The Use of BlogTalkRadio in Online Management Classes

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Abstract

This paper reports on a two-step study of students' perspectives with respect to the use of BlogTalkRadio (BTR) in online management classes. First, a survey was conducted in three online sections of a business policy course, and 70 of 103 students participated. Second, participants were contacted to provide follow-up comments on the practical use of BTR in online management classes, and 9 of 70 participants provided positive comments. BTR is the world's largest social radio network and podcasts producer. It is a web-based platform for hosting live call-in talk shows which are recorded as podcasts. This study examined whether an instructor hosting executive interviews on BTR with student participation would result in generation of good resource materials for online management classes; enhancement of student-student, student-instructor, and student-content interaction; and student understanding of the application of management concepts in business settings. The results affirmed the research focus, and 80% of the survey participants would recommend the use of BTR in online classes. The planned BTR interview project would satisfy Chickering and Gamson's (1987) Seven Principles for Good Practice in Undergraduate Education. It would promote elements of active learning such as student engagement, connectivity, critical thinking, and knowledge creation.

Key words: BlogTalkRadio; collaborative learning; interaction; active learning; student engagement; knowledge creation

Introduction

This research investigated students' perspectives with respect to conducting interviews with executives and entrepreneurs on BlogTalkRadio (BTR) for online management classes. The study examined the BTR tool as an opportunity for instructors and students to interview executives and entrepreneurs on the air, and fellow students to call in to ask questions. The author's expectation was to enrich online management classes with interviewees' knowledge and experience. The author posed the following research question. Will an instructor hosting executive interviews on BTR with student participation result in generation of good resource materials for online management classes; enhancement of student-student, student-instructor, and student-content interaction; and student understanding of how management concepts can be put into practice?

Background

BTR was founded by Alan Levy in 2006. Individuals can host live shows on BTR with live guests and callers over the telephone or internet. Guests such as President Obama, Hilary Clinton, John McCain, and Arianna Huffington had been on the BTR shows (Stone, 2008). BTR is the largest social radio network and podcasts producer in the world, creating 1,800 daily shows, with more than 15,000 hosts and 30 million monthly listens. Social networks such as Facebook, Twitter, LinkedIn, YouTube, and Google+ are integrated into the BTR website (BlogTalkRadio, 2014a).

In 2008, the company received $4.6 million in financing, and it planned to incorporate live videos and to provide more offerings to more companies. The Department of Defense, Intel, and Sun Microsystems, among others, have channels on BTR (Stone, 2008). In October 2009, BTR launched Cinch, a micro-podcasting platform, which permits users to share to Cinchcast.com, Facebook, and Twitter short audio incorporated with images and text. As of March 2010, BTR had raised another $1.9 million in financing for

product development. Harper Collins, PBS, *Women's Day Magazine*, Sun Microsystems, and Walmart are BTR's content partners (Rao, 2010). BuiltWith (2013, October 25) reported that BTR had been used by 6,433 websites (http://trends.builtwith.com/media/Blog-Talk-Radio).

In January 2008, BTR launched the *RevShare* program. Radio hosts who participate in the program split the advertising revenues with BTR and get 35%. When hosts bring sponsors to BTR, they get 50% of the revenues. As for radio hosts who do not participate in the *RevShare* program, BTR still places ads on their shows (Turner, 2008). BTR provides the free, Premium, Plus, and Pro accounts. A free account carries the following benefits: live radio show hosting; five simultaneous callers on the show; live chats; sharing on social networks; embedding on blog/iTunes; and the archival of shows as podcasts. A Premium account costs $39 a month, and it allows 50 simultaneous callers. A Plus account costing $99 a month allows 100 simultaneous callers, and a Pro account costing $249 a month allows 250 simultaneous callers. No audio/video advertisements will appear on the Plus or Pro account shows (BlogTalkRadio, 2014b).

Comparing BTR with Alternative Technologies

Numerous audio and video tools can be used to interview experts for online classes. However, the choice of technology/methodology has to consider the nature of the course, learning objectives, the instructor's pedagogy, time constraint, technological skills of students, and the preferences of both the instructor and students. For example, one of the learning objectives of a management class is to connect students with executives so that they can learn how to put management concepts into practice. In an information technology class, an instructor may ask each student team to produce an audio podcast of an interview so that students are acquainted with not only the designing, writing, editing, and interviewing aspects, but also the technical aspects of audio podcasting. As learning the technical aspect of podcasting is not an objective of the management class, the choice of BTR to do the interviews suffices.

Various technologies, such as BTR, audio podcasting, Skype, Google Hangouts, iPad, Spreaker, Mixlr, Spreecast, Livestream, and UStream, can be used to conduct online interviews. Compared to traditional audio podcasting, BTR can offer a live broadcast with interaction among the host, guests, and listeners. It also has a chat room for questions from the listeners. A traditional audio podcast is a prerecorded broadcast that may not have a chat room or accept call-ins from listeners. Equipment purchase and program downloads are involved with traditional audio podcasting. One can download both the archived BTR shows and traditional audio podcasts or listen to them online (Ng, 2009).

Skype, first released in 2003, is a form of internet-based telephony and a popular medium for video chats. By 2006, it had attracted over 100 million users (Deyermenjian, 2013). As of April 28, 2014, Skype started to offer free group video calls on Windows, Mac, and Xbox One. Previously, a premium Skype account at a cost of $9.99 per month was required to make group video calls (Foley, 2014).

To record a Skype audio session, a recording software program, such as the MP3 Skype Recorder or the Pamela Call Recorder, needs to be downloaded. Audacity, a digital audio editor and recorder, can be downloaded to edit the Skype audio session. One can choose an audio output file format, such as MP3, to upload it to iTunes. By contrast, it is not necessary to download various software programs to create podcasts on BTR. One needs to have a Skype account to be a host, participant, or listener. Without adding money to a Skype account, one cannot call from Skype landline or mobile contacts. With respect to BTR, both the host and listeners can call in using landline, Skype, or VOIP (Voice Over Internet Protocol)(Levy, 2006).

Similar to Skype, Google Hangouts, released on May 15, 2013, also provides free group video chatting for 10 participants, but it provides this service on more platforms (Deyermenjian, 2013). With Google+ Hangouts on Air, the host can invite individuals in his/her circle to participate in the video chat. The public can be invited to view the video chat, but cannot participate in the video. Once the "Start Broadcast" button is clicked, the host's YouTube channel will start recording the broadcast. With the help of some software programs, the YouTube video recording can be converted to an audio podcast.

Similar to BTR, with just a phone, ipadio also brings audio online. Ipadio has a free app on iPhone, iPad, iPod Touch, and Android which can live stream audio directly from the phone to the web. After signing up for a free ipadio account, the individual gets a dial-in number and pin. The ipadio tool provides an hour of recording which is uploaded to the user's account. The user can also upload the audio to the Social

Media and Blogger sites. With a phone that supports conference calls, a phone interview can be recorded with ipadio. The procedure involves the interviewer calling the interviewee, and then putting him/her on hold while calling a local ipadio number. The interviewer/caller has to provide the pin, and then press the button on the phone to merge the calls. Then the interview starts to be recorded, and the recording will show up in the caller's online account (Google Play, 2014).

Spreaker, founded in 2009, is an online application that enables people to create and share live or prerecorded audio content. A small percentage of shows on Spreaker is devoted to talk shows (Young, 2011). With a free account, the live broadcast session is limited to 30 minutes, and the audio storage is capped at 20 hours (Walker, 2014).

