i.e.: inquiry in education

Volume 8 | Issue 2 Article 3

2016

The Trifecta Approach and More: Student Perspectives on Strategies for Successful Online Lectures

Laura Jacobi
Minnesota State University Mankato, laura.jacobi@mnsu.edu

The Trifecta Approach and More

Student Perspectives on Strategies for Successful Online Lectures

Laura Jacobi
Minnesota State University (Mankato Campus), Mankato, USA

Introduction and Rationale

Most of us will readily agree that lectures have become the hallmark of the college classroom. And when used effectively, they can certainly have an impact. But what about lectures delivered in online courses? Can they "pack the same punch"? Are there specific strategies instructors may use in developing and delivering lectures for online courses that would help to insure their effectiveness?

While there appears to be an abundance of literature on *whether or not online lectures are effective* (i.e., lead to positive learning outcomes such as increased attendance and achievement) as compared to traditional lectures, there is not as much literature on *what makes online lectures effective*. Perhaps that is due to the expectation that what is done in the traditional lecture is simply to be replicated in the online lecture, or to the assumption that what makes the traditional lecture successful will be the same as what makes the online lecture successful. But are the strategies used to make traditional lectures successful the same as those used to make online lectures successful? In their survey of 240 instructors of online communication courses, Vanhorn, Pearson, and Child (2008) found that one of the most significant concerns pertained to how to convey the information in online lectures in an informative and creative way, as done in a face-to-face class: "Instructors commented on the difficulty of transforming a face-to-face course to an online course…Instructors questioned where they could make the online information interesting, creative, and complete for their online audience" (p. 31). The purpose of this qualitative survey study is to decipher which strategies students find most and least effective in helping them to learn in online lectures. Although the extant literature is fairly scant when it comes to strategies pertinent to effective online lectures, what is there reflects the significance of interactivity and immediacy.

Interactivity

One of the features that stands out in the literature on what makes online lectures effective is interactivity. In other words, it is suggested that lectures that help to engage students actively are more likely to be effective. For example, Scheines, Leinhardt, Smith, and Cho (2005) conducted

five different experiments involving over 600 students, three different lecturers, six different recitation instructors, and two different locations; even with such a large data set, they found no differences in learning outcomes when replacing traditional lectures with online lectures. They concluded:

> We believe that we will soon be able to show a significant gain from using interactive online material in place of lecture (i.e., traditional live lecture), precisely because of the opportunities online learning affords for more immediate feedback, more active learning, and more personalized opportunity to engage the material when and how the student wishes. (pp. 21-22)

O'Bannon, Lubke, Beard, and Britt (2011) also found no significant differences in achievement when using podcasts to replace traditional lecture in a technology class; the authors claim that this is a major finding that suggests that podcasts can be used beyond disseminating fundamental information to "allow more time for demonstration, hands-on practice, and development of technology-rich lessons" (p. 1891). Assessing analytics, Geri, Gafni, and Winer (2014) found that students in online courses experience a u-curve with a dip in engagement and participation midsemester; therefore, they suggest *interactive* video lectures to improve students' engagement along with *compulsory assignments* throughout the semester to motivate students to review lectures in preparation for their assignments. Freeman, Schrimsher, and Kendrach (2006) tested specific instructional design methods in an online introductory drug course, and based on survey responses from students, they concluded that interactive exercises were important to include. Murthy and Naraharisetty (2011) concur based on their findings and even suggest some strategies for improved interactivity in online courses: interview-based presentations; interactive quizzes embedded as part of the presentation; animated diagrams and graphics; and supplements with hyperlinks for further examples, illustrations, and explanatory videos.

Immediacy

Immediacy, as first defined by Mehrabian (1969), is the "extent to which communication behaviors enhance closeness to and nonverbal interaction with one another" (p. 203). Immediacy has been shown in research to be significant in impacting students in their ability to learn, regardless of context. For example, Hackman and Walker (1990) found that teachers who engaged in immediacy behaviors (e.g., encouraging involvement, offering feedback, maintaining a relaxed body posture, and using vocal variety) were viewed more favorably by students. Mottet (2000) found that teachers who exhibit immediacy behaviors were perceived as helpful, sympathetic, responsive, compassionate, and friendly. And Christophel (1990) examined the effects of teacher immediacy behaviors on perceived cognitive and affective learning and found significant, positive relationships.

