>
<tr>
<td>Social Networking Sites (Facebook, Google+)</td>
<td>27 (31.4%)</td>
<td>59 (68.6%)</td>
</tr>
<tr>
<td>Twitter</td>
<td>21 (24.4%)</td>
<td>65 (75.6%)</td>
</tr>
<tr>
<td>Podcasts</td>
<td>16 (18.6%)</td>
<td>70 (81.4%)</td>
</tr>
<tr>
<td>Live Chat (Instant Messaging, Chat Rooms, etc.)</td>
<td>16 (18.6%)</td>
<td>70 (81.4%)</td>
</tr>
<tr>
<td>Blogs</td>
<td>16 (18.6%)</td>
<td>70 (81.4%)</td>
</tr>
<tr>
<td>Wikis</td>
<td>13 (15.1%)</td>
<td>73 (84.9%)</td>
</tr>
<tr>
<td>Skype (Audio and/or Video Chat)</td>
<td>11 (12.8%)</td>
<td>75 (87.2%)</td>
</tr>
</tbody>
</table>

Previous research has found that students in an online course who had higher interaction with their instructor learned more than those with a lower level of instructor interaction (Battalio, 2009). Though this question did not ask students how important they found interaction with their instructor, it still has some importance since the high level of agreement with this statement shows that students do not believe there is as much interaction, and perhaps as much personal relationship, with their instructor in an online course than there is in an on-campus course.
The statement that students disagreed with the most was that there is more information presented in an online course than an on-campus course (M=2.67±1.04). This result suggests that there is belief among students that online courses are not as content rich as on-campus courses.

Table 4.3: Student Attitudes About Online Learning (N=86)\textsuperscript{a}

<table>
<thead>
<tr>
<th>Statement Regarding Online vs. On-Campus Learning</th>
<th>Mean\textsuperscript{b}</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is more interaction with the instructor in an on-campus course than an online course.</td>
<td>3.95</td>
<td>1.05</td>
</tr>
<tr>
<td>I feel I know the instructor better in an on-campus course than an online course.</td>
<td>3.85</td>
<td>1.01</td>
</tr>
<tr>
<td>More reading is required in an online course than an on-campus course.</td>
<td>3.59</td>
<td>0.91</td>
</tr>
<tr>
<td>I would learn more in on-campus courses than online courses.</td>
<td>3.58</td>
<td>1.12</td>
</tr>
<tr>
<td>I receive more feedback in an on-campus course than an online course.</td>
<td>3.58</td>
<td>1.08</td>
</tr>
<tr>
<td>I receive more help in an on-campus course than I would in an online course.</td>
<td>3.38</td>
<td>1.24</td>
</tr>
<tr>
<td>Online courses take less time than on-campus courses.</td>
<td>3.34</td>
<td>1.22</td>
</tr>
<tr>
<td>I would miss the interaction with other students if I took an online course.</td>
<td>3.19</td>
<td>1.45</td>
</tr>
<tr>
<td>I would do better on exams if I was in an on-campus course compared to an online course.</td>
<td>2.92</td>
<td>1.12</td>
</tr>
<tr>
<td>Online courses are more stimulating than on-campus courses.</td>
<td>2.81</td>
<td>1.01</td>
</tr>
<tr>
<td>Online courses are more stressful than on-campus courses.</td>
<td>2.79</td>
<td>1.16</td>
</tr>
<tr>
<td>Online courses are less expensive than on-campus courses.</td>
<td>2.77</td>
<td>1.27</td>
</tr>
<tr>
<td>There is more information presented in online courses than on-campus courses.</td>
<td>2.67</td>
<td>1.04</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Numbers may not total 100\% due to non-response and/or rounding error

\textsuperscript{b} A five point Likert-type scale was used for responses: 1=Strongly Disagree, 5=Strongly Agree

\textit{Consideration Factors for Taking an Online Course}

Students indicated the ability to complete coursework at their own convenience (M=4.26±0.83) was most important when deciding to take an online course, followed by the
ability to communicate with the course instructor when they needed help (M=4.11±0.94) (Table 4.4). Students appeared most concerned with their schedule when considering taking an online course, though they also considered the level of interaction with the course instructor. Students appear to not only consider this interaction with their course instructor, but they do not believe they would receive as much interaction in the online course when compared to an on-campus course. Students did not seem to consider the opportunity to connect with their fellow classmates very much when deciding to take an online course (M=2.69±1.22).

Table 4.4: Consideration Factors for Taking an Online Course (N=86)*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to complete coursework according to my own schedule</td>
<td>4.26</td>
<td>0.83</td>
</tr>
<tr>
<td>Ability to communicate with my instructor when I need help</td>
<td>4.11</td>
<td>0.94</td>
</tr>
<tr>
<td>Ability to complete coursework away from campus</td>
<td>3.93</td>
<td>1.08</td>
</tr>
<tr>
<td>Cost of taking an online course</td>
<td>3.65</td>
<td>0.99</td>
</tr>
<tr>
<td>Opportunity to connect with other students</td>
<td>2.69</td>
<td>1.22</td>
</tr>
</tbody>
</table>

*Numbers may not total 100% due to non-response and/or rounding error

A five point Likert-type scale was used for responses: 1=Unimportant, 5=Critical

**Perceived Usefulness of Technologies for an Online Course**

Students believed that the most useful technology for communicating with the instructor and fellow students was email (M=4.31±0.96; M= 4.26±0.99, respectively) (Table 4.5 and Table 4.6). For learning online, students rated lecture notes/outlines (M=4.17±0.87) and slideshow presentations (M=3.87±1.06) as the most useful technologies. Twitter rated lowest for learning and communicating with the instructor (M=2.23±1.31) and communicating with students (M=2.22±1.28). Live chat received almost identical ratings in both questions (M=2.79±1.32; M=2.79±1.42). Social networking sites such as Facebook and Google+ were both rated with a
mean score of less than three. However, students believed the tool was more useful for communicating with other students (M=2.83±1.48) than it was for communicating with instructors and/or learning in the online environment (M=2.41±1.36).