Similar to Spreaker, Mixlr is a live audio platform that enables broadcasting from the desktop computers or mobile devices. It was founded in 2010 as a desktop application. In 2012, it created an app for the Apple mobile devices, and in August of 2014, a beta version of the Android app was released (Thorpe, 2014). The broadcaster can chat with listeners when on a live broadcast, which can be saved or exported to Dropbox, SoundCloud, and the like. The Mixlr live player can be embedded on the user's Facebook page or blog. A free basic account provides one hour of broadcasting at a time. For $5 a month, premium account users can broadcast as frequently as they choose for three hours. For $20 a month, the Pro account users can broadcast continuously without any limit (Mixlr, 2014). Similar to Spreaker, Mixlr started out to be music-focused, but now it has broadened to talk shows on different areas.

Spreecast is a social video platform launched in 2011. A live and recorded broadcast, public or private, can be made on Spreecast from the browser with a webcam and internet connection. It allows four individuals to appear in the video at the same time, but thousands may be watching. Spreecast is interactive, allowing viewers to provide comments and questions. With question polling, the questions that most viewers want the answers for will be identified (McGarry, 2014). Audience members can request to be put live on the camera, and Spreecast has the functionality to preview them before doing so. Anyone can join a Spreecast video show, but as for Google+ Hangout on the Air, only Google+ users can join the show (Koetsier, 2012). However, similar to Spreecast, Google+ users can provide in a live broadcast comments and questions, and vote up on those questions they want to be answered live (Lussier, 2014).

Livestream is a live video streaming platform founded in 2007. To engage in live video streaming, Livestream's free broadcasting apps must be downloaded to the desktop computers or mobile devices. Viewers can comment during the live video streaming. The New Livestream offers a free account that is devoid of advertisements, and paid accounts that run from $49 to $999 a month. With an unpaid account, the video will be deleted after 30 days. With a paid account, the video can be archived indefinitely (Livestream, 2014). Ustream, Livestream's competitor, was also founded in 2007. It does not require software downloads, as it streams right from the browser or a mobile device. It offers a free basic account supported by advertisements and paid accounts that run from $99 to $999 a month (Ustream, 2014). Both Livestream and Ustream produce high-definition videos.

Since it takes less time to produce an audio podcast than a video podcast, which requires more time to edit, an audio podcaster can concentrate on the content without issues related to the production of a video podcast. Moreover, compared to audio files, the video files require greater storage space. As video podcasts appeal to both audio and visual senses, they communicate a greater amount of information (Armstrong, Tucker, & Massad, 2009).

Following the introduction, the previously described background of BTR and its comparison to other technologies, the subsequent sections offer a literature review, a brief synopsis of how BTR can be used for teaching and learning, methodology of the study, results, discussion, and conclusion.

Literature Review

BTR is a Web 2.0 tool. The Pew Internet & American Life Project (2011) defines Web 2.0 as "an umbrella term that is used to refer to a new era of Web-enabled applications that are built around user-generated or user-manipulated content, such as wikis, blogs, podcasts, and social networking sites." BTR is the largest online social radio network that hosts live shows and distributes the recordings as podcasts. BTR allows the collaboration among students, instructors, and outside experts for educational purposes. BTR

is a good example of a Web 2.0 tool that enables McLoughlin and Lee's (2008) Pedagogy 2.0, a new paradigm of innovative learning comprising three key elements: Personalization, Participation, and Productivity. Personalization denotes learners' self-regulation over their own learning process. Learners can make their own choices with respect to their own learning. Participation denotes communication, collaboration, and connectivity among learners, facilitators, peers, experts, and the global community. Productivity denotes learners as co-producers of knowledge.

The literature review examines some podcasting studies on student and or instructor involvement in content production for educational purposes. As BTR can enable active learning strategies due to its characteristics to allow students to drive their own learning, connect with others, and become producers of knowledge, the literature review then moves on to additional articles related to elements of active learning: student engagement, collaboration, connectivity, critical thinking, and knowledge creation.

The traditional podcasting studies by Lee, Chan, and McLoughlin (2006), Nathan and Chan (2007), and Cameron and Van Heekeren (2008) were conducted with Australian students. Kemp, Mellor, Kotter, and Oosthoek (2012) conducted their study in the U.K. Armstrong, Tucker, and Massad's (2009) traditional podcasting study and this author's BTR survey were conducted with American students. The author of this study planned to host each BTR show for 30 minutes. The other studies mentioned here developed podcasts that lasted for a much shorter duration, for example, three to five minutes for a podcast in the Lee et al. study, and five to ten minutes for a podcast in the Armstrong et al. study.

The studies used the talkback radio-style format for their podcasts. Except for this author's BTR study, these other studies used traditional podcasting to create podcasts for asynchronous listening with no live audience. In Lee et al. (2006) and Nathan and Chan's (2007) studies, the podcasts were created by students for students. Lee et al.'s project asked five second-year students who had taken an information technology course to produce podcast content related to the course for first-year students. The project objectives were to create podcast materials to alleviate first-year students' anxiety and preconceptions with respect to the course, and to enable the student-producers to develop a set of skills. The student-producers learned about the podcasting process through examples. They worked as a team on the origination, script-writing, editing, presentation, and recording of the podcast episodes. Two or more students engaged in an informal discussion of course content and related issues in a talkback radio-style weekly show that lasted for three to five minutes. Periodically, the instructor and other experts in the subject area were invited to clarify complex issues on the show. The lecturer provided guidance only when needed. Similar to the methodology used by Lee et al., Nathan and Chan (2007) created talkback radio-style podcasts over a six-week period to clarify complex subject content, and to alleviate student anxiety in a capstone business strategy course. In addition, Nathan and Chan (2007) used an informal discussion format between a student and a lecturer or subject-matter expert in the podcast. Kemp et al.'s (2012) study examined the use of podcasting as an assessment tool in an undergraduate geomorphology course. Student groups produced podcasts to communicate the analyses of geomorphological data in the context of economic and social issues to the general public.

Armstrong et al.'s (2009) study involved the presentation of student team projects, each with the incorporation of a podcast. Cameron and Van Heekeren (2008) conducted a pilot study that explored the potential benefits of engaging in radio-like format for educational podcasting. With respect to this author's BTR study, the planned design of the BTR interview for the online classes would be the same as her design of the BTR interview conducted with an entrepreneur for a face-to-face entrepreneurship class in 2012. The planned BTR show would be a live show with the executive as the interviewee and the instructor as the interviewer. Students could also cohost the internet radio show. Students in the class and the public could call in to the show to ask questions. Compared to the podcasting studies mentioned here, more people would be involved in the podcast, and a great deal more interaction and collaboration would be required between the instructor and students in the BTR study.

Except for the Cameron and Van Heekeren's (2008) preliminary study with no results yet generated, the other podcasting studies reported here produced positive results. The student-producers of the podcast episodes in Lee et al.'s (2006) study reflected on their podcasting experience positively, and they gained technical and generic skills in research, communication, team collaboration, and the critique of others' work from the podcasting production experience. Nathan and Chan (2007) conducted a questionnaire to assess students' views on the use of podcasts in the business strategy class. The results indicate that

most respondents felt that the podcast topics were useful, and they would recommend the podcasts to other students taking the business strategy course.

