Situated Technology as Student Tool for Leadership Instruction

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Abstract

Technology is becoming a part of students' lives more every day. How as educators can we use technology as a developmental tool instead of a distraction in the classroom? This paper frames technology in leadership instruction through situated learning, specifically how a video production course assignment provided a developmental opportunity for students in an introductory leadership course. The research reports students' perception of using technology that extends beyond the specific objective of development of a personal definition of leadership and offers a new perspective for engaging other forms of technology.

Introduction

Students are using all forms of technology at an increasing rate. Watch any student walking across campus and you will likely see an ipod, cell phone, blackberry, video, or digital camera attached to them. Students use this technology for entertainment and communication with others. They also use it to learn, develop knowledge, and even build communities with others. Students are learning through these virtual means more each day (Swan & Shea, 2005). A question for educators is how to situate learning opportunities within the context of technology to capitalize on students' increasing use.

Technology has been used for many years as a training tool. This technology takes many forms depending on the learning outcomes the training is set out to accomplish. For example, virtual learning environments have been used through simulators to train pilots or operators in nuclear power plants (Wickens, 1992). Virtual reality has been used in practicing safety skills for coal miners (Kizil & Joy, 2001).

Institutions of higher education have been providing courses that utilize technology. This evolution started with videotapes and interactive television, and

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currently the use of internet in various capacities (Baker, 2003). Ball and Levy (2008) list several ways in which emerging educational technology can be used in classrooms. These include creation of course materials, planning and organizing of lesson plans, research and reference tools, supporting specific content area, and recording class lectures. Technology can not only support the communication of the curriculum, but also support students' development of knowledge.

Situating Learning within Technology

Lave (1988), who developed the situated learning theory, argues that learning as it normally occurs is a function of the activity, context, and culture in which it is situated. The concept of situated learning postulates that knowledge development must be presented within a specific context. This context can be an area of study or specific form of communication. Lave (1996) believes "the region of social theory that seems richest in clues for how to conceive of learning in social terms…is that of historical, dialectical, social practice theory" (p.150). Social interaction is a critical component of situated learning – learners become involved in a "community of practice" which embodies certain beliefs and behaviors to be acquired (Lave, 1991). Brown, Collins, and Duguid (1989) emphasize the idea of cognitive apprenticeship which supports learning by enabling students to acquire, develop, and use cognitive tools. Learning then advances through collaborative social interaction and construction of knowledge. Technology provides a context in which students are already active thereby situating particular learning. Whether it is the use of technology in forms of the internet, video development, social networking sites such as Facebook, or use of an ipod, a community is developed around the use of these technologies.

Beyond Lectures and Papers

Currently, several methods are being used to infuse technology into classrooms. This technology is used to communicate knowledge through use of visual media such as documentaries, television shows, and videos posted online as well as informational podcasts and online courses (Duhaney, 2000). However, when exploring how to infuse technology into the assignments or requirements of a leadership course, the infusion of this technology becomes more challenging. The question of whether technology is more of a distraction then a learning tool surfaces. Moreno (2006) argues that cognitive overload, as result of too much visual and audio information processing, may restrict students' ability to complete learning tasks. Like with any assignment, questions also surface about whether students will get caught up in the process and miss the learning outcomes or will learn more than the outcomes.

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In an introductory leadership course, an assignment that focused on the definition of leadership provided an opportunity to infuse technology into the curriculum through students' knowledge development and communication of learning. More specifically, this assignment focused on video production as the framework of technology infusion. Students were asked to interview five individuals on camera and gather their thoughts on the definition of leadership. Students were encouraged to ask individuals whom they did not know. From the information gathered, they were to make a brief five to seven minute video to share their findings. The format of the video was left up to the creativity of the students. Videos presented ranged in format from a late night talk show to displaying interviews with upbeat music in the background to a spin-off of the popular television show "The Crocodile Hunter" titled "The Leadership Hunter." When presenting the video students were asked to reflect on how the information gathered affected their personal definition of leadership and how they learned from the process of creating the video.

Student Feedback

This exploratory study used survey methodology. There was an 85% response rate (N = 22) and data was collected anonymously using SurveyMonkey. This data was collected one month after the semester ended in which they took the Introduction to Leadership Theory course. This allowed time for reflection of their experience. A total of seven questions were asked, three were close-ended and four were open-ended. Among the respondents, 68% were female and 42% were male. Five percent were freshmen, 55% were sophomores, 31% were juniors, and 9% were seniors. Students were involved in a wide variety of activities including athletics, Greek organizations, honorary societies, religious organizations, service and philanthropic groups, and student government.

In response to two questions, "Did you find creating the video defining leadership in the Introduction to Leadership Theory course a useful activity?" and "In hindsight, did you enjoy creating the short video?" 81.8% of students responded yes to both questions. In response to the question, "Did you find the video project an educational activity?" 100% students responded yes.