But can immediacy be conveyed through online lectures? Carrell and Menzel (2001) assessed whether or not teacher immediacy varied based on lecture delivery type (live lecture, PowerPoint, or videotaped lecture). They found that perceptions of teacher immediacy did vary significantly, with immediacy highest for the live lecture, second highest for the videotaped

lecture, and lowest for the PowerPoint slides. However, it is important to note that the video lectures were recordings of live lectures that occurred in a live classroom. Furthermore, participants in the study were shown the videotaped lectures in a classroom on a screen. Both of these conditions are quite different from the experiences of many other students who experienced lectures in online courses that were recorded specifically for the course; in such cases, recordings may be done with the instructor recorded up close "looking" directly at students. The instructor therefore appears to be talking directly to the individual students in the class, and not to students of a different class in which the lecture was recorded, making immediacy much more prevalent. Furthermore, students in online courses typically watch these lectures in their homes or other private areas, which again may lead to a different experience of immediacy than when watching a recorded live lecture on a screen in a classroom with other research participants.

Because teaching presence involves appropriate presentation of course content and design of learning activities, it can be argued that teaching presence serves as a theoretical foundation here.

Despite the fact that Carrell and Menzel's (2001) research found immediacy more prevalent in live lectures, other research finds that immediacy can be just as strong in online lectures. For example, some research reveals that the use of video for delivery of instructional materials and general communication helped students to feel more connected to the instructor and to other students (Borup, West, & Graham, 2012; Griffiths & Graham, 2009); it was clear that these videos allowed for immediacy. And Huss and Eastep (2013) found instructor presence to be one of the "make or break aspects of distance education" (p. 15). Research also shows that immediacy can be communicated in a variety of ways in online courses—through warmth, expression, and eye contact (Guerrero & Miller, 1998), personal stories (Arbaugh, 2001; LaRose & Whitten, 2000), use of humor (Arbaugh, 2001), smiling images of instructors (LaRose & Whitten, 2000), and audio lectures accompanied by a picture (LaRose & Whitten, 2000).

Theoretical Foundation: Connection to Teaching Presence

Both the significance of interactivity in online lectures and the importance of immediacy fit with the notion of *teaching presence* defined within the framework of Garrison, Anderson, and Archer's (2000) Community of Inquiry (COI) Model. Defined by Garrison et al. (2000), *teaching presence* involves "the selection, organization, and primary presentation of course content, as well as the design and development of learning activities and assessment" (p. 90). Because teaching presence involves appropriate presentation of course content and design of learning activities, it can be argued that teaching presence serves as a theoretical foundation here. Teaching presence relies upon the use of immediacy behaviors, such as warmth and expressiveness, and interactive lectures in order to gain student engagement—and ultimately, in order that students learn to their fullest capabilities. And research shows that teaching presence appears to play a significant role in the success of an online course (Drouin, Hile, Vartanian, &

Webb, 2013), especially considering presence is not restricted to face-to-face communication (Garrison & Anderson, 2003; Wei, Chen, & Kishuk, 2012).

While teaching presence, as displayed with interactivity and immediacy, is significant in successful online lectures, what other factors may play a role? Are there specific aspects about the way in which online lectures are structured that are most conducive to student learning? Listening to student voices is crucial in the process of understanding how to best use technology to enhance student learning in the context of online lectures. Therefore, the purpose of this study is to discover student perspectives on what makes for effective lectures in the online classroom. RQ: Which strategies do students find most and least effective in helping them to learn in online lectures?