Students of a management information systems course in Armstrong et al.'s (2009) study were given the research project's learning objectives at the beginning of the semester. A podcast had to be incorporated in the research project. By the end of the semester, students were given a questionnaire to respond on a five-point scale the degree to which the learning objectives had been met. The learning objectives involved the development of students' skills in communication, technology, literacy, multimedia applications, self-reliance in new technologies, and the promotion of students' creativity and collaborative efforts with fellow students. Students' responses to the evaluation questionnaire were positive. Kemp et al.'s (2012) study also achieved these similar objectives. In addition, the students gained a deeper understanding of the use of geomorphic data in the context of economic and social issues. This author's study involved a Qualtrics survey to examine students' perspectives with respect to the use of BTR to interview executives and entrepreneurs, and the student responses to the survey were positive. Similar to Nathan and Chan's (2007) study, this author's BTR study surveyed students from a business policy course, which was also a last-year capstone course for business students.

Similar to Lee et al. (2006), Armstrong et al. (2009), and Kemp et al.'s (2012) studies, this author's BTR study also had the planned learning objectives of developing students' skills in communication, analysis, critical thinking, and reflection; and fostering team collaboration, active learning, and knowledge creation. However, as Lee et al. and Armstrong et al.'s studies involved student-produced podcasts related to an information technology course, and Kemp et al.'s study involved student-produced podcasts in a geomorphology course, the acquisition of technical skills was one of their objectives. Therefore, the opportunity given to students to engage in the whole process of producing podcasts with traditional podcasting was invaluable. Regarding the BTR study, the focus was on helping students from a business policy course to see the linkage between management theory and practice by interviewing executives on BTR rather than the acquisition of technical skills.

Armstrong et al. (2009) brought out the resource issue that since eight student teams were involved, and the university had just a limited number of audio and video equipment, the latter had to be scheduled for use by each team. By using BTR, this author and her students would not have to purchase audio and video equipment to produce the podcast.

Armstrong et al. (2009) designed the class project that adhered to Chickering and Gamson's (1987) Seven Good Principles for Good Practice in Undergraduate Education, which emphasize "contacts between students and faculty," "reciprocity and cooperation among students," "active learning techniques," "prompt feedback," "time on task," communication of "high expectations," and the respect for "diverse talents and ways of learning."

Armstrong et al.'s (2009) study satisfied all these principles. The study emphasized faculty-student contact throughout the project. Active learning was involved, as evidenced by each student team working together to develop research objectives and the script for the project. Each team also engaged in knowledge creation with the interview. There was a timeline for the teams to complete various steps in the podcast production. Abiding by the team project schedule, the instructor provided prompt feedback regarding the research topic, script, and the final podcast. The teams had to submit progress reports at different points during the project timeline, but the instructor provided adequate time for the teams to practice important elements of podcast production. Therefore, the principle with the emphasis on "time on task" was satisfied. The instructor communicated to the teams the objectives of the research project and high expectations for their achievement of the objectives. Student teams could use various tools to produce audio or video podcasts, satisfying the principle of the respect for "diverse talents and ways of learning."

These seven principles would also be satisfied in this author's planned study. The selection of executives to be interviewed on BTR, the development of interview questions, and the post-interview analysis aimed to improve the subsequent interview would involve faculty and student collaboration. Active learning would be involved with student engagement, student collaboration, interactivity among students, instructor, and executives, and knowledge creation. The instructor would provide prompt feedback to students throughout the process of creating the BTR interview show and during a post-interview discussion. Students would be given adequate time to identify potential interviewees and interview

questions, satisfying the "time on task" principle. The instructor would communicate high expectations to students that they should participate in coming up with good interview questions for the executive in order to learn from the latter management practices in the business world. Students would have options to participate in the show: call in to the BTR show, ask questions via the BTR chat box, or co-host the show with the instructor. Students could discuss among themselves and with the instructor all aspects of the interview project by using audio and/or video tools. In addition to learning from the course materials, students could learn from practitioners by asking questions on the air. Thus, the principle involving the respect for "diverse talents and ways of learning" would be satisfied.

As BTR can enable active learning, the literature review moves on to additional articles related to elements of active learning: student engagement, collaboration, connectivity, critical thinking, and knowledge creation. McLoughlin, Lee, and Chan (2006) found that second-year student producers of podcast content for first-year information technology course students as described in Lee et al. (2006) engaged in reflection and metacognition which involved the following four elements: "self-knowledge," "task knowledge," "strategic knowledge," and "knowledge of plans and goals." Their results indicate that the student-producers of the podcast episodes displayed related skills of each of the four metacognitive elements. Regarding "self-knowledge," students exhibited "self-evaluation," "awareness of effort needed," and "awareness of learning achieved" with the podcasting task. As for "task knowledge," students showed an understanding of "task demands," "degree of task success," and the appropriate "strategies applied to task." With respect to "strategic knowledge," students engaged in "self management," "resource management," and secure "peer group learning/support." Regarding "knowledge of plans and goals," students included the subcomponents of "plans established," "scheduling," and "persistence" (p. 38). McLoughlin et al. (2006) concluded the study with this comment: "The creation of learning environments and tasks to support and develop metacognitive skills remains an enduring challenge for educators and designers, and the authors will continue to explore the possibilities of podcasting to enhance and develop this essential skill" (p. 39). The student-instructor and student-student collaboration in the production of BTR interview shows with executives could also enhance students' metacognitive skills. As described in Lee (2005), facilitators in the "ultimate learner-centered paradigm" have to create "a conducive online environment – a community - for learners to build their own content and take ownership of their learning" (p. 19).

Student engagement is central to a learning community. Engaged students are those that are interacting, connecting with others, thinking critically about their tasks, and creating knowledge. As stated in Kuh, Kinzie, Cruce, Shoup, and Gonyea (2007): "Student engagement represents both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices" (p. 2). The National Survey of Student Engagement (NSSE) project produced a first report which identified the five benchmarks of effective educational practices that brought about student engagement: "level of academic challenge, active and collaborative learning, student interactions with faculty members, enriching educational experiences, and supportive campus environment" (Kuh, 2001, p. 13).

Four studies (Rivera & Rowland, 2008; Rowland & DiVasto, 2001; Rowland, Hetherington, & Raasch, 2002; Rowland, Lederhouse, & Satterfield, 2004) indicate that powerful learning involves "active engagement in authentic settings" and social interactions with others such as instructors, peers, mentors, and so forth. With active engagement, one tries to make meaning with one's actions. Interactions with others and reflection on one's past and present actions influence one's making of meaning (Rivera & Rowland, 2008).

Brinthaupt, Fisher, Gardner, Raffo, and Woodard (2011) identified three broad categories of behaviors in which Bain's (2004) exemplary face-to-face teachers engaged that could be applied to online teaching as follows: "fostering student engagement," "stimulating intellectual development," and "building rapport with students" (p. 515). Brinthaupt et al. (2011) described behaviors with respect to each of the three broad categories that could be applicable to online teaching. Adapted from Brinthaupt et al. (2011, p. 519), some examples of these behaviors include:

1. Fostering student engagement

    - Promote interactions among students and faculty
    - Build a sense of community among learners

- Promote collaboration and knowledge creation with the use of Web 2.0 tools

2. Stimulating intellectual development
    - Establish a critical thinking environment
    - Provoke students' critical thinking with questions
    - Provide students with authentic tasks
3. Building rapport with students
    - Establish trust between students and instructor
    - Offer appropriate help to students to resolve issues
    - Provide feedback to students on assessment activities

The current study plans to incorporate all active learning elements described in the abovementioned studies.

Paavola and Hakkarainen (2005) discussed three metaphors of learning that are "complementary" for knowledge creation. The acquisition metaphor focuses on knowledge processing within the individual's mind without considering the situational factors. The participation metaphor focuses on the interactions with people and the environment rather than the outcomes of the activities. The knowledge-creation metaphor includes elements of both the acquisition and participation metaphors, and it focuses on the collaborative development of artifacts that advance knowledge.

