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Audio-Enhanced Technology Strengthens Community Building in the Online Classroom

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Abstract

The purpose of this phenomenological study was to explore the lived experiences of students in an audio-enhanced online classroom. Online students who had participated in such a classroom experience were interviewed. The interviews were analyzed to explain the students' experiences with the technology online and show how each student perceived the audio within the online classroom. One of the emergent themes was that the use of audio-enhancements in the online environment helps to build community and as a result promotes transformational learning.

Introduction

As online education emerges and matures, it is important for practitioners as well as theorists to begin to understand how they can apply these new and emergent educational technologies and practices to work to foster a sense of community and to streamline the online learning environment. In order to accomplish this goal, it is very important that researcher continue to test instructional design theories and models. By doing so, they can build upon them in order to create new models and ideals to guide the design of online instruction (Snyder, 2009).

The purpose of this phenomenological study was to explore the lived experiences of students in an online classroom that is audio enhanced. In addition, through these students' perceptions it examined how the creation of community takes place online. The lived experiences were explored through interviews with students in an online classroom that is enhanced with audio technology. The interviews were analyzed to help explain the students' experiences. In addition, students explained if the audio enhancement helped to decrease the sense of isolation which can occur in the online environment.

Due to the recent popularity of online education, research is needed to study the lack of community and the isolation that occurs in an online class. Research of online learning has shown that students enjoy communicating in a safe and supported community. A safe and supportive environment is one where the student feels comfortable posting and sharing ideas and insights on the discussion board. It is also a place where students can feel that their posts are valued and important. Palloff and Pratt (2003) explained "issues of education should be addressed first and foremost in terms of identities and the student's need to belong to a group that is most important" (p. 15). It is important for the student to feel engaged in social participation and have active involvement in the online community (Snyder, 2009). Thus, this research explained from the student perspective how audio-enhanced technology promotes community building in the online classroom.

Importance of Community Building Online

Parr and Ward (2006) have identified the rationale for community as stemming from Wenger's social theory of learning that he calls communities of practice. In the community of practice the participants mutually engage in the task at hand; negotiate the boundaries and focus of joint enterprise and develop shared ways of working. The notion of what makes a community successful is rather complicated but may be determined by what deSouza and Preece (2004) called the sociability and usability factors. deSouza and Preece believed that success of a community can be determined by both social factors as well as well-designed and implemented software in the online environment. The creation of a community of learners helps to create an environment in which the virtual student enjoys learning, and this in turn, helps with the overall retention of knowledge.

Since the beginning of history human beings have used communities that share cultural practices to reflect their collective learning (Wenger, 2000). Thus, engaging on these communities of practice is essential to the experience of human learning. Wenger believed that it is at the very core of what makes human beings capable of meaningful knowing. One of the keys to a successful community of practice is the notion of connectivity. Wenger also explained that building a community is not just a matter of the organization of the classroom; it is the enabling of a rich fabric of connectivity among people. This includes brokering relationships between people within the classroom, and often takes place through the interaction with multiple media.

Students who never developed a sense of connectedness in the classroom with those with whom they were enrolled tended to feel insecure, jealous, isolated and insulated (Thurston, 2005). As a result the establishment of a feeling of connectedness between students and the instructor has been stated as being essential to effective reflection as well as academic enhancement in the learning process. Turston argued that often distance education students can suffer from the lack of support, alienation and isolation due to their special separation from the actual institution of learning.

Paloff and Pratt (2006) believed the creation of a learning community supports and encourages knowledge acquisition. It also creates a sense of excitement about learning together and renews the passion involved with exploring new realms of education. The collaboration involved in learning together truly creates a synergy or chemistry between people that creates an atmosphere of excitement and passion for learning and working together. As a result the total outcome of knowledge acquired and shared is far greater than would be through independent, individual engagement with the material. Community building is a powerful and important part of the online environment and can create a successful learning environment in which students can thrive.

