TRADITIONAL VERSUS ONLINE INSTRUCTION: FACULTY RESOURCES IMPACT STRATEGIES FOR COURSE DELIVERY

DeShea Simon, Hampton University, Hampton, USA Kanata Jackson, Hampton University, Hampton, USA Karen Maxwell, Hampton University, Hampton, USA

ABSTRACT

Advances in communication technologies have provided alternative ways to deliver instruction to learners. With the availability of the Internet as a learning tool, educators are able to use this instrument for course delivery. This study takes an empirical look at course design and delivery factors that impact student perceptions of learning and course satisfaction. Students completed surveys addressing a variety of topics as they relate to traditional classroom and Internet courses. Results of the study suggest that online learning is a viable alternative to traditional classes in the information systems discipline. Students were active participants in the evaluation and comparative analysis of an undergraduate business course delivered in an online format for the first time. Implications of the results are discussed.

JEL: I20

KEYWORDS: Information Systems; Online Learning; Traditional Course

INTRODUCTION

In the debate over online versus traditional classroom courses, the decision is often predicated on faculty resources. In 2008, the United States experienced the worst economic recession since 1930. As a result, this crisis greatly affected colleges and universities. Many institutions have been forced to find alternatives to "business as usual" to maintain their academic standards. According to an article in U.S. News & World Report, several universities have "frozen construction, cut employees' pay and laid off instructors" (Clark, 2009, p. 1). To mitigate the resulting economic challenges Hampton University's School of Business decided to explore other avenues that would allow them to sustain the quality of learning and maintain enrollment for the Management Information Systems course offered in the Department of Management. The information systems professors chose this course because they were eager to gain valuable insights into how this instruction method affects learning in the information systems discipline.

Hampton University's Management Information Systems (MGT 323) class is a required course for all business majors. Four sections of this course are provided each semester and each section is always filled to capacity. The decision was made to convert two sections of the Management Information Systems course to an online format. The customary enrollment cap for the course is 25 however; student need influenced the decision to increase the enrollment cap to 35. The enrollment cap was increased to 35 because a large number of seniors needed the course that semester to graduate. Students met face-to-face the first day of class with the instructor. During this meeting, the students were made aware that their sections would be held entirely online. The notification was met with mixed reactions, some students preferring an online class were excited and others were disappointed. Students were given the syllabus and directions to access their class section online. The Blackboard platform was used to transmit course information, assignments, e-mails, and discussion posts.

The remainder of this paper discusses the business department's experience with online learning and the implications for inclusion of this approach within the curriculum. The study begins by describing the literature surrounding online learning. Next, a pilot study was conducted, followed by current research. Last, general implications are provided about online learning as an alternate means of instruction.

LITERATURE REVIEW

Traditional classroom teaching focuses on a number of elements where learning is conducted in a synchronous environment. The instructor and the students must be in the same place at the same time in order to derive motivation and instruction from the teacher as well as from the other students. This has been a customary teaching method because "sharing one's own ideas and responding to others' reactions improves thinking and deepens understanding" (Chickering & Gamson, 1987, p.76). In this environment educators have the opportunity to identify the needs of students and motivate them on an individual basis.

Online Course Delivery

As the popularity of the Internet has grown so has the potential to learn online. Online learning is a method of studying in which lectures are broadcast or classes are conducted by correspondence or over the Internet. Online learning combines various types of online technology such as multimedia, video streaming, virtual classroom, and e-mail (Thorne, 2003). Since this type of education has evolved over the past decade "studies that explore issues of differences in learning between traditional and non-traditional students are now coming to the forefront" (Ravai and Gallen, 2005, p. 53). Although online learning has lower retention rates than face-to-face classes traditionally, (Diaz, 2000; Parker, 1995; Snyder 2001) each year the number of students taking online courses continues to increase. Allen and Seaman found that "nearly 3.2 million students were taking at least one online course during 2005, which was a substantial increase over the 2.3 million reported the previous year" (Senn, 2008, p. 268). The latest Sloan Survey reveals that enrollment has risen by almost one million from prior years (Sloan, 2010). Though there has been a continued increase in the number of students taking online courses, students' perceptions associated with online courses have been mixed (Smart and Cappel, 2006).