Lee, McLoughlin, and Chan (2008) argued that "knowledge creation defines successful outcomes in inquiry-based and project-based learning" (p. 517). Inquiry-based learning is one of the authentic learning practices, which involves collaboration among learners, educators, and the community of practice. With various technologies, these parties can engage in the sharing and construction of knowledge. Inquiry-based learning is an active learning approach (Edelson, Gordin, & Pea, 1999; Lombardi, 2007). Rutherford (2010) explored using social media resources to offer authentic experiences to learners, and that these Web 2.0 resources could be used to connect learners to other learners outside of the course and experts with respect to course content. Rutherford (2010) found that most students who reported using social media more frequently perceived better relationships with their fellow classmates and their instructors, and they perceived the quality of the instruction and the overall programs more positively. Rutherford (2010) suggested that the results of her study indicate that student engagement can be enhanced with the use of social media. As described in this study, by interviewing executives on BTR, a social media tool, with student-instructor and student-student collaboration would provide an authentic learning experience for students and enhance student engagement.

Various researchers (Alexander, Commander, Greenberg, & Ward, 2010; Dietz-uhler & Lanter, 2009; Mandernach, Forrest, Babutzke, & Manker, 2009; Stevens & Brenner, 2009; Tsui, 2002; Walker, 2003) found that active learning instructional strategies enhanced critical thinking. Dietz-Uhler and Lanter (2009) developed the four-questions learning technique and examined whether this technique could enhance quiz performance. Each of the four questions incorporated a different form of active learning. Questions 1 to 4 focused on the following respectively: analyzing, reflecting, relating, and questioning the studied material. The four questions are:

1. "Identify one important concept, research finding, theory, or idea in psychology that you learned while completing this activity."
2. "Why do you believe that the concept, research finding, theory, or idea in psychology is important?"
3. "Apply what you have learned from this activity to some aspect of your life."
4. "What question(s) has the activity raised for you? What are you still wondering about?" (p. 39).

In Dietz-Uhler and Lanter's (2009) study, 107 students from an introductory psychology course participated in an interactive activity on either one of the two topics: prisoner's dilemma and self-enhancement bias. They found that after participating in the interactive activity, students who completed Questions 1 to 4 promoting analysis, reflection, application, and questions, respectively, did better on the

quiz compared to students who took the quiz prior to completing the four questions. Results indicate that students' quiz performance improved after engaging in multiple ways of active learning.

Dietz-Uhler and Lanter (2009) examined the four-questions technique's effect on active learning and critical thinking in a face-to-face environment. Alexander et al. (2010) modified the four-questions technique and examined the latter's effect on critical thinking in online discussions. Alexander et al. reported that the use of the four-questions technique succeeded in heightening critical thinking in online discussions in a graduate educational psychology course. Students in Alexander et al.'s study participated in three online discussion forums on different case studies pertaining to "behaviorism," "social cognitivism," and "metacognition and learning." Students were instructed to respond to the four-questions technique prior to the discussion forum on "social cognitivism." The results indicate that students who did not complete the four questions prior to the first and third online discussion forums on behaviorism and metacognition respectively had lower critical thinking scores compared to those who completed the four-questions prior to the second discussion forum with the focus on social cognitivism. Thus, the four-questions technique promoted active learning, which in turn enhanced critical thinking.

Analysis, reflection, application, and questions would also be involved in this author's planned inquiry-based BTR project for students. The latter would have to analyze the studied materials and ask executives on BTR questions related to the real world applications of concepts learned from the studied materials. Students would also have to reflect on and critically analyze the podcast to come up with improvements for subsequent interviews with executives.

Liu, Magjuka, Bonk, and Lee (2007) found positive correlations between learners' sense of online community with "learning engagement," "feelings of having learned a lot," and "overall satisfaction with the quality of online courses" (p. 14). These findings indicate the importance for online instructors to facilitate the building of an online learning community. Young and Bruce (2011) examined in online courses students' perceived "classroom community with instructors," "classroom community with classmates," and "engagement in learning" across five Colleges (Agriculture, Arts and Sciences, Business, Education, and Health Sciences). A comparison of all five colleges indicates that students taking courses in the College of Education had significantly strong sense of classroom community with both instructors and fellow learners. Compared to students taking Business and Arts and Sciences courses, students in Health Sciences courses had significantly higher sense of community with fellow learners. Compared to students taking Arts and Sciences courses, students taking Education and Health Sciences courses had significantly more intense learning engagement. From this study, it seems that some work needs to be done to facilitate student engagement and an online learning community in business courses. The use of BTR has the potential to support the development of online learning communities in business courses.

Shackelford and Maxwell (2012a) attempted to identify the types of instructor-learner interactions that contribute to the building of community in online graduate education. Results of the study indicate that there were positive correlations between instructor-learner interactions and the sense of community. The instructor-learner interactions that made the most contribution in descending order to building a sense of community included the following: **"**(1) instructor modeling; (2) support and encouragement; (3) facilitating discussions; (4) multiple communication modes; and (5) required participation" (p. 254).

Shackelford and Maxwell (2012b) in another study examined learner-learner interactions that were most predictive of online graduate students' sense of community. They found positive correlations between learner-learner interaction items and the sense of community. The most effective forms of interactivity used by peers to build a sense of community included the following: "(a) introductions, (b) collaborative group projects, (c) contributing personal experiences, (d) entire class online discussions, and (e) exchanging resources" (p. 239).

Rovai (2004) proposed a constructivist learning environment for online learners. Some of the emphases under a constructivist approach to learning involve collaboration, active learning, knowledge creation, reflection, authentic tasks, team work, and so on. BTR can promote a constructivist learning environment that emphasizes the collaboration between the instructor and learners in the preparation of interview questions for management experts on BTR and reflection on expert interviewees' responses to questions. Constructivists, such as Piaget (1970) and Glasersfeld (1989), considered that an individual constructs knowledge mentally through a cognitive process. Social constructivists (e.g., Bruner, 1990; Vygotsky,

1978) considered knowledge construction to be a social process. An individual constructs knowledge via interactions with others.

According to a constructivist approach, Swan (2005) noted the importance of developing a "learner centered, knowledge centered, assessment centered, and community centered" (p. 26) learning environment. In Stewart, Bachman, and Babb's (2009) development of a course template for an Introduction to Psychology course, a learning environment that was "learner-centered," "knowledge-centered," "assessment-centered," and "community-centered" was incorporated. Stewart et al. reported that the course template had been used successfully by both instructors and students, and it served "as a 'best practices' example of website development" (p. 518) throughout their university.

Using BTR for Teaching and Learning in Management Classes

The study examines students' perspectives with respect to the use of BTR in online Management classes. Instructors can interview executives and entrepreneurs on BTR, and students are able to call in to ask the interviewees questions. Students are expected to make suggestions about the interviewees. Prior to the scheduled show, students can engage in online discussions to produce a list of good questions for the interviewees. They can assign the approved questions to those students who will be calling in to the show. The public can also call in to ask questions. Students who cannot call in to the show can listen to the archived podcast. All students in the class can then comment on the discussion board the information obtained from the expert on the show. Students are able to reflect on what they have learned and hone in on their metacognitive skills in "self knowledge," "task knowledge," "strategic knowledge," and "plans and goals" as discussed in McLoughlin et al. (2006). Furthermore, the activity involves personalization, participation, and productivity as noted in McLoughlin and Lee (2008).

As students are able to decide who to invite on the show, and what questions to ask, they exercise control over knowledge they would like to generate. They engage in inquiry-based learning (Edelson, Gordin, & Pea, 1999; Lombardi, 2007). Students, instructors, the expert interviewee, and the community are all interconnected. There is a high level of student-student, student-instructor, and student content interaction. Student-student and student-instructor communication and collaboration are evidenced. Students are co-producers of knowledge with the instructor.