Table 4.5: Ratings of Usefulness of Technologies for Communicating with Other Students in an Online Course (N=84)\(^a\)

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th>Mean(^b)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>4.31</td>
<td>0.96</td>
</tr>
<tr>
<td>Message Boards</td>
<td>3.78</td>
<td>1.15</td>
</tr>
<tr>
<td>Social Networking (Facebook, Google+, etc.)</td>
<td>2.83</td>
<td>1.48</td>
</tr>
<tr>
<td>Live Chat (Instant Message, Chat Rooms, etc.)</td>
<td>2.79</td>
<td>1.42</td>
</tr>
<tr>
<td>Skype (Audio and/or Video Chat)</td>
<td>2.58</td>
<td>1.31</td>
</tr>
<tr>
<td>Twitter</td>
<td>2.22</td>
<td>1.28</td>
</tr>
</tbody>
</table>

\(^a\) Numbers may not total 100% due to non-response and/or rounding error

\(^b\) A five point Likert-type scale was used for responses: 1=Not Useful, 5=Critical

**Relationship between grade level and perception of online technologies**

An ANOVA was used to measure the relationship between the grade level of the student and the perception of online technologies, with results shown in Table 4.7 and Table 4.8. According to the data, no significant differences were found between any of the ratings of the technologies presented and the grade level of the student.
Table 4.6: Ratings of Usefulness of Technologies for Learning and Communicating with the Instructor in an Online Course (N=84)

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>4.26</td>
<td>0.99</td>
</tr>
<tr>
<td>Lecture Notes/Outlines</td>
<td>4.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Slideshow Presentations (Microsoft PowerPoint)</td>
<td>3.84</td>
<td>1.06</td>
</tr>
<tr>
<td>Online Quizzes</td>
<td>3.84</td>
<td>1.17</td>
</tr>
<tr>
<td>Word Processor Documents</td>
<td>3.67</td>
<td>1.11</td>
</tr>
<tr>
<td>Recorded Lectures from an In-Class Session</td>
<td>3.49</td>
<td>1.16</td>
</tr>
<tr>
<td>Message Boards</td>
<td>3.38</td>
<td>1.17</td>
</tr>
<tr>
<td>Narrated PowerPoint Presentations (Not including course lectures recorded from an in-class session)</td>
<td>3.38</td>
<td>1.19</td>
</tr>
<tr>
<td>Online Readings (PDFs)</td>
<td>3.30</td>
<td>1.19</td>
</tr>
<tr>
<td>External Websites</td>
<td>3.17</td>
<td>1.14</td>
</tr>
<tr>
<td>Live Chat (Instant Messaging, Chat Rooms, etc.)</td>
<td>2.79</td>
<td>1.32</td>
</tr>
<tr>
<td>Skype (Audio and/or Video Chat)</td>
<td>2.50</td>
<td>1.32</td>
</tr>
<tr>
<td>Podcasts</td>
<td>2.44</td>
<td>1.25</td>
</tr>
<tr>
<td>Social Networking Sites (Facebook, Google+)</td>
<td>2.41</td>
<td>1.36</td>
</tr>
<tr>
<td>Blogs</td>
<td>2.29</td>
<td>1.25</td>
</tr>
<tr>
<td>Wikis</td>
<td>2.26</td>
<td>1.19</td>
</tr>
<tr>
<td>Twitter</td>
<td>2.23</td>
<td>1.31</td>
</tr>
</tbody>
</table>

*aNumbers may not total 100% due to non-response and/or rounding error
*bA five point Likert-type scale was used for responses: 1=Not Useful, 5=Critical
Table 4.7: Ratings of Usefulness of Technologies for Learning and Communicating with Instructor, Based on Year in School (N=85)\(^a\)