Online versus Traditional Course Delivery

Spiceland and Hawkins (2002) performed a study to evaluate students' perceptions of the value of online asynchronous-based courses compared to conventional classroom courses. A study was conducted employing a 12-item survey instrument. The population chosen for this study consisted of students attending The University of Memphis from four sections of an accounting course. The study was given to 70 students and completed by 66. It examined how the differences of an online course could affect student's ability to learn given that the environment lacks the traditional components of the classroom such as a structured environment, a specific class meeting time and the interaction of the instructor and other students. In addition, the study looked at the influence of the types of material learned and the types of students taking the course.

This study was organized into four areas: interaction, active learning, student perceptions and learning outcomes. Numerous educators believe interaction is a required element of learning. According to Jaffe (1997), "Learning is an essential social process which requires interaction for the purpose of expression, validation, and development of one's self as a knowledgeable learner" (p.70). In the traditional classroom, participation can be carried out by the same students, thereby alleviating most students from participating. Conversely, in an online course active learning occurs because each student must demonstrate writing and literacy skills. The results of the study indicate that although students have a more positive attitude regarding online computer courses, they expressed difficulty learning the material

outside of a traditional classroom setting. The results also show that the direction of recent research in online learning has changed from focusing on technology to understanding the effects on students.

Lim, Morris, & Kupritz (2006), conducted a study, which consisted of a group of 125 undergraduate students at the University of Tennessee of whom 36 were male and 86 female. 59 of the students took an information systems course in an online format. The remaining 69 students took the same course in a blended format that included classroom instruction in addition to online instruction. Eighty percent of the students had previously taken an online course. A questionnaire using open-ended and closed-ended questions was used to measure the perceptions and satisfactions of the students.

According to the data, online learners did not show any major differences between traditional learners and blended learners. Nevertheless, students' perceptions revealed that blended courses provided the opportunity to obtain regular support and interact with the instructor and their peers. This interaction increased students' feelings of belonging. The findings of this study were in line with previous research performed by (Laine, 2003; Reeves et al., 2003; Willis & Cifuentes, 2005).

Researchers Larson and Sung (2009) conducted a study to determine if online, blended, or face-to-face learning contributed to a higher rate of success among students. In this study, face-to-face learning involved a format using a textbook and lectures for the primary mode of instruction. The online course required students to use a textbook and view lecture notes via a course management system. The blended learning model employed a combination of the face-to-face and online formats. The study was conducted using 168 students presently enrolled in an introductory Principles of Management Information Systems course. The study included 63 students who took the course in a face-to-face format, 22 students who took the course online, and 83 students who took the course in a blended format. The courses were taught by the same instructor using the same textbook and supporting materials. No differences in the homework assignments between the face-to-face, blended, and online sections of the course were found. The three courses were compared using data from examination scores, final class grades, and student evaluations.

Regardless of the delivery method student satisfaction with the course was positive. Learning effectiveness was measured by the student's perception of an increase in critical thinking and work motivation. Students believed the online and blended courses provided a higher level of critical thinking and work motivation compared to face-to-face courses. The researcher believed this response might have been because students in the face-to-face course were not required to prepare responses to discussion questions. In contrast to face-to-face courses, students tend to give the first answer that comes to mind and fewer students participate.

The research concluded there is no significant difference among the three modes of delivery. The article concluded that the lack of difference among the analyzed data of the three modes of delivery indicate that new methods of teaching students are as effective as the previous methods used for teaching.

Blended Learning

Blended learning, also referred to as hybrid learning, combines online education with traditional education, (Finn & Bucceri, 2004). This method of course delivery provides an environment where the learners can study regardless of time and place restrictions according to their learning speed. Learners who have difficulty in establishing communication in the classroom environment may find it easier to communicate through an electronic platform. McCampell (2001) emphasizes that blended learning is a suitable approach for incorporating online applications into an existent course program for the first time. Since the hybrid classroom incorporates characteristics of both the traditional and online classroom settings, learning occurs in both synchronous and asynchronous modes and teachers can determine what aspects of the course are best suited to online delivery modes.