BTR is a Web 2.0 tool, and it can facilitate the connections between students, instructors, and practitioners. Using the management field as an example, students learn the concepts and theories from the texts and online lectures, and they can interview executives on BTR to find out how executives put into practice the management concepts such as motivation, leadership, organizational design, and so forth. Students can then analyze, synthesize, and evaluate various perspectives to reflect on their learning. For example, a high-technology firm has an organic structure, where authority is decentralized, and employees are encouraged to collaborate across departments. Comparatively speaking, a banking institution has a mechanistic structure, characterized with centralized authority, close supervision, rules, and procedures. A high-technology firm is facing a competitive and rapidly changing environment, and a banking institution is hamstrung with many governmental regulations. Therefore, an organic structure helps the high-technology firm to adapt to the changes in the external environment. A relatively mechanistic structure aids the financial institution to comply with many regulations. Innovation drives the leadership and reward structure in a high-technology firm, whereas compliance drives the leadership and reward system in a financial institution. From different interviews, students can analyze, synthesize, and evaluate the aspects of leadership, motivation, organization design, and the like with respect to the industry and external environment. Students can also evaluate whether the firm has good performance when leadership, motivation, and organizational design are congruent with the external environment. In the generation of real-world management knowledge, students have to work together to come up with difficult management situations, and then ask the invited executive guests on BTR how to resolve these situations. Instructors can help students to come up with challenging questions for the executives.

In sum, BTR can enable active learning that involves elements such as student engagement, collaboration, connectivity, critical thinking, and knowledge creation.

Methodology

On March 10, 2012, this author conducted an interview on BTR with an entrepreneur for a face-to-face entrepreneurship course. **Click on the link to listen to a five-minute audio clip from the interview:** https://soundcloud.com/merlot_jolt/btr-interview-excerpt

Prior to hosting the interview on BTR, this author worked with both the students and the entrepreneur to come up with a list of interview questions. Further, students were asked to prepare additional questions by calling in to the show. A post-show discussion of the interview was conducted after the class listened to the recorded interview. As all the students in this class had not heard of BTR, the idea of interviewing an entrepreneur on the latter with student participation was novel to them. However, they expressed that the interview on BTR was a fun and interesting way to generate knowledge. As the feedback from the entrepreneurship students was positive, this author launched a study to examine the following research question. Will an instructor hosting executive interviews on BTR with student participation result in the following: generation of good resource materials for online management classes; enhancement of student-student, student-instructor, and student-content interaction; and student understanding of how management concepts are put into practice?

In addition to teaching the face-to-face class on entrepreneurship, the author was teaching three fully online sections of the business policy course in the spring of 2012. Therefore, the author requested 103 graduating seniors, 57 males and 46 females, from these online sections to participate anonymously in a Qualtrics survey with respect to the use of BTR in online management classes. Three extra credit points were offered to each survey participant. They were asked to listen to this author's March 10, 2012 interview on BTR with an entrepreneur for the entrepreneurship class prior to answering eight survey questions. The recorded show is available on the Web, and the podcast is downloadable directly from BTR and iTunes.

Ninety-six of 103 students were in a single concentration of the Business Administration degree program, and the remaining ones were in two concentrations. The Business Administration degree program consisted of the following concentrations: accounting, computer information systems, finance, general business, management with three tracks (human resource, strategy/entrepreneurship, and international business), and operations management.

Qualtrics is a Web survey tool made available by the author's university to support research, teaching, and administration. Qualtrics is designed for survey creation, survey distribution, storage, and data analysis. Qualtrics is easy to use, and it has technologically advanced features. It is customizable with respect to questions, reports, images, graphs, colors, exports, sharing, and the like. The survey was made available from April 4, 2012 to May 16, 2012. The survey link was posted on Blackboard's announcement board. All closed questions were used in the survey with the expectation of a higher response rate. The eight survey questions are included in Appendix A, and these questions can also be found in the Discussion section of the paper.

After analyzing the survey data, respondents were contacted to provide qualitative comments with respect to their perspectives on the practical use of BTR in online management classes.

Results

Out of 103 students in three online sections of the business policy course, 70 students, 35 males and 35 females, participated in the Qualtrics survey. The response rate was 67.96%. Tables 1 to 8 indicate the results corresponding to survey questions #s 1 to 8 as follows.

1. Do you like the use of BlogTalkRadio to interview entrepreneurs and executives for online management courses?

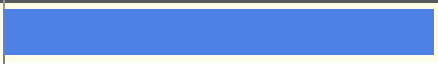
Answer		Response	%
Yes		63	90%
No		7	10%
Total		70	100%

Table 1. *Preference for the Use of BTR to Interview Entrepreneurs and Executives for Online Management Courses*

2. Would you like to participate in a BlogTalkRadio interview show by calling in to the show in order to ask the interviewee (an entrepreneur or an executive) some questions?

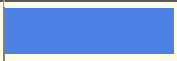
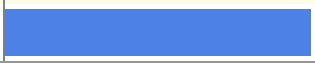
Answer		Response	%
Yes		25	36%
No		45	64%
Total		70	100%

Table 2. *Participation in a BTR Interview Show by Calling in to the Show*

3. Would you like to co-host an interview show with the instructor?

Answer		Response	%
Yes		10	14%
No		60	86%
Total		70	100%

Table 3. *Co-Hosting a Show With an Instructor*

4. How often would you like the instructor to conduct interviews on BlogTalkRadio during the semester?

		Response	%
Do not conduct interviews on BlogTalkRadio		3	4.29%
One interview in a semester		18	25.71%
Two interviews in a semester		25	35.71%
Three interviews in a semester		13	18.57%
Four interviews in a semester		9	12.86%
More than four interviews in a semester		2	2.86%
Total		70	100%

Table 4. *Number of Interviews Respondents Would Like an Instructor to Conduct During the Semester*

5. Do you consider online interviews constitute good resource materials for management classes?

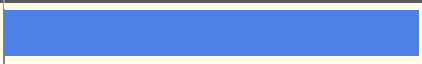
Answer		Response	%
Yes		61	87%
No		9	13%
Total		70	100%

Table 5. *Consideration of Online Interviews as Good Resource Materials for Management Classes*

6. Do you consider BlogTalkRadio interviews hosted by an instructor with student participation a good way to enhance student-student, student-instructor, and student-content interaction in online classes?

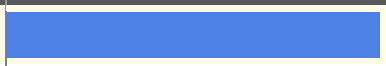
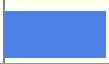
Answer		Response	%
Yes		55	79%
No		15	21%
Total		70	100%

Table 6. *Consideration of BlogTalkRadio Interviews Hosted by an Instructor With Student Participation a Good Way to Enhance Interaction*

7. Do you consider interviews with entrepreneurs and executives on BlogTalkRadio as one of the ways to find out how concepts learned in management classes are put into practice?

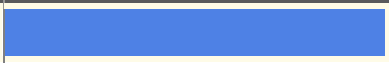
Answer		Response	%
Yes		56	80%
No		14	20%
Total		70	100%

Table 7. *Consideration of Interviews with Entrepreneurs and Executives on BlogTalkRadio as a Way to Find Out How Management Concepts Are Put into Practice*

8. In addition to hosting interviews with entrepreneurs and executives, BlogTalkRadio can be used to host other types of shows with educational value. Would you recommend the use of BlogTalkRadio as a tool in online classes?