Method

Lectures are often considered the hallmark of teaching in higher education, especially considering the move on the part of universities to online lectures since they are more cost-effective. Because lectures remain one of the most significant teaching tools used in both traditional and online classrooms, these were chosen as the focus of this qualitative survey study. Archival data (student evaluations) were used to assess the utility and structure of the recorded online lectures in an upper level online organizational communication class from a large Midwestern American university. Because archival data were used from anonymous participants, demographic data of the specific participant population was not available. However, demographics can be surmised based on the demographics of the students in the class as a whole. Of the 47 students in the class, 34 (72%) were seniors, nine (19%) were juniors, and four (9%) were graduate students. Thirty-two, or 68%, of the students were female. Twenty-seven of the 47 students in the class completed the evaluation, and based on the demographics of the class, it can be surmised that the majority of those who completed the evaluation were undergraduate seniors and female.

Class Structure

Communication in Human Organizations was a 15-week course taught completely online, which included links to weekly online lectures from the instructor and a discussion board for weekly asynchronous discussions with the use of Moodle, a web-based course management system. After passing one of two 5-point quizzes based on lecture and text readings, students in the course posted to an online discussion board each week in response to discussion questions that required critical reflection and application of course material. Lectures were brief, ranging from 8 to 31 minutes, with the bulk of the lectures around 15-20 minutes. Hyperlinks were included in each weekly module for easy access to the lectures each week; such links brought students to a PowerPoint presentation with slides that advanced automatically to fit with an audio voice-over of the lecture. Printer-friendly PowerPoint slides and audio transcripts of each lecture were also made available.

Data Collection

In addition to the standard university class evaluations, students were given the option to complete survey questions that I developed as the instructor of this online course in order to obtain more specific feedback for the online lectures as compared to their lectures in other online and live courses. Surveys were distributed online. Participation was voluntary and anonymous.

What makes this study particularly unique is that it sought student participants' reflections not only on the structure of the online lectures as pertinent to the specific course of study, but also upon the lectures in comparison to both online lectures and traditional lectures experienced in other courses. Questions were framed with the intention of drawing upon students' experiences as students *of many courses*—in both online and traditional courses—in order to tap into the most effective lecture strategies for online lectures.

Surveys were used to gather the perspectives of undergraduate and graduate students on the structure and utility of the online lectures in the course as compared to other online courses and to their current and previous traditional courses. Because it was important to understand the experiences of students from their perspectives, I felt it important to ask them about their experiences with open-ended questions, which allowed students the freedom and flexibility to record what they found particularly helpful or not helpful about the lectures. According to Van Manen (1990), "The most straightforward way to go about our research is to ask selected individuals to write their experiences down" (p. 63). Furthermore, many studies have demonstrated student evaluations to be reliable and valid instruments for measuring learning outcomes (d'Apollonia & Abrami, 1997; Marsh & Roche, 1997). For example, d'Apollonia and Abrami (1997) found that almost half of the variation in student learning could be explained by student perceptions of teaching effectiveness.

Students were given evaluations with specific questions aimed at getting feedback on the utility of the structure of the lectures in the course as compared to other online courses and to lectures in traditional face-to-face classrooms. Students were asked the following four questions:

1. What do you like *most* about the way in which lectures are set up in this course?

2. What do you like *least* about the way in which lectures are set up in this course?

3. Are lectures in this online course *more* effective, *less* effective, OR *the same level* of effective as lectures in your live classes? Why? What would make lectures the most effective they could be?

4. In what ways have lectures been set up differently in other online courses you have taken? What did you like or not like about that structure?

Data Analysis

In coding, the data were compared continuously to discover emerging themes and patterns. Computer scans of the data were also used in generating themes, determining frequency counts

of themes, and verifying the semantic analysis. In interpreting the data, I compared theme frequencies and assessed relationships between different themes (Guest, MacQueen, & Namey, 2012).

Results

What Students Found Most Effective

Five themes emerged from the data regarding what students found most effective about the structure of the online lectures in the course: the trifecta approach (including audio voice-over), the ability to review lectures, the concise nature of lectures, the fact that key points were highlighted, and the use of helpful examples.