Online material is viewed as an extension of the classroom. Students receive the benefit of face-to-face interaction with faculty and students while being exposed to web-based learning paradigms simultaneously. Many programs are taking an interest in blended courses because it is this belief in the human contact element of teaching that leads many skeptics to discount the possibility that asynchronous online learning can be as effective as the traditional method of information delivery (Black, 2001). Along with overcoming the "faceless classroom" Swan (2001), adapting to student-centered teaching, managing time and techniques, and establishing the learning community are challenges that plague online learning. To ensure the satisfaction of students in online environments, instructors need to be sure to focus on these obstacles.

Methodology and Results

To explore the challenges stated above, a pilot study was conducted to determine if online instruction would be a feasible and sustainable avenue for the Hampton University's Business Management Department. Pre and post surveys were created to capture the perceptions of an online course. Thirty-six students were included in the pilot study from once section of the MGMT 323 course. The pre-test asked nine questions about experience with technology in general and experience with an online learning platform. The post-test asked eight questions, specifically about the online learning experience after taking a course online and the perceptions of online learning after taking the information systems class in this format.

The pilot study results indicated that although students did not sign up for an online class the majority could adapt to the online environment and be successful. Seventy-eight of the participants had never taken an online course previously. However, 92% expected to receive or better than a C in the course. The results reflect 97% of participants said that they felt comfortable using the computer and learning new technologies however, 33% of the students reported that they were not familiar with navigation and using the tools in the Blackboard environment.

One hundred percent of the students claimed to be comfortable using applications such as Word, PowerPoint, Excel, and Windows Media tools and 97% of the students completed work using these applications without problems. Since the university requires that during freshman year all students pass a computer literacy course that covers these applications, students are expected to have a sufficient understanding of how to use these applications prior to taking this course. Fifty-eight percent of students were familiar with the discussion forum and navigation tools in Blackboard however 52% would prefer not using these features, even as a supplement to a traditional course.

The number of students that had ever taken an online class was only 22% and only 32% of the class said that their experience in taking this course online was good. Fifty-two percent of the class said that they would have still taken this class if they had known that it was online. Some of the reasons given were (1) "Online fits better into my busy schedule." (2) "You can work at your own pace." A summary of the comments in support of taking MGT 323 online was implicit through one participant who wrote, "Since this is a computer information systems class I feel like taking it as an online class enables students to feel comfortable and familiar with their own technology while learning new strategies. I also feel as though some of the topics discussed such as increased awareness of online safety help students to see things in a more accessible situation while actually conducting the assignments online."

Thirty-six percent would not have chosen to take the MGT 323 class online and some of the reasons given were (1) "It is hard to keep up with when the assignments are due." (2) "I get confused easily." A summary of the comments in support of not taking MGT 323 online was implicit through one participant who wrote, "I like the in-classroom setting. I don't like blackboard, even though it's a tool that helps track and maintain a digital record of teacher and student materials. I guess I'm just old fashion in that regard."

Fifty percent of the class thought 10 hours a week would be a sufficient amount of time to study and complete class assignments. Five hours was suggested in the expectations portion of the syllabus. Thirty-three percent of the participants actually spent 20 hours a week. When students were asked if they thought the expectations were fair 89% agreed. One hundred percent of the class responded positively to having the ability to problem solve and work independently and only 33% thought that they spent less time completing the course material than if they were in a traditional class. This suggests that this method of instruction can be designed as a rigorous alternative or supplement to traditional instruction.

Eighty percent of the students specified that they had a good experience in the information systems class. Twenty percent thought their experience was fair and one percent had a bad experience. Twenty-five percent did not answer this question. This is interesting considering that 92% of the class expected to responded that they were successful in the course. Ten hours appeared to be the amount of time the majority of the class spent completing class work. It is not clear if this is due to issues within the online environment or with the coursework itself. To determine the nature of the reasons the study time was double what had been suggested in the syllabus needs further investigation.