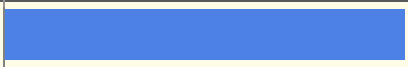
Answer		Response	%
Yes		64	91%
No		6	9%
Total		70	100%

Table 8. *Percentage of Respondents Who Would Recommend the Use of BlogTalkRadio as a Tool in Online Classes*

The data answered to the affirmative the following research question of this study. Will an instructor hosting executive interviews on BTR with student participation result in the following: generation of good resource materials for online management classes; enhancement of student-student, student-instructor, and student-content interaction; and student understanding of how management concepts can be put into practice? Table 5 shows that 87% of the respondents believed that online interviews constitute good resource materials for management classes. Table 6 indicates that 79% of the respondents agreed that BTR interviews hosted by an instructor with student participation enhance student-student, student-instructor, and student-content interaction in online classes. As illustrated in Table 7, 91% of the respondents considered BTR interviews with entrepreneurs and executives useful in finding out how management concepts are put into practice.

After the survey analysis, 9 of 70 survey participants sent in qualitative comments pertaining to the practical use of BTR in online management classes as shown in Table 9.

- "The use of BTR to interview entrepreneurs and executives for online management courses is like the backbone of a human body. It should be an integral part of management courses. It is really comparable to giving you hands-on training."
- "I would like to see the tool to be used to interview experts in not only management, but all concentrations of the Business Administration program such as accounting, finance, marketing, computer information systems, and so on."
- "BTR provides value for students as long as interviewees are sharing knowledge and experiences closely related to the class agenda."
- "I think these online interviews constitute good resource materials for management and business classes. Indeed, interviews with entrepreneurs and executives on BlogTalkRadio are one of the best ways to find out how concepts learned in management classes are put into practice. I will suggest to have at least one to two interviews in a semester."
- "I see BTR as a way to create more interactions between the instructors and students. . . . Besides, it is always helpful when students can interact with real-world professionals who provide interesting and valuable information to the students."
- "I see that the management classes could benefit from the anytime availability of the online talk radio format. I feel the biggest benefit will come from hearing from not just executives from the field, but from recent (past 5 year) graduates who are currently employed in order to find out how they utilize their skill set acquired at our university. There is practical learning value in hearing from both executives and recent graduates because it relates to the coming concerns of every student currently enrolled."
- "There would be value in building a library of discussions or interviews that are relevant to the subject matter. . . . BTR is a valuable tool if it is used and embraced by faculty to expose students to the world outside their immediate geographic areas, textbooks, and approved reading lists. BTR can then be used as a resource tool and as a launch pad from where students may begin to seek out alternative thoughts, methods, and designs relative to their future fields."
- "I know the business policy class is done through teams. BTR could be used as a way for teams to host or co-host a session, and each team could have a different topic to discuss on air. If a team hosts, it could be a way to earn extra credit."
- BTR can be used by students to host a show, and it can be used to "interview students for their views regarding different matters taking place in the world today."

Table 9. *Comments on the Practical Use of BTR in Online Management Classes*

Discussion

Results indicate overwhelmingly positive responses with respect to the use of BTR in online management classes. The author hosted two shows on BTR, and students participated by calling in to the show. The author started teaching online in the fall of 2011, and in the spring semester prior to that, she hosted a BTR show on February 19, 2011 (http://www.blogtalkradio.com/mchan/2011/02/19/university-students-perspectives-with-respect-to-having-office-hours-on-the-air). The show aimed to gather students' perspectives with respect to using BTR to conduct office hours for online classes. The second show was hosted on March 10, 2012 (http://www.blogtalkradio.com/mchan/2012/03/10/interview-with-louise-wannier-of-truudesigns).

The recordings of the shows are available for listening on the Web, and the podcasts are downloadable directly from BTR and iTunes.

All closed questions were used in the survey with the expectation of a high response rate. The survey generated a rather high response rate of 67.96%, and this together with the positive responses from the participants suggest the latter's interest in BTR as a tool in online teaching and learning. The author interviewed an entrepreneur on March 10, 2012 on BTR with the participation of students from an

entrepreneurship class. One of the 70 students from three online sections of a business policy course who participated in the survey of this study called in to the March 10, 2012 show on BTR for she was in the entrepreneurship class as well. As 69 of 70 respondents had not previously participated in a BTR show, their lack of experience with BTR brought about the following responses shown in Tables 2 and 3. Table 2 shows that 36% of the respondents would like to call in to the BTR show in order to ask the interviewee questions. Table 3 shows that 14% of the respondents would like to co-host the interview show on BTR with the instructor. To generate the interest of more students to participate in a BTR show as callers or co-hosts, the instructor has to familiarize the students with the BTR tool. The instructor has to show students how to call in to the show or co-host a show. This can be done by running a test show with the students prior to the live show. The test show will not be broadcast to the public. If students want to have more practice, then more test shows can be conducted before the live show. With familiarity with the tool, a greater number of students will have the confidence and interest to call in to the show or to co-host a show.

Once students gain experience co-hosting a show, they can host a BTR interview, turning from an instructor-hosted show with student participation to a show hosted and co-hosted by students with minimal instructor intervention. It will become a live show with a recorded podcast produced by students for students. As noted in the literature review, in Lee et al. (2006) and Nathan and Chan's (2007) studies, the podcasts were created by students for students with positive results. One student in this author's study suggested that in addition to executives, alumni members should also be interviewed. Based on this suggestion, a BTR show can be produced for online management students by student classmates as host and cohosts with an alumni member in a managerial position as a guest. The alumni member can inspire both the current student-producers and student-listeners. Another student in the BTR study suggested that each student team in the Business Policy class can serve as host and cohosts of a show. To implement this suggestion, each student team can invite an executive interviewee from a different industry to help students identify similarities and differences in strategies, organizational structure, control system, and various management practices across different industries. The interview podcasts are suitable materials for all current and future management classes, and they can be used by all management instructors.

Armstrong et al. (2009) adhered to Chickering and Gamson's (1987) Seven Principles for Good Practice in Undergraduate Education as the framework for their study. Similar to Armstrong et al., this author's planned BTR inquiry-based project would satisfy these same principles as discussed in the literature review section.

Most students liked BTR and recognized it as a valid learning environment with the following implications:

- Inquiry-based learning involves student engagement, and collaboration among faculty, students, and the community of practice (Edelson, Gordin, & Pea, 1999; Lombardi, 2007).
- BTR is a Web 2.0 tool that enables McLoughlin and Lee's (2008) Pedagogy 2.0 with the three elements: Personalization, Participation, and Productivity.
- Multiple forms of active learning such as analysis, reflection, application, and questions can enhance critical thinking (Dietz-Uhler & Lanter, 2009).
- BTR has the potential to bring about a "learner-centered, knowledge-centered, assessment-centered, and community-centered" learning environment as advocated by Swan (2005, p. 26).

Conclusion

The study demonstrates the benefits of using BTR as an engaging learning environment for introducing students to management theory and how it is applied in practice. It does this by interviewing executives and entrepreneurs on BTR with instructor-learner and learner-learner collaboration. Further research should explore other ways it can be used for teaching and learning including the following: office hours with students; student presentations; student debate on a particular topic; case discussions; and so on. The author conducted a show on BTR back in 2011 to gather students' perspectives with respect to having office hours on the air. Four of six student callers supported the idea. The author's business policy classes are organized into teams, and each team can choose to have office hours on BTR to ask questions with respect to upcoming assignments. Students often have similar questions about certain assignments; therefore, if some students cannot come for office hours on BTR due to schedule conflict, they may be able to find the answers from the archived recordings. It is important to inform students that

office hours on the air are designed to answer questions about various assignments, and students should not complain about other students or talk about their personal problems on the air. Students are not penalized for not taking advantage of office hours on BTR, and those who go on BTR for office hours are not given points for doing so. Students can provide on the air their first names or membership in a specific team, such as Team 1, but they do not have to provide their full names. Conducting office hours on the air will not violate the Family Educational Rights and Privacy Act (FERPA), which is a Federal law that protects the educational records of students. Clarification of questions that students have about assignments and upcoming exams on BTR has nothing to do with the educational records of students.