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th>Freshman (n=11)</th>
<th>Sophomore (n=9)</th>
<th>Junior (n=27)</th>
<th>Senior (n=38)</th>
<th>F value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slideshow Presentations (Microsoft PowerPoint)</td>
<td>3.55 ± 0.82</td>
<td>4.22 ± 0.83</td>
<td>3.93 ± 0.96</td>
<td>3.87 ± 1.07</td>
<td>.807</td>
<td>.493</td>
</tr>
<tr>
<td>Word Processor Documents</td>
<td>3.18 ± 1.17</td>
<td>3.89 ± 0.93</td>
<td>3.78 ± 0.93</td>
<td>3.66 ± 1.24</td>
<td>.910</td>
<td>.440</td>
</tr>
<tr>
<td>External Websites</td>
<td>3.09 ± 1.04</td>
<td>2.89 ± 1.05</td>
<td>3.11 ± 1.12</td>
<td>3.26 ± 1.20</td>
<td>.301</td>
<td>.825</td>
</tr>
<tr>
<td>Online Readings (PDFs)</td>
<td>3.55 ± 1.04</td>
<td>3.11 ± 1.27</td>
<td>3.22 ± 1.09</td>
<td>3.29 ± 1.29</td>
<td>.262</td>
<td>.853</td>
</tr>
<tr>
<td>Message Boards</td>
<td>3.36 ± 1.03</td>
<td>3.11 ± 1.27</td>
<td>3.15 ± 1.13</td>
<td>3.58 ± 1.20</td>
<td>.880</td>
<td>.455</td>
</tr>
<tr>
<td>Narrated PowerPoint Presentations</td>
<td>3.73 ± 0.65</td>
<td>3.89 ± 1.17</td>
<td>3.04 ± 1.19</td>
<td>3.47 ± 1.22</td>
<td>1.778</td>
<td>.158</td>
</tr>
<tr>
<td>Recorded Lectures from an In-Class Session</td>
<td>3.82 ± 0.75</td>
<td>3.56 ± 1.24</td>
<td>3.33 ± 1.07</td>
<td>3.55 ± 1.25</td>
<td>.505</td>
<td>.680</td>
</tr>
<tr>
<td>Lecture Notes/Outlines</td>
<td>4.09 ± 0.54</td>
<td>4.44 ± 0.53</td>
<td>4.15 ± 1.06</td>
<td>4.13 ± 0.88</td>
<td>.349</td>
<td>.790</td>
</tr>
<tr>
<td>Online Quizzes</td>
<td>3.82 ± 1.40</td>
<td>3.89 ± 0.78</td>
<td>3.81 ± 1.04</td>
<td>3.82 ± 1.29</td>
<td>.010</td>
<td>.999</td>
</tr>
<tr>
<td>Podcasts</td>
<td>2.09 ± 1.04</td>
<td>2.33 ± 1.50</td>
<td>2.19 ± 0.96</td>
<td>2.68 ± 1.36</td>
<td>1.202</td>
<td>.314</td>
</tr>
<tr>
<td>Email</td>
<td>4.27 ± 0.90</td>
<td>4.56 ± 0.73</td>
<td>4.22 ± 1.12</td>
<td>4.18 ± 1.01</td>
<td>.336</td>
<td>.799</td>
</tr>
<tr>
<td>Live Chat (Instant Messaging, Chat Rooms, etc.)</td>
<td>2.45 ± 1.13</td>
<td>2.33 ± 1.73</td>
<td>2.67 ± 1.11</td>
<td>3.03 ± 1.37</td>
<td>1.097</td>
<td>.355</td>
</tr>
<tr>
<td>Skype (Audio and/or Video Chat)</td>
<td>2.27 ± 1.27</td>
<td>2.33 ± 1.73</td>
<td>2.52 ± 1.22</td>
<td>2.53 ± 1.29</td>
<td>.150</td>
<td>.929</td>
</tr>
<tr>
<td>Social Networking Sites (Facebook, Google+)</td>
<td>2.73 ± 1.56</td>
<td>2.44 ± 1.51</td>
<td>2.52 ± 1.19</td>
<td>2.16 ± 1.35</td>
<td>.694</td>
<td>.559</td>
</tr>
<tr>
<td>Twitter</td>
<td>2.55 ± 1.57</td>
<td>2.22 ± 1.56</td>
<td>2.19 ± 1.00</td>
<td>2.11 ± 1.33</td>
<td>.331</td>
<td>.803</td>
</tr>
<tr>
<td>Blogs</td>
<td>2.64 ± 1.12</td>
<td>2.00 ± 1.41</td>
<td>2.26 ± 1.13</td>
<td>2.21 ± 1.30</td>
<td>.492</td>
<td>.689</td>
</tr>
<tr>
<td>Wikis</td>
<td>2.27 ± 1.01</td>
<td>2.22 ± 1.56</td>
<td>2.26 ± 0.98</td>
<td>2.29 ± 1.31</td>
<td>.009</td>
<td>.999</td>
</tr>
</tbody>
</table>

\(^a\) Results may be less than response rate due to non-response in demographic items of survey

\(^b\) A five point Likert-type scale was used for responses: 1=Not Useful, 5=Critical
### Table 4.8: Ratings of Usefulness of Technologies for Communicating with Other Students, Based on Year in School (N=85)\(^a\)

<table>
<thead>
<tr>
<th>Technology Tool</th>
<th><strong>Freshman</strong> (n=11)</th>
<th><strong>Sophomore</strong> (n=9)</th>
<th><strong>Junior</strong> (n=27)</th>
<th><strong>Senior</strong> (n=38)</th>
<th><strong>F</strong> value</th>
<th><strong>p</strong> value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Mean: 4.45, SD: 0.69</td>
<td>Mean: 4.33, SD: 0.87</td>
<td>Mean: 4.33, SD: 1.18</td>
<td>Mean: 4.26, SD: 0.92</td>
<td>F: .113</td>
<td>p: .952</td>
</tr>
<tr>
<td>Message Boards</td>
<td>Mean: 4.18, SD: 0.75</td>
<td>Mean: 3.67, SD: 1.12</td>
<td>Mean: 3.56, SD: 1.28</td>
<td>Mean: 3.84, SD: 1.17</td>
<td>F: .839</td>
<td>p: .477</td>
</tr>
<tr>
<td>Social Networking (Facebook, Google+, etc.)</td>
<td>Mean: 2.64, SD: 1.36</td>
<td>Mean: 2.00, SD: 1.22</td>
<td>Mean: 2.44, SD: 1.15</td>
<td>Mean: 2.74, SD: 1.37</td>
<td>F: .889</td>
<td>p: .450</td>
</tr>
<tr>
<td>Live Chat (Instant Message, Chat Rooms, etc.)</td>
<td>Mean: 2.36, SD: 1.43</td>
<td>Mean: 2.33, SD: 1.12</td>
<td>Mean: 2.15, SD: 1.10</td>
<td>Mean: 2.16, SD: 1.41</td>
<td>F: .119</td>
<td>p: .949</td>
</tr>
<tr>
<td>Skype (Audio and/or Video Chat)</td>
<td>Mean: 2.91, SD: 1.30</td>
<td>Mean: 2.33, SD: 1.50</td>
<td>Mean: 2.67, SD: 1.39</td>
<td>Mean: 2.89, SD: 1.47</td>
<td>F: .461</td>
<td>p: .711</td>
</tr>
<tr>
<td>Twitter</td>
<td>Mean: 3.27, SD: 1.68</td>
<td>Mean: 2.44, SD: 1.42</td>
<td>Mean: 2.89, SD: 1.25</td>
<td>Mean: 2.68, SD: 1.58</td>
<td>F: .658</td>
<td>p: .580</td>
</tr>
</tbody>
</table>

\(^a\) Results may be less than response rate due to non-response in demographic items of survey
\(^b\) A five point Likert-type scale was used for responses: 1=Not Useful, 5=Critical
**Relationship between student experience with online courses and attitudes about online learning**

Students were asked to rate their level of agreement with certain statements regarding online courses, developed from Knowles and Kerkman (2007). An ANOVA was used to determine if student experience with online courses impacted the ratings of statements regarding online learning. According to the data, no significant relationships were established from this data, as presented in Table 4.9.