After reviewing the pilot study data, the online course was posted as such in the registration catalog and students were able to decide for themselves the method of instruction for the class. The following year, the surveys were administered to 50 students in the MGT 323 online information systems course. These surveys were administered in two sections of an online information systems class. The surveys' questions and response calculations can be found in Appendix A. Sixty-eight of the participants had never taken and online course previously. However, 96% expected to receive better than a C in the course. The results revealed that 100% of the online students were comfortable using the computer and learning new technologies however, 82% of the students reported that they were successful learning the class material in the Blackboard environment. Eighty-six percent of the participants felt comfortable using applications such as Word, PowerPoint, Excel, and Windows Media tools. Ninety-five percent were able to get their work completed using these applications without problems. This suggests that the introductory computer course provides a sufficient foundation of applications that can be incorporated into the information systems course curriculum.

Ninety-two percent of the students taking the MGT 323 course stated that they were already familiar with the Blackboard tools however 38% would prefer not using these features, even as a supplement to a traditional course. Eighty percent of the participants specified that they had a good experience in the information systems class. Fourteen percent thought their experience was fair and 6% had a bad experience.

Although 80% of the students were successful in the course, only 40% of the class would still take the class again online. Some of the reasons given for taking the course in this format were (1) "It fit better into my hectic schedule and being able to do my work on my own time suited me better." (2) "I can have extra time to study for other courses." (3) "The information needed was provided and I am not good at taking notes." (4) "A lot of the homework and tasks are online so it makes sense to have the class online." A summary of the comments in support of taking Mgmt 323 online was implicit through one participant who wrote: "Although classroom discussions are helpful, an online class provided me with the same benefits as in class."

Sixty percent would not have taken the class again online. Some of the reasons given were (1)"There was not enough student teacher interaction. I was not able to ask questions about the material as consistently as I would have liked and there weren't any real office hours and not enough feedback on my work." (2) "Doing the assignments with a class helps me to understand the material more." (3) "I can't keep up." (4) "Some of the cases needed explanation." A summary of the comments in support of not taking Mgmt 323 online was implicit through one participant who wrote: "The course material was difficult to teach

myself. The assignments were not explained thoroughly and not having a teacher to see made it hard to receive responses in a timely manner."

Forty-six percent of the students thought that 10 hours a week would be a sufficient amount of time to study and complete class assignments and 92% actually spent that amount of time. Sixty percent thought that they would spend less time in the online class versus a traditional course however; the results show that the time spent was comparable to that of a traditional course. This data supports that this method of instruction can be designed as a rigorous alternative or supplement to traditional instruction. Ninety-eight percent of the class responded positively to having the ability to problem solve and work independently and 96% thought the expectations of the course were fair.

The results of the actual study indicated a preference for a blended format of instruction for the course. The researchers find it interesting that the study participants, undergraduate level students, were successful in the course but still felt as though "they were to some degree teaching themselves". They also expressed a preference for "more student professor interaction". This intangible factor should not be minimized in assessing contributing factors for ongoing student course satisfaction. This variable can be isolated for further study to obtain feedback on students' perception of lasting value of the teaching format. Survey results indicated that a fair amount of students were not comfortable with the Blackboard platform for course instruction and delivery of assignments. This variable needs closer attention to ferret out if the issue is with the technical performance of the system or with students' lack of adequate orientation to using the Blackboard format. The results seemed to indicate that heavy reliance on the content management system reduced overall course satisfaction. The study results were positive enough to continue offering the MGT 323 Data Information Systems course in a blended format. Future evaluation of the course will include a concentrated focus on the issues that came to the forefront of the results.