Trifecta approach including audio voice-over. Most of the students surveyed brought up either the trifecta approach, the audio voice-overs, or both. They appreciated the flexibility granted with the PowerPoint slides, audio, and a transcript of the audio all provided. One student said, "I've never had an instructor deliver this 'trifecta,' and I'm very pleased with it." Another commented that "the options really cover everyone's learning style," and another student expressed how it enhanced the learning experience:

> I like that you not only post the slides, but that you also include the transcript of the audio. This makes it easier to reference the additional information that you mention about the topic each week and [it] is very user friendly.

This is consistent with previous research, which finds that providing transcripts of video lectures as a multimodal strategy can enhance learning experiences and retention of knowledge (Jadin, Gruber, & Batinic, 2009; Murthy & Naraharisetty, 2011; Schwartzman & Tuttle, 2002).

Other students appreciated the "in-class" feel they experienced with the audio voice-overs. For example, one student stated: "I love having a voice behind the slides and feeling a much stronger connection with the professor." Another student expressed a similar sentiment: "When I listen to the audio and watch the slides, it feels as if I'm not even taking an online course." Such comments reinforce the significance of immediacy to students. This is consistent with Drouin et al.'s (2013) research, which found that students preferred richer online lecture formats (i.e., audio and video with slides versus lecture notes or slides alone). According to the authors, "These high ratings suggest that instructor immediacy cues like warmth, expressiveness, and general involvement may have been present in both formats" (p. 155). The authors further claim that these similar high ratings "suggest that either lecture format could be used successfully to deliver content within online courses" (p. 155). And again, this immediacy contributes to teaching presence.

In addition to the "in-class" feel, other students also focused upon the enhanced ability to pay attention to audio voice-over lectures. For example, one student said, "I like that they are narrated. It makes it easier to pay attention and feels like a live class." Another said, "The live

recording of each lecture allows you to feel like you are part of a class and helps in the learning process." This finding is consistent with the research of Carrell and Menzel (2001), who found that the short-term recall of students who experienced PowerPoint slides with audio voice-overs was highest, and that students in this experimental condition were the only students who took notes, indicating a stronger focus upon paying attention.

Despite the support for audio voice-overs represented in the literature and despite the fact that there are no differences revealed in learning by students, there are other studies which find a *preference* by students for *video*-recorded lectures (Copley, 2007; Dey, Burn, & Gerdes, 2009; Murthy & Naraharisetty, 2011). And in Grabe and Christopherson's (2008) study of 329 introductory psychology students, while audio recordings of lectures, detailed notes, and lecture outlines were provided, it was found that significantly more students accessed lecture outlines (61%) than the detailed notes (19%) or audio recordings of lectures (3%), suggesting that in this case, students were putting forth the least investment of time necessary. Such studies reveal the need for continued research upon the delivery format of online lectures.

Ability to review lectures. In addition to the trifecta approach, students liked being able to pause, rewind, and review the lectures as needed. One student said, "I like that I can pause and repeat sections while following the written transcript. It helps keep my focus guided and also allows me to clarify if I have missed things." Another commented, "It's nice being able to multitask and take notes like you would in an actual class, but in this one you get to pause if needed!" And another stated, "I can view it and review it as many times as I want, and that is really helpful!" This is consistent with previous research. For example, Williams and Fardon (2007) argue that the opportunity to replay and review past lectures helps students with revision and comprehension. York's (2008) work reinforces this and adds that it also allows students to work at their own pace, take breaks when needed, and work at times most conducive to their schedules. And Schwartzman and Tuttle (2002) claim that the flexible nature of lectures in an online course allows student to spend time where needed. Finally, Kinash, Knight, and McLean's (2015) review of 19 journal articles revealed that the ability to pause, fast-forward, and rewind audio-recorded lectures was particularly advantageous to students with diverse learning needs and allowed learner's to accommodate to their own pace. The ability of students to pause, rewind, and review lectures as needed also fits with the suggested need for interactive lectures since it puts some control in the hands of students. With the technological features involved, students are allowed to interact with the lecture material in a way that suits their needs.

