USING MOBILE APPS AND SOCIAL MEDIA FOR ONLINE LEARNER-GENERATED CONTENT

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ABSTRACT

As part of an evolutionary approach to extending and enhancing the online learning experience for adult students in the LMS-based online college courses that I teach, I have been introducing learning activities that use social media and mobile devices. However, realizing that student adoption of mobile devices with data plans such as smartphones or tablets was still evolving, I focused on the development and use of these resources from a teaching perspective and to test and model it for learner-generated content. With the increasing adoption of mobile devices, I have begun to explore how I can integrate mobile learning activities into the online course assignments in ways that would allow students to use their mobile devices as a means of creating learner-generated content and sharing communications about that process. In this paper, I share my initial, anecdotal findings about this process, identify useful social media and mobile apps for mobile learning, provide examples of their successful integration into online course assignments and activities, and propose methods of further research and development.

KEYWORDS

Mobile learning, social media, mobile apps

1. INTRODUCTION

Overcoming the "distance" in distance learning has been a challenge for me as an online teacher and many of my students since the introduction of online college courses into mainstream educational practice. By distance, I not only mean the physical or geographical distance that can pose challenges to scheduling live online sessions or determining communications that accommodate students in multiple time zones, I also mean the psychological and social distancing that can occur with students who find the virtual mediation of online courses less engaging than the personal interaction with a teacher and other students in live onsite courses.

This distancing effect is also a function of the busy schedules and resulting challenges of most of my adult online students who juggle professional demands of their work and personal responsibilities with family and friends along with their academic work as students. Time management in this context of many competing demands takes on a central place in accommodating this adult learner population when designing online learning activities.

And despite the many benefits of working within a Learning Management System (LMS) as the platform for online college courses, it also imposes some distancing effect in the nature of its enclosed sphere of interaction. Most LMS-based college courses require familiarity and facility with using its online resources, an ability to work with text-dominated course content and communications, and system requirements that favor personal computers over most mobile devices for accessing the course and using its interface.

There are also several constraints on the adoption of mobile devices in online college courses that can be attributed to the still evolving state of mobile technology development, including a wide variety of mobile device attributes such as screen size, and a relative lack of multi-platform standards for development of mobile software. By contrast, there are many benefits in using mobile devices in support of online learning. Adult students with their competing demands on their time, tend to have highly mobile lifestyles in which the adoption of mobile computing associated with smartphones and tablets has represented a perfect match of need with function. With this adoption comes a high level of mastery of use, seamless integration into most personal and professional activities, and a natural preference to use this medium for most communication and

computing activities. These attributes of mobile devices make them useful for lifelong learning, distributed learning, field-based learning activities, and authentic learning (EDUCAUSE, 2010).

For many colleges, faced with decreasing enrollments and limited budgets, migrating through LMS-based online course support to accommodate demands of mobile device users often dictates a slower adoption path with limited and specialized support (Alden, 2013). Online faculty who teach with more minimal administrative development of mobile learning support are then faced with similar approaches at the course level.

As part of an evolutionary approach to extending and enhancing the online learning experience for adult students in the LMS-based online college courses that I teach, I have been introducing learning activities that use social media and mobile devices that do not rely on administrative or LMS-provider support. However, realizing that student adoption of mobile devices with data plans (e.g., smartphones or tablets) was still evolving during this time, I focused on the development and use of these online resources from a teaching perspective.

With the increasing adoption of mobile devices among my online students (evidenced in their attributions and the primary use of mobile devices to send me brief email messages – indicated by the ubiquitous "Sent from my _____ smartphone" closing line), I have begun to explore how I can integrate mobile learning activities into the online course assignments in ways that would allow students to use their mobile devices, mobile apps, and social media as a means of creating learner-generated content and sharing communications about that process. In this paper, I share my initial findings about this process by identifying useful social media and mobile apps for mobile learning, describing strategies for their successful integration into online course learning assignments and activities, and proposing methods for evaluating this educational innovation.

2. MOBILE LEARNING WITH SOCIAL MEDIA

As an outgrowth of my professional writing (books, articles, etc.), I created a blog (using WordPress blog software) on my teaching and consulting Web site and began writing blog posts with no certain audience in mind. However, with its highly interactive nature, support of text and audiovisual content, and easy access via the Web with a wide range of device support (including blogging and display apps for mobile devices), it soon became clear to me that I could use this social media platform with mobile devices as a way to extend learning activities outside the confines of LMS-based online courses.

I began writing blog posts with text, resource links, images, and video that addressed topics in the reading. For each blog post, I created a discussion post in the LMS weekly conference area that briefly introduced and elaborated on the topic and then invited (as an optional learning activity) the students reading it to click on a link to my Web site blog that opened a new browser window with that blog post in view. I also invited them to optionally post comments in reply to the discussion post and/or the blog post. Despite identifying it as an optional learning activity, I provided credit for their use of this resource to satisfy part of their discussion assignment requirements. As part of the instructions for blogging, I indicated that for confidentiality, student bloggers should only use their first name and that their email address would not be displayed on the blog (i.e., only used as email notification to approve the post in a moderated blog).

As an extension to their weekly discussion assignment responses, the use of the blog for enhanced learning has been adopted by most of the students based on their posted responses and in the nature of their feedback about the value of this learning activity. One of the interesting results of those informal action research findings was that students understood that in providing comments on the public access blog, that they were becoming co-creators of learning content and interaction not only with their classmates in the current and future course sections, but also with the blog reading public who would view those blog posts.