CONCLUDING COMMENTS

This study took an empirical look at course design and delivery factors impacting student perceptions of learning and course satisfaction. To explore these factors a pre and post survey was administered to students to determine if online instruction would be a feasible and sustainable avenue for Hampton University's Business Management Department. The surveys consisted of eight questions designed to obtain the perspectives of students currently enrolled in an online course. The results of the surveys revealed a preference for a blended format of instruction. This suggests that platforms such as Blackboard are useful instructional tools; however they should not take the place of the professor's role in the learning process. Today online learning is becoming a widely used mode of instruction. While there are still mixed perceptions on this method of learning, it appears that interaction with content, interaction with instructors, and interaction with classmates are of significant importance to those who take courses using this method.

By using multiple exercises the instructor can measure how well the information is being learned utilizing different methods. Hands-on problems allow students to perform applications that will further instill the concepts being learned. Online instruction allows the learner the opportunity to slow down or speed up the pace of instruction, depending on the students' needs. Frequent testing provides an ongoing measurement of the student's progress in the course. Clear feedback supplies students with the direction needed to progress in the course. Consistency in the layout of a course eliminates the need for students to obtain knowledge on how to maneuver through a course and clear navigation supplies a roadmap similar for each course. Having help screens or tutorials available allow students the opportunity to research questions or problems they may be encountering. Although asynchronous learning may produce the same desired learning outcomes as a traditional learning environment, it appears that a level of maturity

and self-discipline is required for success. Therefore, blended learning is being used to enhance current course offerings and increase student satisfaction.

This study was restricted to the MGMT323 course within the business department; therefore the findings cannot be generalized. The study was limited further by surveying only two sections of the MGMT323 course. However, the study can be used as a model to expand the current research, review additional courses in the department, and other courses throughout the university. In today's information age, research exploring online education benefits in STEM areas is extremely important (Flowers, Moore, and Flowers, 2009); therefore future research should also include an in-depth investigation on the responsibilities of the professor when conducting a blended learning environment in technical courses. Exploring which concepts can be taught virtually versus face-to-face can be beneficial when designing curricula for technical disciplines such as information systems.

APPENDICES

Appendix A: Participant responses before taking the Management 323- Info/Dp Systems Management course.

Questions	Reply	Response	s % of
			Responses
Q1.) I am comfortable using the computer and enjoy learning new technologies	No	0	0.00%
	Yes	50	100.00%
Q2.) I am comfortable using Word, PowerPoint, Excel, and Windows Media Player tools.	No	7	16.28%
	Yes	43	86.00%
Q3.) I am familiar with Blackboard discussion forums and navigation tools provided.	FALSE	4	8.00%
	TRUE	46	92.00%
Q4.) Have you taken an online class before?	No	34	68.00%
	Yes	11	22.00%
	Unanswered	5	10.00%
Q6.) As a student, how much time do you feel is the minimum amount of time necessary to put into an online class?	20 hours	7	14.00%
1	5 hours	14	28.00%
	10 hours	23	46.00%
	More than 20 hours	3	6.00%
	Unanswered	3	6.00%
Q7.) After reviewing the Instructor's expectations of the course, how do you think that you will be in this online environment?	Above a C	48	96.00%
	with at least a C	2	4.00%
Q8.) I am a student who can problem-solve and work independently.	Yes	49	98.00%
	No	1	2.00%

Students enrolled the Mmgt 323 Information Systems courses were asked to take asked to take a survey the first day of class. This table shows the average for each question in the survey. The first column show the questions asked in the survey. The second columns show the selection of responses that could be given for each question. The third column shows the Number of response for each question. The fourth column shows the percentage of response for each type of response given.

Appendix B: Participant responses after taking the Management 323- Info/Dp Systems Management course.