Concise lectures. Besides the trifecta approach and the ability to control their use of lecture material, students discussed their appreciation of concise lectures. Most students used words like "concise," "straightforward," and "focused" to define the nature of the lectures, and their comments indicated their appreciation of such focused brevity. For example, one student said, "I appreciate the inclusion of all chapter topics in a manner that is concise and based on level of importance." Another commented, "My favorite part about the lectures is that they are very straight to the point but still give enough vital information." And another student stated, "These PowerPoint lectures give more information right off the bat than do the PowerPoints in

live classroom settings." This is consistent with previous research. For example, Murthy and Naraharisetty (2011) explored the effectiveness of video and audio-based online lectures through a survey administered to students in a Master of Science in Information Technology program. Through survey findings, they concluded that online lectures should be no longer than 20 minutes. Furthermore, proponents of active learning suggest that a lecture session must be limited to 15 to 20 minutes to be effective (Osborn, 2010). And in order to adapt to the mobility of today's students, Mirriahi and Alonzo (2015) claim that concise lectures are key.

Informative/highlights key points. Connected to their desire for concise lectures, students mentioned that they appreciated that "the lectures are very clear and informative." One student said, "I like that the lectures talk about some key terms from the book and highlight some main points." Another stated, "They are very informative, and you can get another viewpoint on a chapter reading. It also helps clarify any questions that I have after reading." This fits with previous research, which claims the significance of clear structure. For example, Kinash et al.'s (2015) review of 19 journal papers reflected students' expectation that the requirements and purpose for digital content be communicated clearly to students. In other words, students feel that instructors must have a clear teaching and learning purpose that aligns with the modules' learning objectives.

Helpful examples. Finally, students expressed appreciation of relevant and personal examples that fit with lecture concepts. For example, one student claimed that "examples from real world situations are very helpful in understanding key concepts from the lecture." And another stated, "I like the personal examples you use to personalize the terminology in a more memorable way." This too fits with previous research that claims the importance of relevant examples in online lectures to aid in student understanding. For example, Dolnicar (2005) claims the importance of relating course content to real life examples, making the knowledge acquired more meaningful. And inferring from survey responses and analysis, Murthy and Naraharisetty (2011) recommended that lectures be revised "with relevant examples and illustrations that have a direct bearing in accomplishing task-based assignments" (p. 6).

What Students Found Least Effective

Although the majority of students said "nothing" in response to the question about what they liked *least* about the online lectures, one theme emerged pertaining to what students found least effective in structuring the online lectures: lack of connection to text material. There were a few other things mentioned by only one or two students each; those are discussed below.

Lack of connection to text. It is ironic that the one theme that emerged was a lack of connection to text material, considering that one of the themes in response to what students found *most* effective was the fact that the lectures highlighted key points from the text. However, it is apparent that while one large group of students perceived a close connection, another group perceived a lack thereof. For example, one student said, "I wish the lectures incorporated more of the textbook to give us a deeper perspective on the content we are currently reading. Right now, they are certainly closely related but I feel like the lectures could quickly

summarize the readings a bit better." Another student said, "The PowerPoints could potentially cover a little more ground to eliminate a bit of the reading." And another participant commented upon wanting more references made to examples in the text at times "because I like when I can get different views/examples about a certain topic." From these statements, one can surmise that students appreciate clear connections made between material in the text and lecture.

Other. There were two comments pertaining to technological issues due to browser problems, one comment with an expressed desire for more visuals in lectures, and one comment pertaining to frustration with the inability to get an immediate response to questions he/she had while watching the lecture.

Online or Face-to-Face Lectures: Which is More Effective?

The majority of students found online lectures more effective than ones that happen in traditional classrooms. Twelve out of 27 students claimed online lectures as *more* effective; seven out of 27 claimed online lectures as the *same* level of effective, six out of the 27 found online lectures *less* effective, and two of the 27 did not respond to the question.

More effective. Those who identified the online lecture as more effective claimed that it was largely due to the fact that students can proceed through the material at their own pace and review when needed. For example, one student said:

> You provide the actual PowerPoint, the audio, and the outline of the PowerPoint, which makes taking notes very easy. I like to read the chapter first, then play the audio, and then I just use the PowerPoint if I need to double-check anything.

