Technology Acceptance in an Online Practicum Course

Sherryl W. Johnson

Albany State University, Georgia

Abstract

Online instruction is increasing in colleges and universities across the United States of America. Healthcare Management programs are also exploring the usefulness and acceptance of technology or learning management systems by their students. The healthcare practicum – which features community based and campus instruction provides a unique opportunity to examine both the usefulness and acceptance of a learning management system – Brightspace D2L.

Keywords: Technology acceptance; Online instruction; Management programs; Healthcare practicums

I.History of the Internet / Overview of Healthcare Management

In 1969, interface processors were being connected to computers at various locations in California – namely at the University of California, Los Angeles and at the Stanford Research Institute. This stated that some researchers as the beginnings of modern computing (Haigh, Russell and Dutton, 2005). Then came the Internet, a vast electronic communication network that connects routers and reaches around with world. The Internet provided a bridge between networks. It included a set of protocols and technologies for the interconnection of computers (Haigh, Russell, and Dutton (2015). The Internet has continued to grow and develop. By 2012, social media sites were selling more than $8 billion in ads (Hand, 2016). Since the development of the Internet or World Wide Web in the early 1990s, online instruction has also increased in educational institutions. New technology based approaches to education can be used to encourage active (participatory) learning. The Internet also supports asynchronous online learning which allows coursework to be assessed at the time and place that the student chooses (Lucas, 2018). There has been a shift from the traditional lecture format. Frequently, students access asynchronous material like readings, videos simulations, and games through learning management systems like Blackboard or Canvas (Lucas, 2018).

With increased frequency, healthcare and management programs are requiring students to complete some type of experiential learning experience prior to the completion of their training. The experiential learning often mirrors a practicum or internship. Such experiences often require students to complete their training in a community based setting – meanwhile completing course work.

The extent to which student accept the use of technology via a learning management system to support their training experience is needs continual examination.   However, learning management systems such as Brightspace D2L have been to be useful in providing a centralized location to access education material; collaborate with students and engage educators (Marketwire, 2014). Thus, this article aims to review the Technology Acceptance Model in relation to GA View Brightspace D2L's impact or relevance in the education of online healthcare management practicum students.

Healthcare management programs train students to become entry-level managers in a healthcare setting or agency. The healthcare practicum which is often required as a capstone course for students nearing the end of their

course requirements; allows students to gain normative and cognitive skills in an actual health care setting. Each student has an onsite preceptor. Practicum agencies include a wide range of health care organizations including hospitals, governmental agencies, long term care facilities, rehabilitation centers, community health centers, preferred provider organizations, health insurance firms, medical practices, dental practices, public health agencies and more.

II. Implementation of GA View (Brightspace) D2L

Glenn (2003) stated that the design of an online course requires a very different approach from that of a traditional course.   He stated that an interactive component would be needed to introduce the content, engage students and provide assessments. During its initial implementation phase, the GA View D2L learning management system was used by more than 310,000 students (Marketwire, 2014). The system was developed by the University System of Georgia as one of several alternative pathways for students to achieve degree completion (Marketwire, 2013). In 2013, The University System of Georgia hosted more the 6,000 courses in D2L – now GaView D2L (Marketwire, 2013). Some key features of a GaView D2L practicum course are as follows:

Student registration for the practicum course, automatically places the student in the GaView D2L course interface. Student must take the GaView D2L orientation quiz to become familiar with the online format – before active participation in the course is allowed. Once the student enters the practicum course, a syllabus quiz is required to acquaint the student with the onsite and online practicum requirements – including course goals: the application of theoretical knowledge; the attainment of professional development; the incorporation of technology; and development of effective written and oral communication skills.

III. Theoretical Framework

The Technology Acceptance Model (TAM) was developed by Davis, Bagozzi, and Warshaw (1989). The model assumes that once an individual is introduced to a new technology, he or she will make a decision whether to use it. The individual's decision will be included by four factors:

Perceived Ease of Use (PEOU) – refers to the extent to which the individual believes that the technology would not require extensive cognitive effort.

Perceived Usefulness (PU) – relates to improved performance that is achieved by the individual as a result of technology use.

Behavioral Intention (BI) – relates to whether the individual's behavior supports an intention to use the technology.

Actual Use (AU) - relates to whether the individual actually uses the technology. Actual use is influenced by behavioral intention.

The Technology Acceptance Model also includes eight usability attributes – namely, content quality, learning support, visual design, and system navigation, ease of use, system interactivity, instructional assessment and system learnability (Davis, Bagozzi, and Warshaw, 1989).

Content Quality- The practicum course includes structured online learning activities such as online discussion forums, videos reviews, communication and personality assessment tools. The course also includes onsite activities and assignments that can be shared and posted in the online GaView D2L system. The course has sufficient materials to meet the course objectives.

Learning Support – The practicum course is enhanced by online learning support through SMART Online

Tutoring Service and an Online Writing Center. Writing Guides and reference tools are also available through links on the GaView D2L homepage.