Ouestions	Reply	Responses	% of Responses
O1.) I was successful learning the course material in this type of environment.	No	10	20.00%
$\mathcal{C}^{(i)}$	Yes	40	80.00%
Q2.) I was able to use Microsoft applications in order to get my work done.	No	3	6.00%
	Yes	47	94.00%
Q3.) I was familiar with Blackboard discussions and navigation tools however; I would like to use this platform as a supplement (only) to this course.	No	19	38.00 %
	Yes	31	62.00%
Q4.) I would have still taken this class online. If the answer is no explain why. (refer to text for explanations)	No	30	60.00%
1 /	Yes	20	40.00%
Q5.) How was your experience?	Poor	3	6.00%
	Fair	7	14.00%
	Good	40	80.00%
Q6.) How much time did you spend per week completing coursework for this class?	10 hours	46	92.00%
	5 hours	3	6.00%
	20 hours	0	0.00%
	More than 20 hours	1	2.00%
Q7.) Do you think that the expectations for this course were fair? If the answer is no explain why. (refer to text for explanations)	No	2	4%
	Yes	48	96.00%
Q8.) Do You feel that you spent (or would spend) less time in an online class for this course?	Answer 11	Total	
	No	20	40.00%
	Yes	30	60.00%

Students enrolled the Mmgt 323 Information Systems courses were asked to take asked to take a survey the last day of class. This table shows the average for each question in the survey. The first column show the questions asked in the survey. The second columns show the selection of responses that could be given for each question. The third column shows the Number of response for each question. The fourth column shows the percentage of response for each type of response given.

REFERENCES

Allen, J., Seaman, J., (2006) Making the Grade: Online Education in the United States. The Sloan Consortium. Retrieved April 30, 2011 from www.sloan c.org/publications/survey/pdf/making the grade.pdf.

Bielawski, L., Metcalf, D., (2005). Blended Elearning: Integrating Knowledge, Performance Support, and Online Learning. Amherst, MA: HRD Press.

Bolter, J.D., (1991). The Writing Space: The Computer, Hypertext and the History of Writing. University of North Carolina Press. Chapel Hill, NC.

Black, G. (2001). A comparison of traditional, online and hybrid methods of course delivery. International Conference on Teaching Online in Higher Education: "Synthesizing Online

Teaching Strategies". November 12-14, 2001. Conference paper.

Edelson, P., (1998). The Organization of Courses Via the Internet, Academic Aspects, Interaction, Evaluation, and Accreditation. Educational Resources Information Center, 2-15. U.S. Department of Education, Office of Educational Research and Improvement, ERICNO: ED421644.

Flowers L. Flowers, Moore J. & Flowers L.(2009) Examining distance education courses in science, technology, engineering, and mathematics: A pilot study. Retrieved from www.clemson.edu/centers-institutes/houston/.../pilotstudy.pdf

Jaffe, D., (1997). Asynchronous Learning: Technology and Pedagogical Strategy in a Distance Learning Course. *Teaching Sociology*, 25 (3) 262-277.

Laine, L., (2003). Is E-learning E-ffective for IT Training? Training & Development. 57 (6)55-60.

Landow, G.P., (1992). Hypertext: The Convergence of Contemporary Critical Theory and Technology, John Hopkins University Press, Baltimore, MD.

Larison, R., (1997). The Lecture Really is Dead: Using Electronic Media to Teach On-Campus Courses. Educational Resources Information Center, 2-8. U.S. Department of Education, Office of Educational Research and Improvement, ERIC No: ED430525.

Larson, K., Sung, C., (2009). Comparing Student Performance: Online Versus Blended Versus Face-To-Face, *Journal of Asynchronous Learning Networks*, 13(1), 31-42.

Lim, D., Morris, M., Kupritz, V., (2006). Online vs. Blended Learning: Differences in Instructional Outcomes and Learner Satisfaction. (ED 492755), 27-42.

Lim, D., (2004). Fixed vs. Flexible Learning: Difference in Learning, Application, and Instructional Perception. In T.M. Eagan and L. Morris (eds.), Proceedings of the 2004 Academy of Human Resource Development Annual Conference, 1060-1066. Austin, TX: Academy of HRD.

Lim, D., (2002). Perceived Differences between Classroom and Distance Education: Seeking Instructional Strategies for Learning Application. *International Journal of Educational Technology* 3 (1).

Murray, J.H., (1997). Hamlet on the Holodeck: The Future of Narrative in Cyberspace, the Free Press, NY.