Another student said, "It's like you are really in class, but you can rewind at your own speed." In a similar vein, another student commented:

> I can take them at my own pace and pause when necessary or take more time going over certain slides that I feel I need to look at more. I like how I can go back through the slides if I want to relate something in a slide to a previous one. I feel more in control of my learning.

Such comments reinforce students' appreciation of the trifecta approach and the ability to pause, rewind, and review lectures.

Those who identified the online lecture as more effective claimed that it was largely due to the fact that students can proceed through the material at their own pace and review when needed.

Students also found the online lecture more effective due to the focused nature of them. For example, one student claimed that "because they aren't ridiculously long, I tend to pay attention through the whole thing when viewing it online." Another student confirmed this sentiment: "It's easier to pay attention because it's a lot shorter than my 75-minute classes, so I never zone out

when watching the PowerPoints." One other student stated: "They do not take a full hour, yet they are packed full of information." These comments reveal that students appreciated the focused lot of information, and it was easier for them to gather the needed information since the time frame in which they were expected to pay attention was so much shorter than would be expected in a live class.

Less effective. Students who found the online lectures to be less effective than lectures in traditional classrooms claimed so for various reasons—either lack of connection to other course material, missing nonverbals of the instructor, or lack of the interactive nature of lectures. Again, only six out of 27 students found them less effective. The majority of those (n=4) found the lectures less effective due to a lack of connection with other course material. For example, one student commented, "The information in them usually has nothing to do with our quizzes and online discussions." And another said that the "material in the PowerPoints are not expanding from the textbook." This is easily resolvable and is not a problem pertinent only to online lectures. Another student wished for more interactive lectures, stating that it's "easier to stay engaged in a classroom setting …could be more effective if they were more interactive." Although this is the voice of only one student, it speaks to the significance of keeping students engaged in lecture material. Although there were exercises within the PowerPoint presentations, more could always be added. The final student who found them less effective found them as such due to the perception of less clear communication: "The inability to read nonverbals makes online lectures slightly less effective." Again, despite the fact that this one was student's voice, this speaks to the significance of the development of immediacy for online instructors.

Same level of effective. Those students who found online and live lectures to be similar in levels of effectiveness claimed so due to a mixture of the advantages and disadvantages of each, as aforementioned. For example, one student claimed, "It's easier to understand because the teacher is not being interrupted, but it's also less effective because we aren't getting to have conversations and ask questions." And another said, "I can listen to them in any setting that I feel like, and I can pause if I need a break. Though it's a drawback that I can't ask questions." Both of these comments speak to the loss of interactivity and reinforce the significance of keeping students engaged and active in lectures.

Comparison to Other Online Courses

Only one major theme emerged when students compared the online lectures in this course to those in other online courses: the lack of audio voice-overs in the online lectures in their other courses. A few other aspects were mentioned by only one or two students each, and those will be discussed.

No audio voice-overs. In response to the question about what students liked or didn't like about the structure of other online courses they have taken, seven of the students mentioned that they did not have audio voice-overs in lectures in other courses. Their responses reinforced the importance of audio in helping students to understand and remain engaged with the concepts. For example, one student shared, "I have had classes with just a transcript to read through, and

some textbook pages to go along, or sometimes just the PowerPoint. This gets annoying and frustrating, especially with concepts not very well explained." Another student claimed that the audio helped to "provide a connection to [my] classroom experiences…Reminds me to engage in my online course."

Other. In addition to the desire for audio voice-overs, individual students mentioned liking the structure of the lectures in this course and the trifecta delivery in comparison to those in their other online courses. However, one student desired the incorporation of additional activities into lectures "to help ensure that [I] was paying attention," and two other students commented on the use of video lectures in their courses. One of those two students appreciated that the video lectures made it feel "just like a normal classroom," but the other student, who viewed videotaped recordings of live lectures, claimed it was "extremely boring and taken way in the back of the class so you could see all of the other students eating or fidgeting on their computers." This speaks to the significance of creating immediacy as discussed earlier.