**Relationship between Gender and Attitudes About Online Learning**

A t-test was used to determine if significant differences existed in the responses between these two groups. The results from this analysis are in Table 4.10. The statement with the highest significant difference between males and females was that online courses are more stimulating than on-campus courses (p=0.017). Males reported a higher level of agreement with this statement (M=3.28±0.75) than females did (M=2.66±1.01). Females agreed that there is more interaction with the course instructor in on-campus courses than online courses (M=4.10±1.02) more than males did (M=3.56±0.86). Finally, females had a higher level of agreement that there is more reading required in an online course than an on-campus course (M=3.70±0.89) than males had (3.22±0.94).
Table 4.9: Attitudes Towards Online Courses, Based on Previous Experience with Online Courses (N=86)

<table>
<thead>
<tr>
<th>Attitude Statement</th>
<th>Experience with online Coursework</th>
<th>F Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Online Experience (n=2)</td>
<td>On-Campus with LMS (n=40)</td>
<td>Full Online Course (n=44)</td>
</tr>
<tr>
<td>Online courses take less time than on-campus courses</td>
<td>3.50 0.71</td>
<td>3.15 1.12</td>
<td>3.50 1.32</td>
</tr>
<tr>
<td>Online courses are more stressful than on-campus courses</td>
<td>3.50 2.12</td>
<td>2.75 1.08</td>
<td>2.80 1.21</td>
</tr>
<tr>
<td>Online courses are less expensive than on-campus courses</td>
<td>2.50 0.71</td>
<td>2.80 1.24</td>
<td>2.75 1.33</td>
</tr>
<tr>
<td>There is more information presented in online courses than on-campus courses</td>
<td>2.00 1.41</td>
<td>2.68 1.05</td>
<td>2.70 1.05</td>
</tr>
<tr>
<td>I would learn more in on-campus courses than online courses</td>
<td>4.00 0.00</td>
<td>3.60 1.06</td>
<td>3.55 1.21</td>
</tr>
<tr>
<td>I receive more feedback in an on-campus course than an online course</td>
<td>4.00 0.00</td>
<td>3.58 1.17</td>
<td>3.57 1.02</td>
</tr>
<tr>
<td>There is more interaction with the instructor in an on-campus course than an online course</td>
<td>4.00 0.00</td>
<td>3.93 1.12</td>
<td>3.98 1.02</td>
</tr>
<tr>
<td>More reading is required in an online course than an on-campus course</td>
<td>3.50 0.71</td>
<td>3.53 0.85</td>
<td>3.66 0.99</td>
</tr>
<tr>
<td>I would miss the interaction with other students if I took an online course</td>
<td>4.50 0.71</td>
<td>3.35 1.42</td>
<td>2.98 1.47</td>
</tr>
<tr>
<td>I feel I know the instructor better in an on-campus course than an online course</td>
<td>4.50 0.71</td>
<td>3.85 1.10</td>
<td>3.82 0.95</td>
</tr>
<tr>
<td>I receive more help in an on-campus course than an online course</td>
<td>4.50 0.71</td>
<td>3.30 1.24</td>
<td>3.41 1.24</td>
</tr>
<tr>
<td>I would do better on exams if I was in an on-campus course compared to an online course</td>
<td>2.50 0.71</td>
<td>3.05 1.15</td>
<td>2.82 1.11</td>
</tr>
</tbody>
</table>

* A five point Likert-type scale was used for responses: 1=Strongly Disagree, 5=Strongly Agree
## Table 4.10: Differences between Gender and Attitudes About Online Learning (N=85)*

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Mean±SD</th>
<th>Male (n=18)</th>
<th>Female (n=67)</th>
<th>t</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online courses take less time than on-campus courses.</td>
<td>3.22±1.17</td>
<td>3.34±1.24</td>
<td>0.373</td>
<td>0.710</td>
<td></td>
</tr>
<tr>
<td>Online courses are more stressful than on-campus courses.</td>
<td>2.56±1.04</td>
<td>2.88±1.17</td>
<td>1.066</td>
<td>0.290</td>
<td></td>
</tr>
<tr>
<td>Online courses are less expensive than on-campus courses.</td>
<td>2.89±0.83</td>
<td>2.70±1.35</td>
<td>-0.560</td>
<td>0.577</td>
<td></td>
</tr>
<tr>
<td>There is more information presented in online courses than on-campus courses.</td>
<td>2.89±0.76</td>
<td>2.58±1.08</td>
<td>-1.135</td>
<td>0.260</td>
<td></td>
</tr>
<tr>
<td>I would learn more in on-campus courses than an online course</td>
<td>3.28±0.75</td>
<td>3.70±1.15</td>
<td>1.472</td>
<td>0.145</td>
<td></td>
</tr>
<tr>
<td>I receive more feedback in an on-campus course than an online course.</td>
<td>3.33±0.77</td>
<td>3.69±1.10</td>
<td>1.275</td>
<td>0.206</td>
<td></td>
</tr>
<tr>
<td>There is more interaction with the instructor in an on-campus course than an online course.</td>
<td>3.56±0.86</td>
<td>4.10±1.02</td>
<td>2.097</td>
<td>0.039*</td>
<td></td>
</tr>
<tr>
<td>More reading is required in an online course than an on-campus course.</td>
<td>3.22±0.94</td>
<td>3.70±0.89</td>
<td>2.007</td>
<td>0.048*</td>
<td></td>
</tr>
<tr>
<td>I would miss the interaction with other students if I took an online course.</td>
<td>3.22±1.00</td>
<td>3.21±1.54</td>
<td>-0.034</td>
<td>0.973</td>
<td></td>
</tr>
<tr>
<td>I feel I know the instructor better in an on-campus course than an online course.</td>
<td>3.50±0.71</td>
<td>3.99±1.00</td>
<td>1.916</td>
<td>0.059</td>
<td></td>
</tr>
<tr>
<td>I receive more help in an on-campus course than I would in an online course.</td>
<td>3.00±0.84</td>
<td>3.52±1.28</td>
<td>1.632</td>
<td>0.107</td>
<td></td>
</tr>
<tr>
<td>I would do better on exams if I was in an on-campus course compared to an online course.</td>
<td>3.00±0.77</td>
<td>2.93±1.18</td>
<td>-0.253</td>
<td>0.801</td>
<td></td>
</tr>
<tr>
<td>Online courses are more stimulating than on-campus courses.</td>
<td>3.28±0.75</td>
<td>2.66±1.01</td>
<td>-2.433</td>
<td>0.017*</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05

*Results may be less than response rate due to non-response in demographic items of survey
Discussion

The purpose of this study was to better understand the attitudes of undergraduate hospitality management students about online learning. Due to the social nature of this degree and its high level of interpersonal interaction, online learning is not considered as much for this group as it might for other disciplines. However, this study uncovered some important and significant data for any faculty member in hospitality management that is interested in creating online course offerings in their program.