Visual Design: The practicum course is designed using the standard GaView D2L system template – commonly referred to as a shell. The shell allows for instructor administration to post course content in a manner that is visually appealing and appropriate. The course material is place in modules – with standard components (objectives, activities, discussion forum, quizzes, evaluation).

System Navigation- System navigation through the practicum course occurs with the use of "bread crumbs" – content, assessments, communication, and administration. All of the courses that a student is enrolled in for the term can be accessed through a "waffle" – grid at the top of the GaView D2L system.

Ease of Use – Ease of use relates to the students' ability to use the system without difficulty (Neilsen, 1993). The GaView D2L system is easy to use. System requirements and features are presented on the home page and in the system orientation. The system can also be viewed from computers and mobile devices (Marketwire, 2013). Students are encouraged to use a computer with Microsoft operating systems to submit coursework.

System Interactivity – The online practicum course allows students to engage and interact with their peers and course instructor. There are several features that support communication such as discussion forums, chat features, and email.

Instructional Assessment – The online practicum course includes areas for quizzes and other forms of assessment. Feedback can be provided immediately – upon completion of a quiz. The system also records statistics on students' performance on various assessment activities. The statistics can be represented in numerical or tabular form. Results of preceptor evaluations can also be reported by the course instructor in the GaView D2L system.

System Learnability - The learning curve for the online GaView D2L practicum course is minimal. This feature supports the PEOU factor.

IV. Assessment of Online/ Practicum Course

Freeman, Shrimsher, Kendrach (2006) reported that 59% of students who participated in an online course, stated that they would take future courses. They also reported that online technology was easy to use. Schimming (2008) conducted a study of 455 first year medical students enrolled in an online tutorial course. Students who took the online tutorial course were equally or more satisfied with the online tutorial as the in-class students.

Schofield and Davidson (2002) reported that the driving forces for internet integration was to increase teachers' and students' use of up to date and extensive materials and provide opportunities to learn in the context of meaningful experiences in a real world framework.

Some of the skills that the practicum students may develop include how to:

Develop a departmental budget (annual and projected).

Develop employee work schedules.

Maintain and administer central inventory.

Conduct interviews and screen personnel.

Assess employee performance and customer satisfaction levels.

Process insurance claims and other forms of billing.

Prepare department progress and statistical reports.

Market and promote department functions.

Exercise ethical and legal practices in the healthcare setting.

While students enrolled in online practicum courses produced projects comparable to those enrolled in the in-class setting, convenience was the overwhelming reason cited by students for enrolling in online classes (Guenrsey, 1998). Flexibility has also been supported as a reason to take an online course. At the end of each online practicum course, student have been able to provide feedback. Overall, students enrolled in the online practicum course provided positive feedback. The students appreciated the flexibility that the online course allowed – especially since some students were even able to secure a placement in their hometowns and submit assignments electronically. The overall grades in the online course were comparable to those of practicum students enrolled in the traditional in-class setting.

V. Conclusion

Online courses, while innovative, have both benefits and limitations. Some of the benefits are as follows:

- ●Students can apply their individual student experiences using the web-based curriculum, projects, and virtual field trips that provide opportunities for critical and creative thinking through student support activities (Keating, Wiles, Piazza, 2002).
- ●Teamwork can be fostered via e-mail, virtual meeting rooms and discussions (Fann and Lewis, 2001).
- ●Online learning encourages communication with peers (Morrow, Phillips and Bethune, 2007).
- ●Web courses allow for real world application and sharing knowledge (Schofeld, 2005). This concept is especially useful in a practicum course.
- ●In Bloom's Taxonomy of Learning, deep learning (application, analysis, synthesis, and evaluation) can be supported by web-instruction (Bloom, Englehart, Furst, Hill and Krathwohl, 1956) to synthesize and evaluate knowledge, multimedia creation (such as Practicum PowerPoint Managerial Projects) can be created by students.

While online instruction has many positive benefits, some limitations do exist as follows:

- ●Computer maintenance may be required and loss of connectivity may occur (Morrow, Phillips, and Bethune, 2007).
- ●Online courses may require more time and planning than a traditional course
- ●Web-instruction may benefit visual learners primarily and may be a disadvantage to those with poor reading skills.
- ●Also, it may be difficult to develop meaningful student – teacher interaction with online instruction (Corona, 2008).

Despite the aforementioned limitations relative to online course delivery, the benefits still appear to be far-reaching. Healthcare management students who receive instruction via GaView D2L will gain additional technological knowledge that can be useful in many health care settings.

Additionally, online instruction allows students to view up to date scenarios and videos online and practically apply knowledge gained in the healthcare setting. The GaView D2L format also affords students a great deal of flexibility and diminishes the need to regularly return to the main campus for course instruction and progress checks during the practicum period. Online practicum training seems to be an ideal for colleges - and if embraced and fine tuned by healthcare management instructors, could prove to be a most valuable tool for the development of high quality healthcare managers.

Endnote

This article updates and extends previous study published in the Academic Exchange Quarterly (Fall 2009, Using WebCT-Vista for a Capstone Practicum Course, Sherryl W. Johnson).

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Biography

Sherryl Johnson, Ph.D is Professor of Management: Healthcare Administration Program, in the College of Professional Studies.