Discussion and Conclusions

This study confirms the comfort level students experience in viewing and "interacting with" online lectures, as evidenced by the fact that the vast majority of students in this study found online lectures to be at least as effective, if not more effective than those in the traditional classroom. The online lecture offers students control in engaging with the course material at their own pace, and it gives them the opportunity to make more efficient use of their time since online lectures are typically more focused and concise.

Creating successful online lectures takes some planning, however. As confirmed with previous theory and research, students desire interactivity and immediacy. They appreciate when their instructors find ways to engage them through focused lectures with key concepts explained by personal and relevant examples. And they value instructor immediacy, conveyed in online lectures through narrated PowerPoints and personal stories. And again, students wish for some control over the lecture experience. They like to be able to pause and reflect when needed, to rewind when needed, and to review challenging concepts when needed in preparation for their exams or assignments.

In summary, the voices of these students offer further confirmation of the utility of the COI Model in the context of online lectures. For example, students in this course confirmed the significance of teaching presence in their desire for audio voice-overs and the trifecta approach. Their voices also reinforce previous research, which clarifies the significance of clear structure and concise lectures. Finally, online lectures offer additional characteristics not available in the traditional lecture. The ability to pause and reflect, rewind and review, and go back to the lecture whenever needed for review and deeper reflection is not possible with traditional lectures. Furthermore, because online lectures are typically shorter and focused upon the crucial information needed, students may pay closer attention, take better notes, and have better recall of information, as was found in Carrell and Menzel (2001). Further research should be conducted to continue to explore the significance of delivery format (i.e., audio voice-over versus video

lecture), interactivity, and immediacy; however, by sharing student voices pertaining to the factors surrounding effective online lectures, this study contributes to an important conversation in education.

Laura Jacobi is an assistant professor in the Department of Communication Studies at Minnesota State University, Mankato. Her research pursuits include communication pedagogy, interpersonal communication, and spiritual communication.

References

Arbaugh, J. B. (2001). How instructor immediacy behaviors affect student satisfaction and learning in web-based courses. *Business Communication Quarterly*, *64*(4), 42-54.

Borup, J., West, R. E., & Graham, C. R. (2012). Improving online presence through asynchronous video. *Internet and Higher Education, 15,* 195-203.

Carrell, L. J., & Menzel, K. E. (2001, June). Variations in learning, motivation, and perceived immediacy between live and distance education classrooms. *Communication Education, 50*(3), 230-240.

Christophel, D. M. (1990). The relationship among teacher immediacy behaviors, student motivation, and learning. *Communication Education, 39,* 323-340.

Copley, J. (2007). Audio and video podcasts of lectures for campus-based students: Production and evaluation of student use. *Innovations in Education and Teaching International*, *44*(4), 387-399.

D'Apollonia, S., & Abrami, P. C. (1997). Navigating student ratings of instruction. *American Psychologist*, *52*(11), 1198-1208.

Dey, E. L., Burn, H. E., & Gerdes, D. (2009). Bringing the classroom to the Web: Effects of using new technologies to capture and deliver lectures. *Research in Higher Education, 50,* 377-393.

Dolnicar, S. (2005). Should we still lecture or just post examination questions on the Web?: The nature of the shift towards pragmatism in undergraduate lecture attendance. *Quality in Higher Education*, *11*(2), 103-115.

Drouin, M., Hile, R. E., Vartanian, L. R., & Webb, J. (2013). Student preferences for online lecture formats: Does prior experience matter? *Quarterly Review of Distance Education, 14*(3), 151-161.

Freeman, M. K., Schrimsher, R. H., & Kendrach, M. G. (2006). Student perceptions of online lectures and *WebCT* in an introductory drug information course. *American Journal of Pharmaceutical Education, 70*(6), 1-7.

Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st Century: A framework for research and practice.* London, England: RoutledgeFalmer.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education, 2*, 87-105.

Geri, N., Gafni, R., & Winer, A. (2014). The u-curve of learning: Course website and online video use in blended and distance learning. *Interdisciplinary Journal of E-Learning and Learning Objects, 10*, 1-16. Retrieved from http://www.ijello.org/Volume10/IJELLOy10p001-016Geri0473.pdf

Grabe, M., & Christopherson, K. (2008). Optional student use of online lecture resources: Resource preferences performance and lecture attendance. *Journal of Computer Assisted Learning, 24*(1), 1-10.