It appears that undergraduate hospitality management students have at least some experience with using online course tools. This study defined online course tools as using an online learning management system in an on-campus course, which can offer a wide array of features. Students may have only used a learning management system to check their grades online, or they may have gone so far as to watch a recorded lecture and take a quiz online—this study did not investigate which features of a learning management students had used. However, it is now the case that more undergraduate students have at least some online experience.

Students reported that the technologies they had used most in their classes included slideshow presentations, online quizzes, and email. The students also believed that these technologies, in addition to online lecture notes/outlines, would be the most useful to them if they were required to take an online course. Focus group data and final survey data both supported the belief that students do not value using social media such as Twitter, Facebook, and Google+ in their courses, at least as an official communication tool for student-to-instructor communication.

Results showed that students valued the convenience and flexibility of online learning. However, respondents’ ratings indicated that they valued interaction with their instructor in an
online course and stated that they did not believe they would receive as much interaction with the address this issue and demonstrate to students that they can still receive help in an online course, though the format may be different than the traditional on-campus courses.

No significant relationship was identified between student grade levels (freshman, sophomore, junior, senior) and their perception of online technologies for both learning online and communicating with their fellow students online. In addition, no significant relationship was found between the level of experience students had with online courses and their attitudes about online learning.

Finally, results from this study showed that females and males differed in some of their beliefs about online learning. Compared to females, males believed that the online environment may be more stimulating than females. Females believed more strongly than males that there is more interaction with the instructor in an on-campus course, and there is more reading required in the online environment. However, both males and females believed that there is not as much information presented in the online environment as the on-campus environment.

Instructors interested in offering online courses in hospitality management should address these concerns. Perhaps by combining technologies that students are familiar with, such as slideshow presentations and online lecture notes/outlines, with some technologies that might increase perceived levels of interaction with the course instructor, such as recorded video lectures for online courses and online chat sessions, students would be more comfortable in the online environment. Future research could identify which technologies students believe will increase their level of interaction with the instructor in the online environment.
Conclusions & Recommendations

Slideshow presentations, online quizzes, and email were the specific technologies used most often in previous university courses. This is an encouraging finding, because these technologies are also used in the online environment. Instructors would not need to spend as much time training these students to use this technology in an online course. However, students also reported lower levels of experience with video technologies, blogs, and wikis. Instructors who would like to engage students in more creative projects using these technologies would need to spend at least some time introducing students to the technologies, and perhaps showing them an effective way of working with these.

One potential obstacle for hospitality management instructors looking to add online courses to the curriculum is perceived instructor interaction in the online environment. Students reported the level of communication with their instructor was an important consideration when deciding to take an online course, but they also believed that there was more interaction and more help offered from the instructor in an on-campus course. Instructors wanting to add online course offerings may want to find ways to build this instructor interaction into the course, perhaps by offering more opportunities to make contact with the instructor, or making it a required part of the course to contact the instructor during the first few weeks to make introductions.

Students believed they would need to read more in the online environment, but they would not learn as much as they would in on-campus courses. This finding echoes the belief of the importance of interaction with the instructor in an online environment, but perhaps also highlights a missing component of online instruction—the interaction with fellow students. This study found that students believe they would miss interaction with their classmates in the online environment, but do not find this interaction to be an important consideration when deciding to
take an online course. Future research could explore the perceived level of student-to-student interaction in an online course and identify technologies and/or course design techniques that increase this level of perceived interaction.

**Limitations of the Study**

This study used a convenience sample of students from five Midwestern universities. Students were also contacted via email for survey distribution, and students could self-select whether or not to participate. It was difficult to measure exactly how many students had access to the email because some universities did not use a listserv tool to distribute the survey; the email was instead sent to students through individual faculty members sending the email to their students.

There could be a response bias present in the results from this study. Students were contacted via email to participate in this study, and therefore it is likely that only students interested in completing the study actually participated. This bias may have skewed the data towards students who are interested in online learning and may not necessarily reflect the thoughts of all of the students included in the study sample.

Finally, another major limitation of this study is the limited response rate. Only 86 usable surveys were collected, which given the potential sample size of 792 this survey did not reach as many students as it could have. Therefore many conclusions and findings of this study should be taken with caution.
References


Harrington, R., & Loffredo, D.A. (2010). MBTI personality type and other factors that relate to preference for online versus face-to-face instruction. *Internet and Higher Education*


In M.G. Moore, P. Cookson, J. Donaldson, & B. A. Quigley (Eds.), Contemporary Issues in American Distance Education (pp. xii-xxvi). Elmsford, NY: Pergamon Press, Inc.


Chapter 5 - Summary & Conclusions

While many studies today are conducted in the field of online learning in higher education, few of these studies use hospitality students as a population of interest. The purpose of this study was to examine the attitudes and perceptions of undergraduate hospitality students regarding online courses, which technologies they had used during their academic career, and which technologies they perceived would be most useful to facilitate learning in the online environment.

Summary

This study was exploratory in nature due to the limited available research examining undergraduate hospitality students’ attitudes about online learning. One of the research questions focused on identifying those attitudes among these students. From the results of this study, it appears that students have mixed attitudes about the online learning environment. In addition, the results from this study revealed that attitudes of hospitality management students about online learning do not change after taking an online course.