In addition to the close-ended questions above participants were asked to share their responses to the following questions. Representative responses are included below.

- How was the process of creating a video useful to development of your personal definition of leadership?

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  - It allowed us to explore others' personal definitions of leadership, which allowed me to solidify my own definition. Having it on video allowed me to reflect on what they were saying and how they were saying it by watching it several times.
  - I upload fun videos to YouTube all of the time, this provided me an outlet to learn something while still doing something I enjoy. I tend to learn more when I am having fun.
  - This was a unique twist to the book's definition of leadership, where in each video there were various approaches that described the concept of leadership through personal relativity.

Student's answers to this question suggest an overall appreciation for the video production process. Being able to visually watch a variety of definitions repeatedly, situate the learning in a space already being used, and hearing other perspectives provided additional development of their own leadership definition.

- Why should we continue this activity in a video production format?

  - When making the video, it allowed for limitless creativity from a personal perspective, while in-turn when watching others' videos they shined new light on a more realistic and applicable approach to leadership.
  - Doing it on video was just fun and I was so proud of my final video I sent the link to many friends and family members.
  - Because it was a very fun activity where one was challenged to examine what leadership truly is to them and doing it in a context of video made it more of an exchange with others than an individual reflection.

Responses to this question suggest that students enjoyed this assignment. Whether it was expressed through the creative process in video production or the final product, students took pleasure in the use of technology for this assignment.

- What did you learn from interviewing others on video that you may not have learned from writing a paper?

  - It boosted my confidence to go up to random people and ask them personal questions about their fundamental definitions. Approaching others and being approachable is an important skill that I was able to work on through this project.
  - Being able to interview others on camera allowed them to express their ideas verbally and non-verbally.

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- Doing it on video allowed for a different type of reflection. I have never been asked to make a video, so this allowed me to have a different framework than another paper.

Students responded to this question with answers that suggest development of knowledge and skills different from those used to author a paper. Video production required students to approach others, gather information in verbal and nonverbal ways, and reflect on this material using a different structure other than a traditional writing assignment.

- What overall observations do you have regarding the video project?
  - I really valued the diversity among how the videos were presented, with some being extremely comedic-based and others having a more serious edge. With this diverse range of themes, the overall points came across very well, for the most part, and I observed some individual personality traits coming out through the production of their videos.
  - This was by far the best assignment I have had in a while. Using technology in this way was refreshing. Most professors do not think about how we learn, they just lecture. It is cool to see how something I use almost weekly (my video camera and YouTube) can be so educational.
  - The biggest lesson for me was being able to communicate the vision of the assignment to the people we interviewed. Just as a leader communicating a vision to followers.

Student's answers to this question suggest the use of video production as a positive learning tool. Students valued the structure of the assignment because it allowed for diversity of ideas, challenged them to communicate the vision of the assignment to others, and expanded learning into commonly used technology of video production and YouTube.

Conclusions

"As a student, I think using technology in class has huge implications. We are putting things up on YouTube, blogging, using Facebook anyway and by using it in class just integrates classroom learning with the rest of our lives. Kind of like meeting us where we already are hanging out." – Student

As students responded, the framework of technology, more specifically video production, allowed them to learn both in a different way and also learn skills that could be used as a leader in the future. By situating their learning in the context of

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technology they were able to learn beyond the learning outcomes. First, students reported that they were able to observe the individuals they interviewed repeatedly while making the video. This allowed for more extensive analysis of verbal and nonverbal communication; therefore, reflection and critical thinking assisted in their learning of varying definitions of leadership. Secondly, skills including approachability, relationship building, and communicating the assignment vision to those being interviewed were skills that may be useful in building leadership capacity. These talents were developed through the experience of interviewing and video production. Using technology in this framework allowed students to learn from the process; it became a learning tool rather than a distraction.

Using technology in the classroom beyond showing a website or video is an important topic. Many argue that as students' experiences change, so must the way educational systems teach them. Creating developmental opportunities around technology can be challenging since this would require instructors to be well versed in all areas of technology. However, many institutions have professionals who are willing to assist faculty, staff, and students in using emerging technologies. Using these resources allow for instructors to infuse such technology into curriculum without being an expert themselves.

Beyond video production, infusing different types of technology into an introductory leadership course continues to be explored. Blogging as a form of reflection, using podcasting for both audio and video lectures, creation of a campus television show around leadership development, and student creation of narrated presentations for public use are all examples of technologies being explored.

It is clear that students who responded to the survey not only enjoyed the use of technology in the form of video production as an assignment, but felt it was educational on several levels. By situating the potential learning in a framework of technology, students were able to expand their learning beyond refining their personal definition of leadership.

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