BTR can be used to facilitate student engagement and an online learning community in other disciplines, such as communication studies, journalism, public relations, psychology, sociology, political science, religious studies, and so forth. Researchers can also examine the perspectives of students from other disciplines on the use of BTR to identify the disciplines that are most likely to use BTR.

References

Alexander, M. E., Commander, N., Greenberg, D., & Ward, T. (2010). Using the four-questions technique to enhance critical thinking in online discussions. *MERLOT Journal of Online Learning and Teaching, 6*(2), 409-415. Retrieved from http://jolt.merlot.org/vol6no2/alexander_0610.htm

Armstrong, G., Tucker, J., & Massad, V. (2009). Interviewing the experts: Student produced podcast. *Journal of Information Technology Education: Innovations in Practice, 8*(1), 79-90. Retrieved from http://www.jite.org/documents/Vol8/JITEv8IIP079-090Armstrong333.pdf

Bain, K. (2004). *What the best college teachers do.* Cambridge, MA: Harvard University Press.

BlogTalkRadio. (2014a). Free Internet Radio – About Us. Retrieved from http://www.blogtalkradio.com/about.aspx

BlogTalkRadio. (2014b). BlogTalkRadio Premium Services. Retrieved from http://hosts.blogtalkradio.com/pricing-page-logged-out-v3?aid=GoPremH

Brinthaupt, T. M., Fisher, L. S., Gardner, J. G., Raffo, D. M., & Woodard, J. B. (2011). What the best online teachers should do. *MERLOT Journal of Online Learning and Teaching, 7*(4), 515-524. Retrieved from http://jolt.merlot.org/vol7no4/brinthaupt_1211.htm

Bruner, J. S. (1990). *Acts of Meaning.* Cambridge, MA: Harvard University Press.

Builtwith (2013, October 25). Blog Talk Radio usage statistics: Websites using Blog Talk Radio. Retrieved from http://trends.builtwith.com/media/Blog-Talk-Radio

Cameron, D., & Van Heekeren, B. (2008). Hello, and welcome to the show: Applying radio's "explaining voice" to educational podcasting. In Hello! Where are you in the landscape of educational technology? *Proceedings ascilite Melbourne 2008* (pp.142-146). Retrieved from http://www.ascilite.org.au/conferences/melbourne08/procs/cameron.pdf

Chan, M. (Host). (2011, February 19). *University students' perspectives with respect to having office hours on the air* [Audio podcast]. Retrieved from http://www.blogtalkradio.com/mchan/2011/02/19/university-students-perspectives-with-respect-to-having-office-hours-on-the-air

Chan, M. (Host). (2012, March 10). *Interview with Louise Wannier of TRUUdesigns* [Audio podcast]. Retrieved from http://www.blogtalkradio.com/mchan/2012/03/10/interview-with-louise-wannier-of-truudesigns

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 39*(7), 3-6.

Deyermenjian, K. (2013, July 25). *Google Hangouts vs. Skype: A comparative look.* Retrieved from http://searchunifiedcommunications.techtarget.com/feature/Google-Hangouts-vs-Skype-A-comparative-look

Dietz-Uhler, B., & Lanter, J.R. (2009). Using the four-questions technique to enhance learning. *Teaching of Psychology, 36,* 38-41. doi:10.1080/00986280802529327

Edelson, D. C., Gordin, D. N., & Pea, R. D. (1999). Addressing the challenges of Inquiry-based learning through technology and curriculum design. *The Journal of the Learning Sciences, 8*(3 & 4), 391-450.

Foley, M. J. (2014, April 28). Microsoft begins rolling out free Skype group video calling. *ZDNet Mobility & Telecoms Newsletter.* Retrieved from http://www.zdnet.com/microsoft-begins-rolling-out-free-skype-group-video-calling-7000028827/

Glasersfeld, E. von (1989). Cognition, construction of knowledge, and teaching. *Synthese*, *80*(1), 121-140.

Google Play. (2014, June 11). ipadio. Retrieved from https://play.google.com/store/apps/details?id=com.ipadioltd.ipadio&hl=en

Kemp, J., Mellor, A., Kotter, R., & Oosthoek, J. W. (2012). Student-produced podcasts as an assessment tool: An example from geomorphology. *Journal of Geography in Higher Education, 36*(1), 117-130. http://dx.doi.org/10.1080/03098265.2011.576754

Koetsier, J. (2012, August 16). Stubhub founder Jeff Fluhr wants you to know that Spreecast is way, way better than Google Hangouts [*VB Insight*]. Retrieved from http://venturebeat.com/2012/08/16/jeff-fluhr-spreecast-google-hangouts/

Kuh, G. D. (2001, May/June). Assessing what really matters to student learning: Inside the National Survey of Student Engagement. *Change, 33*(3), 10-17, 66.

Kuh, G. D., Kinzie, J., Cruce, T., Shoup, R., & Gonyea, R. M. (2007). *Connecting the dots: Multi-faceted analyses of the relationships between student engagement results from the NSSE, and the institutional practices and conditions that foster student success.* Bloomington, IN: Indiana University, Center for Postsecondary Research. Retrieved from http://nsse.iub.edu/pdf/Connecting_the_Dots_Report.pdf

Lee, M. J. W. (2005). New tools for online collaboration: Blogs, wikis, RSS and podcasting. *Training and Development in Australia, 32*(5), 17-20.

Lee, M. J. W., Chan, A., & McLoughlin, C. (2006). Students as producers: Second year students' experiences as podcasters of content for first year undergraduates. In *Proceedings of the Seventh IEEE Conference on Information Technology Based Higher Education and Training* (pp. 832-841). Sydney, Australia: University of Technology, Sydney. http://dx.doi.org/10.1109/ITHET.2006.339707

Lee, M. J. W., McLoughlin, C., & Chan, A. (2008). Talk the talk: Learner-generated podcasts as catalysts for knowledge creation. *British Journal of Educational Technology, 39*(3), 501-521. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8535.2007.00746.x/pdf

Levy, A. (2006, August 18). BlogTalkRadio and Skypecast [Web log post]. Retrieved from http://blog.blogtalkradio.com/tag/skype/

Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *The Quarterly Review of Distance Education, 8*(1), 9-24.

Livestream. (2014, June 29). Upgrade your account. Retrieved from http://help.livestream.com/customer/portal/articles/777308-upgrade-your-account

Lombardi, M. M. (2007, May). *Authentic learning for the 21st century: An overview.* Educause Learning Initiative: Advancing Learning Through IT Innovation. Retrieved from http://net.educause.edu/ir/library/pdf/eli3009.pdf.