Respondents reported that the technologies they used most in their university courses were slideshow presentations, online quizzes, email, and word processor documents. Technologies used the least in university courses included blogs, wikis, and Skype (audio and/or video chat). Instructors who are considering using these lesser-used technologies in their courses may want to provide some sort of orientation or training for students so that the students will feel comfortable using the technology in the learning environment.

Technologies that students rated as most useful for learning and/or communicating with the instructor in an online course were email, lecture notes/outlines, and slideshow presentations.
Technologies that were rated the lowest in terms of usefulness in this capacity were blogs, wikis, and Twitter. Though this study did not determine why students believed these technologies were the most or least useful for learning and/or communicating with the instructor in an online course, instructors who are interested in using the lower-rated technologies in an online course may want to find ways to demonstrate the technology’s usefulness. It may be the case that students are not aware of how effective some technologies can be when used in a different manner than they’re accustomed to.

Regarding the usefulness of technologies for communicating with other students, results from this study indicate that students believe email and message boards are the most useful tools. Other technologies, including social networking tools, live chat, and Twitter, received scores that were less than neutral. Based on these findings, it may be that students prefer to use technologies that are institution-sponsored when communicating with other students in the course, not third-party technologies.

Students reported that the ability to complete coursework according to their own schedule was the most important consideration when deciding to take an online course. Students also indicated that the ability to communicate with their instructor when they needed help was an important consideration. This data shows that students do consider the level of interaction they would have with the instructor when deciding to take an online course, and that convenience factors such as scheduling should be considered by the instructor when determining the format of an online course.

Statistical analysis found no significant relationship between students’ previous experience with online courses and their attitudes towards online courses. However, some items should be noted from comparison of means between the groups of experience level. Students
who had taken a fully online course in the past disagreed slightly that online courses are more stressful than on-campus courses, whereas other students showed a small level of agreement with that belief. In addition, students who had no online course experience believed more strongly that students who had taken an online course would miss the interaction with other students if they took an online course. Though the relationship between the factors of experience and attitude was not statistically significant, it should be noted that there were some differences, albeit small ones, among the experience levels.

The results also showed that a student’s grade level does not impact their perception of which technologies are useful for online learning (course delivery, communication with the instructor, and communication with their fellow students). Though some might believe that younger students (and those just beginning their degrees) are more open to using new technologies for learning, results from this study showed that students have a rigid set of expectations for which technologies they believe belong in the learning environment. For all of the new technologies emerging today, respondents believed that email, lecture notes/outlines, and slideshow presentations will suffice in the online learning environment.

Finally, research results showed that there are significant differences between males and females regarding some attitudes about online learning. The results from this study concluded that males believed more strongly that online courses are more stimulating than on-campus courses. Females, on the other hand, believed that there was more reading required in an online course, and that there is more interaction with the instructor in an on-campus course. Though this does not mean that online courses can (or should) be tailored to students based on their gender, it does provide some insight as to what items may be of concern to students in the online learning environment.
Though it was not a research question for this study, results indicated the possibility that undergraduate hospitality management students may prefer asynchronous delivery of online course content. Students rated asynchronous technologies (email, lecture notes, and slideshow presentations) as more useful for online learning than the synchronous technologies listed (recorded in-class lectures, live chat, and audio/video chat).

**Recommendations for Future Research**

Recommendations for future research include conducting this study again to obtain a larger response rate, particularly one where students are more evenly distributed across grade levels. In addition, researchers could explore preferences of students towards time-tested technologies, such as slideshow presentations and email. Do students rate newer technologies as less useful in learning environments because they truly believe that is the case, or is it because they have not yet seen those technologies used effectively for learning? Future research could also examine if a preference exists among undergraduate hospitality management students regarding asynchronous versus synchronous course delivery, and how instructors can effectively teach in the online environment using the preferred style of delivery.

**Implications for Hospitality Management Curriculums**

This study could be of importance for hospitality faculty considering the use of online courses to either supplement on-campus offerings or to create a fully online program in hospitality management. Though technology has advanced for teaching courses online, students still have significant concerns with online courses. This study found that students believe they would interact with and receive more feedback from their instructors in an on-campus course than an online course. Furthermore, students reported that they believed that they would have to
read more in an online course, but that they would not learn as much as they would in an on-campus course.

For all of the advances in technology in higher education, it would appear that undergraduate hospitality management students have the most experience with time-tested technologies. Slideshow presentations, online quizzes, email, word processor documents, and external readings were the technologies with the highest use in on-campus courses, as reported by students. In addition, students rated newer technologies such as blogs, wikis, and social networking tools as less useful for online learning. From this it can be concluded that students expect a certain list of technologies to be used in the learning environment, and that instructors may need to expose students to new technologies and increase their use in the online learning environment.

**Limitations**

One significant limitation of this study was the limited response rate of 10.8%. Though the researchers contacted department faculty at five universities to distribute this survey via email, it cannot be determined conclusively how many students actually received the email, considering that some universities do not use a listserv to email research studies to all of the undergraduate students in the department. The approximate population size for this group was 792. Considering the small response rate, conclusions from this research are cautionary at best. Relationships that may have been significant in this study may have appeared as such simply because of the number of responses collected. Furthermore, a response bias exists in this data because students selected whether or not to participate in the online survey. Results may be skewed because students in this study may have been more interested in the topic of online
learning, and therefore have different attitudes about online learning than the rest of the population.
Appendix A - Proposed Survey Instrument
Opening Instructions
The following questions will ask you to reflect on your experience with online courses and tools used for teaching courses at Kansas State University. Please answer all questions to the best of your ability; your responses will help us identify which tools are most useful for future students in Hospitality Management.

Page 1

Question 1 ** required **
What is your age?

[ ]

Characters Remaining: 2

Question 2 ** required **
What is your current year in school?

○ Freshman
○ Sophomore
○ Junior
○ Senior

Question 3
What is your gender?

○ Male
○ Female

Question 4 ** required **
What is your level of experience with using online tools for taking a college-level course?