Audio-Enhanced Research

Phillips (2005) explained that audio enhancement in the online classroom serves many functions. First it can provide an alternative to the lecture. Exposure to real people is difficult in distance learning, and often the information can be delivered in learning packets with audio voiceovers

that the learner can relate to. Second, it can provide a narrative line for the theory. Often students have a tough time in text-based learning classrooms in keeping track of the intellectual line of argument. Thus an audio based enhancement can help to create a story where characters and situations can be easily retained. Finally, it provides a user-friendly introduction to theory, by illustrating concepts in terms of real-world practice.

Audio's use of sound, voice, music, and even silence has the ability to transport the listeners to another world (Phillips, 2005). The fact that audio has been created that can be captured; retained and retrieved at will has freed audiences from the constraints of the live broadcast schedule, and makes it viable for the online environment.

Although, audio is a useful medium for the online classroom, often instructional designers are confused as to how, when and why to use it in the classroom. As a result, Calandra, Barron and Thompson-Sellers (2008) conducted research to find out the what, when, why and how of using audio in online learning. Calandra et al. (2008) explained that there are three primary audio elements that are commonly used in online education. These elements include music, speech, and sound effects. Through these elements audio can deliver information, direct attention, convey emotions and provide feedback to the students within the classroom. Audio is an effective means to motivate and inform students in the online environment. Although, it is a useful medium for the online classroom, often instructional designers are confused as to how, when and why to use it in the classroom.

The Research Study

The qualitative strategies selected for this research were phenomenological research. Creswell (2009) explained that phenomenology is a strategy of research inquiry in which the essence of human experience is described by the participants themselves, through their own experiences and narrative. Broadening our perspectives and knowledge on the lived experiences of individuals makes phenomenology a philosophy as well as a research method (Moustakas, 1994). The participants in the study were students who were enrolled in an online class that had been enhanced through the use of audio technology. Students were interviewed using telephone interviews which contained in-depth open-ended questions. The questions were carefully formulated to inquire into the participants' lived experience of the phenomenon. The questions also allowed the respondents maximum freedom to respond.

The study took place at a single institution of higher education. This site consisted of an online classroom that contained audio-enhanced elements. Students were selected from several online classrooms where audio-enhanced elements existed. Students were chosen from classrooms with students who had experienced an audio-enhanced learning environment. All students had experience in the online classroom where the classroom was audio enhanced. The audio enhancement was asynchronous, and the student could repeat and play back the information presented in the audio portion of the class. In addition, all of the students stated that they had taken another online class before this one and had some experience with an online class before taking the audio enhanced class. There were 6 male students and 9 female students who participated in the study.

The researcher used the lived experiences of students who had completed an audio-enhanced online class as a guide to reflect upon the themes identified in 15 narrative interviews. The following themes were derived from the 15 transcribed narratives.

- 1. More like Face-to-Face Classroom
- 2. Increased Community
- 3. Communication Not Improved
- 4. Better Understanding / Increases Clarity
- 5. Saves Time
- 6. Successful Learning Environment / Supportive / Encouraged
- 7. Motivating

Several other themes emerged through the interviews that explain what the experience was like in the audio-enhanced online environment. Students felt that the audio enhancements in the classroom helped to increase the clarity and understanding of the materials. Several other students felt that the audio enhancements were great time savers for a busy schedule. Another emerging theme was that the audio enhancements created a successful learning environment that made the students feel supported and encouraged while learning. One student felt that the online enhancements were also motivating in helping him/her to learn as well.

Conclusions

A major theme to emerge from the interviews was that the audio enhancement helped to increase a sense of community in the online classroom. This sense of community is comforting to the student and also does a great deal to decrease the sense of isolation which can result from the online format. As mentioned in the literature review, Paloff and Pratt (2007) described the community which can exist in both the face-to-face and the online course room. Since human beings are social beings, and this social nature drives learning, it is natural to understand how a sense of belonging can be beneficial in the classroom (Paloff & Pratt, 2007).