Lussier, N. (2014, June 4). How to host a Google Hangout On Air. *Social Media Examiner*. Retrieved from http://www.socialmediaexaminer.com/google-hangout-on-air-tips/

Mandernach, Forrest, Babutzke, & Manker (2009). The role of instructor interactivity in promoting critical thinking in online and face-to-face classrooms. *MERLOT Journal of Online Learning and Teaching, 5*(1), 49-62. Retrieved from http://jolt.merlot.org/vol5no1/mandernach_0309.htm

McGarry, C. (2014, April 21). Spreecast takes on Google Hangouts with a YouTube and Reddit-inspired redesign. *PCWorld.* Retrieved from http://www.pcworld.com/article/2145741/spreecast-takes-google-hangouts-youtube-and-reddit-inspired-redesign

McLoughlin, C., & Lee, M. J. W. (2008). The three P's of pedagogy for the networked society: Personalization, Participation, and Productivity. *International Journal of Teaching and Learning in Higher Education, 20*(1), 10-27. Retrieved from http://www.isetl.org/ijtlhe/pdf/IJTLHE395.pdf

McLoughlin, C., Lee, M. J. W., & Chan, A. (2006). Using student generated podcasts to foster reflection and metacognition. *Australian Educational Computing, 21*(2), 34-40. Retrieved from http://acce.edu.au/sites/acce.edu.au/files/pj/journal/AEC%20Vol%2021%20No%202%202006%20Using%20student%20generated%20podcasts%20to%20fos.pdf

Mixlr. (2014). Help. Retrieved from http://support.mixlr.com/

Nathan, P., & Chan, A. (2007). Engaging undergraduates with podcasting in a business subject. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007* (pp. 747-751). Retrieved from http://www.ascilite.org.au/conferences/singapore07/procs/nathan.pdf

Ng, Deb. (2009, February 19). What is podcasting? [Web log post]. Retrieved from http://blog.blogtalkradio.com/podcasting/what-is-podcasting/

Paavola, S., & Hakkarainen, K. (2005). The knowledge creation metaphor – An emergent epistemological approach to learning. *Science & Education, 14,* 535-557. doi:10.1007/s11191-004-5157-0

Pew Internet & American Life Project. (2011). Web 2.0. Retrieved from https://web.archive.org/web/20140209082331/http://pewinternet.org/topics/Web- 20.aspx

Piaget, J. (1970). *Structuralism.* New York: Harper & Row.

Rao, L. (2010, March 29). BlogTalkRadio raises $1.9 million. *TechCrunch*. Retrieved from http://techcrunch.com/2010/03/29/blogtalkradio-raises-1-9-million/

Rivera, B, & Rowland, G. (2008). Powerful e-learning: A preliminary study of learner experiences. *MERLOT Journal of Online Learning and Teaching, 4*(1), 14-23. Retrieved from http://jolt.merlot.org/vol4no1/rowland0308.htm

Rovai, A. P. (2004). A constructivist approach to online college learning. *The Internet and Higher Education, 7*(2), 79-93. doi:10.1016/j.iheduc.2003.10.002

Rowland, G., & DiVasto, T. (2001). Instructional design and powerful learning. *Performance Improvement Quarterly, 14*(2), 7-36.

Rowland, G., Hetherington, J., & Raasch, J. (2002). The individualized nature of powerful learning experience. *Educational Technology, 42*(2), 26-30.

Rowland, G., Lederhouse, A., & Satterfield, D. (2004). Powerful learning experience within coherent learner groups. *Performance Improvement Quarterly, 17*(2), 46-64.

Rutherford, C. (2010). Using online social media to support preservice student engagement. *MERLOT Journal of Online Learning and Teaching, 6*(4), 703-711. Retrieved from http://jolt.merlot.org/vol6no4/rutherford_1210.htm

Shackelford, J. L., & Maxwell, M. (2012a). Contribution of learner–instructor interaction to sense of community in graduate online education. *MERLOT Journal of Online Learning and Teaching, 8*(4), 248-260. Retrieved from http://jolt.merlot.org/vol8no4/shackelford_1212.htm

Shackelford, J. L., & Maxwell, M. (2012b). Sense of community in graduate online education: Contribution of learner to learner interaction. *The International Review of Research in Open and Distance Learning, 13*(4), 228-249. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1339/2317

Stevens, J., & Brenner, Z. R. (2009). The peer active learning approach for clinical education: A pilot study. *The Journal of Theory Construction & Testing, 13*(2), 51-56.

Stewart, C., Bachman, C., & Babb, S. (2009). Replacing professor monologues with online dialogues: A constructivist approach to online course template design. *MERLOT Journal of Online Learning and Teaching, 5*(3), 511-521. Retrieved from http://jolt.merlot.org/vol5no3/stewart_0909.htm

Stone, B. (2008, June 25). BlogTalkRadio chats about new financing and new plans [Web log post]. *New York Times.* Retrieved from http://bits.blogs.nytimes.com/2008/06/25/blogtalkradio-chats-about-new-funding-and-new-plans/?hp&_r=0

Swan, K. (2005). A constructivist model for thinking about learning online. In J. Bourne & J. C. Moore (Eds.), *Elements of quality online education: Engaging communities* (Vol. 6, pp. 13-30). Needham, MA: Sloan-C.

Thorpe, S. (2014, August 31). Mixlr releases beta app for Android iOS update [Web log post]. Retrieved from http://podcasternews.com/2014/08/31/mixlr-releases-beta-app-for-android-ios-

Tsui, L. (2002). Fostering critical thinking through effective pedagogy: Evidence from four institutional case studies. *The Journal of Higher Education, 73*(5), 740-763.

Turner, J. (2008, February). Blog Talk Radio learns monetization and forces endorsements [Web log post]. *One by One Media.* Retrieved from http://onebyonemedia.com/blog-talk-radio-learns-monetization-and-forces-endorsements/

Ustream. (2014). Pro broadcasting plans. Retrieved from https://www.ustream.tv/platform/plans/pro-broadcasting

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Walker, L. (2014). Spreaker review: Social radio for mass audiences [Personal Web]. Retrieved from http://personalweb.about.com/od/socialsound/a/spreaker-social-radio-review.htm

Walker, S. (2003). Active learning strategies to promote critical thinking. *Journal of Athletic Training, 38*(3), 1-10.

Young, E. (2011, May 26). Is Spreaker the future of Internet radio? *Social Media Examiner.* Retrieved from http://www.socialmediaexaminer.com/is-spreaker-the-future-of-internet-radio/

Young, S., & Bruce, M. A. (2011). Classroom community and student engagement in online courses. *MERLOT Journal of Online Learning and Teaching, 7*(2), 219-230. Retrieved from http://jolt.merlot.org/vol7no2/young_0611.htm

Appendix A

BlogTalkRadio Survey

1. Do you like the use of BlogTalkRadio to interview entrepreneurs and executives for online management courses?
   A. Yes
   B. No
2. Would you like to participate in a BlogTalkRadio interview show by calling in to the show in order to ask the interviewee (an entrepreneur or an executive) some questions?
   A. Yes
   B. No
3. Would you like to co-host an interview show with the instructor?
   A. Yes
   B. No
4. How often would you like the instructor to conduct interviews on BlogTalkRadio during the semester?

A. Do not conduct interviews on BlogTalkRadio

B. One interview in a semester

C. Two interviews in a semester

D. Three interviews in a semester

E. Four interviews in a semester

F. More than four interviews in a semester

5. Do you consider online interviews constitute good resource materials for management classes?

   A. Yes

   B. No

6. Do you consider BlogTalkRadio interviews hosted by an instructor with student participation a good way to enhance student-student, student-instructor, and student-content interaction in online classes?

   A. Yes

   B. No

7. Do you consider interviews with entrepreneurs and executives on BlogTalkRadio as one of the ways to find out how concepts learned in management classes are put into practice?

   A. Yes

   B. No

8. In addition to hosting interviews with entrepreneurs and executives, BlogTalkRadio can be used to host other types of shows with educational value. Would you recommend the use of BlogTalkRadio as a tool in online classes?

   A. Yes

   B. No

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