○ I have not used any online tools in my courses.
○ I have taken on-campus courses that use some features of K-State Online.
○ I have taken an online class that does not meet on-campus (all work is completed online).
Fill out this page only if you answered:

- I have taken an onli... OR I have taken on-camp... on question 4. What is your level of experience... on page 1.

Question 5 ** required **

Which of the following technologies have your instructors used for classes? (Select all that apply)

- Slideshow presentations (Microsoft PowerPoint)
- Word processor documents (Microsoft Word)
- External websites (not including K-State sites)
- Online readings (PDFs)
- Message boards
- Narrated PowerPoint Presentations (Not including course lectures recorded from an in-class session)
- Recorded Lectures from an in-class session
- Podcasts
- Live chat
- Social networking sites (Facebook, Google+)
- Twitter
- Blogs
- Wikis

Page 3

Fill out this page only if you answered:

- I have taken on-camp... OR I have taken an onli... OR I have not used any ... on question 4. What is your level of experience... on page 1.

Question 6 ** required **

Rate the following statements about your beliefs regarding online courses.

1 - Strongly Disagree  |  2 - Disagree  |  3 - Neutral  |  4 - Agree  
5 - Strongly Agree

6.1 Online courses take less time than on-campus courses.  
6.2 Online courses are more stressful than on-campus courses.  
6.3 Online courses are less expensive than on-campus courses.  
6.4 There is more information presented in online courses than on-campus courses.
6.5 I would learn more in on-campus courses than online courses.
6.6 I receive more feedback in an on-campus course than an online course.
6.7 There is more interaction with the instructor in an on-campus course than an online course.
6.8 More reading is required in an online course than an on-campus course.
6.9 I would miss the interaction with other students if I took an online course.
6.10 I feel I know the instructor better in an on-campus course than an online course.
6.11 I receive more help in an on-campus course than I would in an online course.
6.12 I would do better on exams if I was in an on-campus course compared to an online course.
6.13 Online courses are more stimulating than on-campus courses.

Page 4

Fill out this page only if you answered:

- I have taken on-campus... OR I have taken an online... OR I have not used any... on question 4.

What is your level of experience... on page 1?

Question 7

Please rate the following items in relation to how important they are to you when deciding to take an online course.

1 - Unimportant | 2 - Somewhat important | 3 - Important
4 - Very Important | 5 - Critical

7.1 Ability to complete coursework according to my own schedule
7.2 Ability to complete coursework away from campus
7.3 Cost of taking an online course
7.4 Ability to communicate with my instructor when I need help
7.5 Opportunity to connect with other students

Page 5

Fill out this page only if you answered:

- I have taken on-campus... OR I have taken an online... OR I have not used any... on question 4.
What is your level of experience on page 1.

Question 8

Rate the following technologies based on how useful you would find them to your learning experience in an online course.

1 - Unimportant | 2 - Somewhat important | 3 - Important
4 - Very Important | 5 - Critical

8.1 Narrated PowerPoint Presentations
8.2 Recorded Video of In-Class Lectures
8.3 External Video (ex: YouTube)
8.4 PowerPoint Slides (no audio/video)
8.5 Lecture Notes/Outlines
8.6 External Readings (PDFs)
8.7 Live Chat (Instant Message, Chat Rooms, Skype, etc.)
8.8 Message Boards
8.9 External Websites
8.10 Social Networking (ex: Facebook, Google+)
8.11 Podcasts
8.12 Twitter
8.13 Wikis
8.14 Blogs

Page 6

Question 9

Please enter your email address below if you wish to be entered in a drawing for one of five (5) $20 gift cards to Starbucks. Only Kansas State webmail addresses are eligible for winning.

Characters Remaining: 200

86
Closing Message
Thank you for your time! Your responses are greatly appreciated.

- End of Survey -
Appendix B - IRB Approval Letter
TO: Kevin Roberts
   HMD
   104 Justin

FROM: Rick Scheidt, Chair
       Committee on Research Involving Human Subjects

DATE: January 27, 2012

RE: Proposal Entitled, “Exploring Undergraduate Hospitality Student Perceptions About Online Degree Programs”

Proposal Number: 6111

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written – and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, 45 CFR §46.101, paragraph b, category: 1, subsection: ii.

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.
Appendix C - Final Survey Instrument
Opening Instructions

Online degree programs have grown in popularity over the last several years and serve an important role in increasing opportunities for higher education. The purpose of this study is to better understand the perceptions and attitudes of undergraduate hospitality management students towards online learning and online degree programs. Your participation is essential in order to form a clear understanding of undergraduate hospitality management student perceptions and attitudes.

The following survey will ask you to reflect on your experience with online courses (if any), your thoughts regarding online courses, and tools used for teaching courses at Kansas State University. Please answer all questions to the best of your ability; your responses will help us identify which tools are most useful for future students in hospitality management.

If at any time during the survey you wish to opt out of participation you may close your browser, which will exclude you from data collection.

By clicking Next, you agree to informed consent to participate in the following survey.

By completing this survey you will have the opportunity to be entered into a drawing for one of ten (10) $10 Starbucks gift cards. Please provide your university email address when prompted in order to be entered into the drawing.

If you would like a copy of the final results of this study, please provide your university email address when prompted to do so.

If you have any questions pertaining to this study please contact Dr. Kevin Roberts at kevrob@ksu.edu or (785) 532-2399. If you have any questions about the rights of individuals in this study or about the way it is conducted, please contact the University Research Compliance Office at (785) 532-3224. Thank you for your time and assistance in this research.

Page 1

Question 1 ** required **

What is your level of experience with using online tools for taking a college-level course?

- [ ] I have not used any online tools in my courses.
- [ ] I have taken on-campus courses that use some features of an online learning system (K-State Online).
- [ ] I have taken an online class that does not meet on-campus (all work is completed online).