With the adoption of the blog by online learners, I ventured into the use of microblogging through the twitter.com social media site as an alternative means of providing enhanced learning activities as an extension of their LMS-based course work, I approached the use of this social media resource in the context of a "push-pull" strategy in which I would announce a topic of interest in a brief "tweet" message and include a link to my corresponding blog post (or other information resources on the Web) that would "push" learners (and other users viewing or subscribing to my twitter feed) directly to that source of information. This tended to bring learners into more blog posts of course-related topical interest than what I was directing through my optional discussion assignment posts.

Some of my online learners who were also twitter users would "re-tweet" my message in their twitter feed (to direct those who subscribed to them to the intended posts or sites) and/or tweet a private message to me about the blog post content. Like WordPress, twitter.com also provides apps for mobile devices, so these social media sites re-purposed as extensions to online learning represented an evolutionary strategy for my initial support and use of mobile apps. I am also exploring how mobile microblogging can promote authentic learning among team members in the communications and design of team project presentations in my courses (Hsu and Ching, 2012).

With an increasing need to embed relevant video presentations into my blog posts (and in LMS course discussion posts), I created a youtube.com channel through which I could upload original video and created playlists of existing youtube.com video presentations. Using the online video editor in youtube.com, I could also edit my original video in useful ways (e.g., to control brightness, reduce shake, connect two or more videos into one presentation, etc.). Even when certain LMS platforms made embedding the video within discussion posts or content pages problematic, I could still insert a link to the video (or my video channel site) on youtube.com through which learners could view the videos in a new browser window.

What I began to envision (and begin to realize) was that online learners would use these models of teaching practice with social media sites and mobile devices to offer a similar level of learner-generated content that could be used for their online course activities. And this discovery also made me start thinking seriously about more extensive use of existing mobile technologies that could be integrated into the curriculum with these types of enhanced online learning support, extending out beyond the confines of the LMS platform.

3. MOBILE LEARNING WITH MOBILE APPS

One of my first tests of mobile apps in an online teaching and learning context was in using the mobile app from qik.com to upload live video from my smartphone camera to be viewed as a live Webcast on my qik.com page. Traveling as part of my consulting and writing work (and to present at international conferences) offered opportunities to share live videos of sites, events, and people on my journeys that were relevant to topics that I was teaching in an online course during the time I was traveling.

For example, during two recent pilgrimage walks on the Camino de Santiago in Spain, I used my smartphone to capture live video of how these types of experiences could help people become "untethered" from excessive use and dependence on technology (a topic being covered in my Ethics in Information Technology course). As the qik.com site also acted as repository for archiving these videos, I have embedded videos stored on qik.com into blog posts, such as in my "Untethered on the Camino" blog post on this same topic.

I am also testing other mobile apps at this stage of research and development, such as the popular Skype app and the Voxer app that provide voice communications over the Internet along with use of text, image, and video. Some of the more important criteria that I use for selecting social media and mobile apps for use in mobile learning support are that they are free, easy to learn and use, popular, and have enough cross platform support to be used by as many learners across a range of device types as possible.

4. MOBILE LEARNER-GENERATED ONLINE CONTENT

In addition to learner adoption of the above-mentioned social media and mobile apps to create and share learner-generated content, I am expanding the scope of discussion and group project assignments to accommodate learner-generated content and communications using a broad array of mobile devices. For example, mobile apps and social media can be indicated as a source of learner-generated content needed for a virtual team project assignment. The original project assignment indicates a PowerPoint presentation that is planned and produced through the group chat and discussion forums in the LMS (limited to text messages and attachments of other media). Social media and mobile apps can provide more learner options and control during the planning and production stages as well as for the online presentation.

Discussion assignment responses can also be enhanced using social media and mobile apps in ways that extend beyond static, text-dominated discussion posts to include many of the multimedia attributes associated with these tools. For example, I am planning the use of an alternative discussion assignment for my online ethics course in which mobile device users could post an example of "everyday ethics" in video or still images captured by their mobile device that they observe in events and actions. Using text and/or audio, they would briefly describe the ethical issue and a relevant ethical principle that could address it.

Based on my initial tests of content generation during my walks through national parks and on pilgrimage in Spain, I am also expanding support of the use of GPS-enabled mobile device cameras by learners to tag and log image and video capture so that location information can be presented with that media when relevant to their creation of discussion or project assignment content. For example, they could provide a visual "walkthrough" demonstration of a physical space or event that marks each location of it on a map display with clickable thumbnails of captured video or images that can be viewed at each point on that path.

5. CONCLUSION

With the advantages and limitations already described, I would like to briefly describe plans for evaluating these learning innovations in ways that will guide further mobile learning design and development. Most of my evaluations of these educational innovations have been based on anecdotal data such as unsolicited feedback from learners or through informal action research in which I solicited learner comments about aspects of their learner experience during the early formative stages. With learner adoption and use of these mobile apps and social media in online course assignments involving learner-generated content, it would be useful to evaluate this innovation in formal research (of a qualitative and/or quantitative design) that examines learner attitudes, behavior, and outcomes in a more controlled manner to identify trends and offer understanding of learner motivation and engagement in mobile learning (Chaiprasurt and Esichaikul, 2013).

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