Wenger (2000) explained that since the beginning of history human beings have used communities that share cultural practices to reflect their collective learning. Thus, engaging in these communities of practice is essential to the experience of human learning. Wenger believed that it is at the very core of what makes human beings capable of meaningful knowing. One of the keys to a successful community of practice is the notion of connectivity. Wenger also explained that building a community is not just a matter of the organization of the classroom; it is the enabling of a rich fabric of connectivity among people. This includes brokering relationships between people within the classroom, and it often takes place through the interaction with multiple media. Thus audio-enhanced technology reinforces the importance of community building in the online classroom and builds upon previous research stressing the importance of this idea. The collaboration involved in learning together truly creates a synergy or chemistry among people that creates an atmosphere of excitement and passion for learning and working together. As a result, the total outcome of knowledge acquired and shared creates a wonderful synergy within the classroom. Community building is a powerful and important part of the online environment and can create a successful learning environment in which students can thrive.

One of the overwhelming themes from 11 of the 15 of the interviews was that the experiences of having audio enhancement in the classroom made the classroom seem much more like a face-to-face experience. In the interviews, many students described their experiences in taking online classes and often explained that they were isolated and lonely. It was the connection to the professor and to the material that made it much more like a face-to-face classroom. This clearly illustrates theme one which emerged through the interviews that the classroom seemed much more like a face-to-face classroom. Thurston (2005) explained that students who never developed a sense of connectedness in the classroom with those with whom they were enrolled tended to feel insecure, jealous, isolated and insulated. As a result the establishment of a feeling of connectedness between students and the instructor has been stated as being essential to effective reflection as well as academic enhancement in the learning process. Turston (2005) argued that often distance education students can suffer from the lack of support, alienation and isolation due to their special separation from the actual institution of learning. Often, online learning communities have failed to address this issue. Therefore, the audio-enhancement decreased the isolation and helped with community building.

Audio enhancement in the online classroom creates an environment where the student feels supported, uplifted and encouraged to learn reinforcing transformational learning. Mezirow's theory of transformative learning focuses on the individual as a reflective learner. In addition, the principles of constructivist learning are important, because knowledge and meaning are built as a result of experience and are dependent upon socio-cultural contexts (Stansbery & Kymes, 2007). Seven of the fifteen students interviewed mentioned that the audio enhancement created a learning environment where they felt they could be successful and as a result felt encouraged to learn. One of the keys to transformative learning is a place where students feel comfortable learning.

Meyers (2008) explained, "A climate of acceptance is necessary because of the implicit challenges to student's ideas that are integral to this teaching approach" (p. 220). It is important for professors to create this environment of community and a safe place for students to express their thoughts, their feelings, their ideas and their emotions. The online environment can be a very inviting place for students to share their thoughts and ideas, because they feel more comfortable participating in a computer- mediated classroom than in the face-to-face environment.

Recommendations

The audio enhancement provides the validation and the connection to the classmates and the professor that can allow for truly transformative learning through the development of critical thinking skills. Thus, the following are recommendations for using audio enhancement in the online classroom.

- 1. Instructors can use an audio welcome in addition to a written welcome in the form of a podcast to help students become acquainted with and have an immediate connection with the instructor in the classroom. This will also help with the creation of community early in the online class environment.
- 2. Instructors in the online classroom should understand the benefits of the audio enhancements to the creation of community within their classroom which supports

- constructivist and transformational learning within the classroom as a result of community building.
- 3. Instructors can create a supportive and welcoming environment in their classroom through the use of audio enhancements, and help to alleviate the isolation that can occur due to the nature of the online classroom.
- 4. The overall online classroom can become much more like a face-to-face classroom, yet still have all of the benefits of the online classroom with the introduction of the audio-enhancements.
- 5. The use of the audio enhancements in the online classroom is strongly recommended to create a more enjoyable, friendly, supportive and learner friendly classroom environment.

Some of the questions which are brought to the forefront while conducting this research are as follows: How does the student's learning style affect the use of the audio-enhancement experience in the classroom? How does Gardner's theory of Multiple Intelligences affect the audio-enhancement experience in the classroom? Do students of different age groups and generations use or are affected by the technology of the audio enhancement differently? There are many differing types of audio-enhancement technologies being used in the online classroom; are the experiences different for students with the use of video in addition to the audio enhancement? What other multi-media might have an effect on the overall learning environment of the online classroom? All of these would be beneficial in further research.

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