Reeves, T., Baxter, P., et al, (2003). Teaching Computing Courses- Computer Literacy, business Microcomputer Applications, and Introduction to Programming Online Utilizing WebCT. *Journal of Computing Sciences in Colleges*. 18 (1) 290-300.

Sandercock, G., Shaw, G., (1999). Learners' Performance and Evaluation of Attitudes towards Web Course Tools in the Delivery of an Applied Sports Science Module. *ALN Magazine*, 3 (2), 1-10.

Senn, G., (2008). Comparison of Face-To-Face and Hybrid Delivery of a Course that Requires Technology Skills Development, *Journal of Information Technology Education*, (vol. 7) 267-283.

Singh, H., Reed, C., (2001). A White Paper: Achieving Success with Blending Learning: 2001 ASTD State of the Industry Report. Alexandria, VA: American Society for Training & Development.

Sloan Consortuim, (2010) Class Differences: Online Education in the United States, 2010. Retrieved fromhttp://sloanconsortium.org/publications/survey/class differences

Smart, K., Cappel, J. (2006). Students' Perceptions of Online Learning: A Comparative Study. *Journal of Information Technology Education* 5, 201-219.

Spiceland, J., Hawkins, C., (2002). The Impact of Learning of Asynchronous Active Learning Course Format, *Journal of Asynchronous Learning Networks*, 6(1) 68-75.

Swan, K., (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous courses, *Distance Education*, 22 (2) 306-31.

Thorne, K., (2003). Blended Learning: How to Integrate Online & Traditional Learning. London: Korgan Page Ltd.

Turkle, S., (1997). Life on the Screen: Identity in the Age of the Internet, Simon & Schuster, New York. Ward E., Lee, J., (1995). An instructors' Guide to Distance Learning, Training and Development, 29 (1), 40-44.

Wegner, S., Holloway, K., et al, (1999), The Effects of Internet-Based Instruction on Student Learning. *Journal of Asynchronous Learning*: JALN, 3 (2), 1-9.

Willis, J., Cifuentes, L., (2005). Training Teachers to Integrate Technology into the Classroom Curriculum: Online versus Face-to-Face course Delivery. *International Journal of Technology and Teacher Education*, 13 (1) 43-63.

BIOGRAPHY

Dr. DeShea Simon is an instruction for the Hampton University Computer Science Department. She holds a Doctorate in Religious Education from International Seminary, a Master of Science degree in Information System from Strayer University, and a Bachelors degree in Business Administration from Christopher Newport University.

Dr. Simon is currently completing a doctorate program in information technology from Capella University. Her academic interests include: Information System in Organization, management information systems, IT Governance, and service (Active) learning. Dr. DeShea can be contacted at Dr. DeShea Simon, Hampton University, Computer Science Department, 100 E. Queen St. Hampton VA 23668, 757-282-5732, deshea.simon@hamptonu.edu

Dr. Kanata Jackson is the Chair for the Department of Management in the Hampton University School of Business department. Dr. Jackson is also an Associate Professor and holds a Doctor of Philosophy, from the United States International University (Alliante University), a Master of Social Work-Administration/Casework from the University of Michigan, and Bachelors of Art from Virginia State University. Her academic interest include: Organizational Behavior, Business Communications, International Business, and Organizational Theory. Dr. Kanata Jackson can be contacted at Hampton University School of Business, 100 E. Queen St. Hampton Virginia 23668, 727-727-5469, kanata.jackson@hamptonu.edu

Karen Maxwell is an Adjunct Professor the Hampton University School of Business department. She holds a Masters degree, from Long Island University and a Bachelors degree in Marketing from, Rutgers University. Ms. Maxwell is currently completing a doctorate program at Walden university in Public Policy. Her academic interest include: Business Organization Management, Business Communication, and Leadership Application Program. She can be contacted at Ms. Karen Maxwell, Hampton University School of Business, 100 E. Queen St. Hampton Virginia 23668, 727-727-5469, karen.maxwell@hamptonu.edu