Page 2

Fill out this page only if you answered:

- I have taken an online OR I have taken on-campus on question 1. What is your level of
Question 2 ** required **

Which of the following technologies have your instructors used for classes? (Select all that apply)

- Slideshow Presentations (Microsoft PowerPoint)
- Word Processor Documents (Microsoft Word)
- External Websites (not including K-State sites)
- Online Readings (PDFs)
- Message Boards
- Narrated PowerPoint Presentations (Not including course lectures recorded from an in-class session)
- Recorded Lectures from an In-Class Session
- Lecture Notes/Outlines
- Online Quizzes
- Podcasts
- Email
- Live Chat (Instant Message, Chat Rooms, etc.)
- Skype (Audio and/or Video Chat)
- Social Networking Sites (Facebook, Google+)
- Twitter
- Blogs
- Wikis
- Other:  

Page 3

Fill out this page only if you answered:

- I have not used any ... OR I have taken an onli... OR I have taken on-camp... on question 1.
What is your level of experience... on page 1.

Question 3 ** required **

Please rate the following statements about your beliefs regarding online courses.

1 - Strongly Disagree | 2 - Disagree | 3 - Neutral | 4 - Agree
5 - Strongly Agree

3.1 Online courses take less time than on-campus courses.

3.2 Online courses are more stressful than on-campus courses.
3.3 Online courses are less expensive than on-campus courses.
3.4 There is more information presented in online courses than on-campus courses.
3.5 I would learn more in on-campus courses than online courses.
3.6 I receive more feedback in an on-campus course than an online course.
3.7 There is more interaction with the instructor in an on-campus course than an online course.
3.8 More reading is required in an online course than an on-campus course.
3.9 I would miss the interaction with other students if I took an online course.
3.10 I feel I know the instructor better in an on-campus course than an online course.
3.11 I receive more help in an on-campus course than I would in an online course.
3.12 I would do better on exams if I was in an on-campus course compared to an online course.
3.13 Online courses are more stimulating than on-campus courses.

Fill out this page only if you answered:

- I have not used any ... OR I have taken an onli... OR I have taken on-camp... on question 1.
  What is your level of experience... on page 1.

Question 4

Please rate the following items in relation to how important they are to you when deciding to take an online course.

1 - Unimportant | 2 - Somewhat important | 3 - Important
4 - Very Important | 5 - Critical

4.1 Ability to complete coursework according to my own schedule
4.2 Ability to complete coursework away from campus
4.3 Cost of taking an online course
4.4 Ability to communicate with my instructor when I need help
4.5 Opportunity to connect with other students

Page 5
Fill out this page only if you answered:

- I have not used any ... OR I have taken an onli... OR I have taken on-camp... on question 1. What is your level of experience... on page 1 .

Question 5

Please rate the following technologies in terms of how useful you would find them to be for learning and communicating with the instructor in an online course.

1 - Not Useful | 2 - Somewhat useful | 3 - Useful | 4 - Very Useful
5 - Critical

5.1 Slideshow Presentations (Microsoft PowerPoint)
5.2 Word Processor Documents
5.3 External Websites (not including K-State sites)
5.4 Online Readings (PDFs)
5.5 Message Boards
5.6 Narrated PowerPoint Presentations (Not including course lectures recorded from an in-class session)
5.7 Recorded Lectures from an In-Class Session
5.8 Lecture Notes/Outlines
5.9 Online Quizzes
5.10 Podcasts
5.11 Email
5.12 Live Chat (Instant Messaging, Chat Rooms, etc.)
5.13 Skype (Audio and/or Video Chat)
5.14 Social Networking Sites (Facebook, Google+)
5.15 Twitter
5.16 Blogs
5.17 Wikis

Question 6

Please rate the following technologies based on how useful you would find them in communicating with other students in an online course.

1 - Not Useful | 2 - Somewhat Useful | 3 - Useful | 4 - Very Useful
5 - Critical

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6.1 Email
6.2 Message Boards
6.3 Skype (Audio and/or Video Chat)
6.4 Twitter
6.5 Live Chat (Instant Message, Chat Rooms, etc.)
6.6 Social Networking (Facebook, Google+, etc.)

Page 6

Question 7 ** required **
What is your age?

Characters Remaining: 2

Question 8 ** required **
What is your current year in school?
- Freshman
- Sophomore
- Junior
- Senior

Question 9
What is your gender?
- Female
- Male

Page 7

Question 10
If you would like a copy of the survey results, please enter your university email address below. (This is not the contest entry page.)

Characters Remaining: 200
Closing Message
Thank you for your time! Your responses are greatly appreciated.

- End of Survey -
Appendix D - Survey Introduction Email to Students
Dear Hospitality Management Student:

The following survey is part of a study being conducted to examine hospitality student perceptions towards online learning at Kansas State University. It is our goal to determine the attitudes of undergraduate hospitality students regarding a fully online degree program in hospitality management.

This survey will ask you about your past experience with online technologies used in your classes, as well as what factors you feel are important when making the decision to take an online course. The survey will also ask you to rate how effective you find certain technologies when using them for learning and educational purposes. The survey should take between 10-15 minutes.

(Link to survey here)

Your input is extremely important for the success of this study. To reward you for your time, you may enter your email address at the end of the survey which will enter you in a drawing for one of ten (10) $10 gift cards to Starbucks. Please be sure to use your Kansas State webmail address for entry. Winning students will be contacted after the survey expires with details for picking up your gift card.

This study complies with Kansas State University’s IRB regulations. No personally identifying information will be collected for the purpose of the study (and all email addresses will be deleted after the drawing for gift cards). By participating in the survey you agree to informed consent regarding this research.

If you have any questions regarding this study, please contact Robbie Sparrow at rsparrow@ksu.edu.

Thank you for your time!
Appendix E - Reminder Email
Dear Hospitality Management Student:

This is a reminder email to ask you to participate in the survey regarding perceptions of online learning among Kansas State University hospitality students. (Link to survey here) The survey should take between 10-15 minutes.

Please remember that you will have the option to enter your Kansas State webmail address in the survey for a chance to win one of ten (10) $10 Starbucks gift cards. Please remember to use your Kansas State webmail address; all other email accounts will be disqualified from winning.