Griffiths, M. E., & Graham, C. R. (2009). The potential of asynchronous video in online education. *Distance Learning, 6*(2), 13-22.

Guerrero, L. K., & Miller, T. A. (1998). Associations between nonverbal behaviors and initial impressions of instructor competence and course content in videotaped distance education courses. *Communication Education, 47*, 30-42.

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*, New York, NY: Sage.

Hackman, M. Z., & Walker, K. B. (1990). Instructional communication in the televised classroom: The effects of system design and teacher immediacy on student learning and satisfaction. *Communication Education, 39*, 196-206.

Huss, J. A., & Eastep, S. (2013). The perceptions of students toward online learning at a Midwestern university: What are students telling us and what are we doing about it? *i.e.: inquiry in education, 4*(2), 1-20.

Jadin, T., Gruber, A., & Batinic, B. (2009). Learning with e-lectures: The meaning of learning strategies. *Educational Technology & Society, 12*(3), 282-288.

Kinash, S., Knight, D., & McLean, M. (2015). Does digital scholarship through online lectures affect student learning? *Educational Technology & Society, 18*(2), 129-139.

LaRose, R., & Whitten, P. (2000). Re-thinking instructional immediacy for Web courses: A social cognitive exploration. *Communication Education, 49*, 320-338.

Marsh, H. W., & Roche, L. A. (1997). Making students' evaluations of teaching effectiveness effective. *American Psychologist*, *52*(11), 1187-1197.

Mehrabian, A. (1969). Some referents and measures of nonverbal behavior. *Behavior Research Methods & Instrumentation*, *1,* 203-207. doi:10.3758/BF03208096

Mirriahi, N., & Alonzo, D. (2015). Shedding light on students' technology preferences: Implications for academic development. *Journal of University Teaching and Learning Practice*, *12*(1). Retrieved from http://ro.uow.edu/au/jutlp/vol12/iss1/6

Mottet, T. P. (2000). Interactive television instructors' perceptions of students' nonverbal responsiveness and their influence on distance teaching. *Communication Education*, *49*, 146-164.

Murthy, S., & Naraharisetty, P. (2011, July). *Investigating the effectiveness of non-interactive video-based lectures in eLearning: Case study at Master of Science in Information Technology (MSIT) Program.* Paper presented at the IEEE International Conference on Technology for Education, Chennai, India.

O'Bannon, B. W., Lubke, J. K., Beard, J. L., & Britt, V. G. (2011). Using podcasts to replace lecture: Effects on student achievement. *Computers and Education*, *57*, 1885-1892.

Osborn, D. S. (2010). Using video lectures to teach a graduate career development course. Retrieved from http://counselingoutfitters.com/vistas/vistas10/Article_35.pdf

Scheines, R., Leinhardt, G., Smith, J., & Cho, K. (2005). Replacing lecture with web-based course materials. *Journal of Educational Computing Research*, *32*(1), 1-26.

Schwartzman, R., & Tuttle, H. V. (2002, September). What can online course components teach about improving instruction and learning? *Journal of Instructional Psychology*, *29*(3), 179-186.

Vanhorn, S., Pearson, J. C., & Child, J. T. (2008). The online communication course: The challenges. *Qualitative Research Reports in Communication*, *9*(1), 29-36.

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy.* Ontario, Canada: The University of Western Ontario.

Wei, C., Chen, N., & Kishuk. (2012). A model for social presence in online classrooms. *Educational Technology Research & Development*, *60*(3), 529-545.

Williams, J., & Fardon, M. (2007). *Perpetual connectivity: Lecture recordings and portable media players.* Retrieved from http://www.ascilite.org/conferences/singapore07/procs/williams-jo.pdf

York, R. O. (2008). Comparing three modes of instruction in a graduate social work program. *Journal of Social Work Education*, *44*(2), 157-171.