Vonderchek, Sarah: Technology in the Classroom: How PowerPoint Affects Teaching and Learning

Research Proposal

I will be exploring the effects of technology on college students in the classroom setting. More specifically I will explore how PowerPoint affects the classroom. I will research this using surveys, research of articles, and interviews. I will interview professors as well as college students. The questions I will answer are:

- Does PowerPoint have a positive or negative effect on learning? Has it created a barrier in learning?
- How has PowerPoint changed?
- How is PowerPoint affecting how professors teach?

The resources I will use are the scholarly, peer reviewed articles:

- Briz-Ponce, Laura, Anabela Pereira, Lina Carvalho, Juan Antonio Janues-Méndez, and Francisco José García-Peñalvo. 2016 Learning with mobile technologies – Students’ behavior. Computers in Human Behavior
- Lavin, Angelina M., Thomas L. Davies, and David L. Carr. 2010 The Impact Of Instructor Attire On Student Perceptions Of Faculty Credibility And Their Own Resultant Behavior. AJBE American Journal of Business Education (AJBE) 3(6)

I hope to find the extent of the impact of PowerPoint in the classroom.

Scholarly Background on PowerPoint in the Classroom

Visual diagrams have been a part of education for an age ages?., whether writing on a black board or looking in a book. What has changed is the medium in which visual examples are used to teach. Not only has technology evolved, but how children are raised and how the school systems integrate that culture into the learning environment has changed (Frey 2002 pg.1 replace pg. with colon). PowerPoint, remove comma has been integrated into the educational system since its first release under the company of Microsoft in 1990 (Richter 2008). Many students prefer PowerPoint over more traditional lectures that use a medium such as a whiteboard to convey the content of a lecture (Frey 2002 pg. 3). While PowerPoint plays the role of the visual and technical stimulation desired by people who grew up in the era of televisions and video games, it also influences learning and relationships within the classroom (Frey 2002 pg. 1). The highest use of computers in education is used by faculty in the age range of 18 to 34 years old awkward sentence structure (Garrett 2015 pg. 72). The era that divides how we think also divides how we interact in the classroom. PowerPoint has become so common we forget to ask the question, “do we need it?” Effective talks were given before PowerPoint came into existence. So why did we make the transition to using PowerPoint?

In a qualitative study conducted by Barbara Frey, the most common opinion of students surveyed conveyed that PowerPoint held their attention during lectures, made their teachers seem more organized, and the visual images presented in class helped them recall content during exams (Frey 2002 pg. 6). In class students prefer faculty who use their slides to lay out key points but discuss them in detail in class (Garrett 2015 pg. 71). Eighty-five percent of students use lecture slides to review before each test, but most research has found no difference in student performance between classes where slides are available and those without available slides (Garrett 2015 pg. 71). According to one study, PowerPoint seemed to make concepts easier for students to understand and follow (Susskrid 2006 pg. 1229). In an interview with Jennifer Guzmán (Jennifer Guzmán, Personal Communication 2016), she conveyed a concern that many other teachers shared, that if they were to post their PowerPoint lectures on the internet after or before class, attendance rates in class would drop. This, however, is contradicted by studies that have shown no proof that providing lecture slides online reduces the rate of attendance (Garrett 2015 pg. 71). It is also a common concern that providing lecture slides outside of class causes students to take less notes, but in a survey taken by Nathan Garrett, ninety-one percent of students reported that receiving slides before class helped them take better notes (Garrett 2015 pg. 71). PowerPoint has also been found to have a differing effectiveness across different disciplines, appearing to be least effective in teaching mathematically based courses while being more effective in fields such as the Social Sciences (Garrett 2015 pg. 70). Some other concerns with PowerPoint are that bullet points cause an oversimplification of concepts, meaning an oversimplification of thinking (Penciner 2013 pg. 110). Another negative of PowerPoint is that some studies have shown students tend to rely more on slides and spend less time reading their textbooks (Mattar 2011 pg. 289). This can also decrease the interaction between students and teachers, making the lecture less interactive and less social (Hill 2012 pg. 244).

In an interview with an older student coming back to college they said, “In today’s day and age, PowerPoint makes students less reliant on themselves and more reliant on technology to do their work. When I came back to school I used PowerPoint for the first time in classroom. I noticed that this time around, I had less personal connections with my teachers and peers. I didn’t feel like anyone knew me in the class because there was now a technological barrier to hide behind. Students were more afraid of face to face interaction because they need to speak to each other to get answers to their questions. In the past I had to learn from a hard copy book and the people around me, now we use the lazy way out and that has cost us a lot of personal relationships.” (Sharon Vonderchek, Personal Communication 2016) This shows how much of a cultural shift in our way of thinking has been caused by PowerPoint. It has become something we rely on, and now use in situations when it isn’t necessary. We use it for discussion topics and lectures, where its use may be limiting (Penciner 2013 pg. 111). We are constantly assimilating and changing to the culture our younger generations are creating; we are a product of our own creations. Ok. generally a good intro to the issues.

Link to Video

Sources Used
• Frey, Barbara A., and David J Birnbaum
• Garrett, Nathan
• Gurtubuz, Hasan, Mustafa Kösogulu, Ali Alas, Mehmet Erkol, Ali Alas, and Sakip Kahraman
• Kahraman, Sakip, Ceren Cevik, and Hulya Kodan
• Garrett, Nathan
• Gurtubuz, Hasan, Mustafa Kösogulu, Ali Alas, Mehmet Erkol, Ali Alas, and Sakip Kahraman
• Kahraman, Sakip, Ceren Cevik, and Hulya Kodan
• Gurtubuz, Hasan, Mustafa Kösogulu, Ali Alas, Mehmet Erkol, Ali Alas, and Sakip Kahraman
• Kahraman, Sakip, Ceren Cevik, and Hulya Kodan
Questions asked in Video Interview

Interview of Dr. Guzman

1) How do you feel about the use of PowerPoint in the classroom?

2) What are some of the positives of using a PowerPoint lecture in class?

3) What are some of the negatives of using a PowerPoint lecture in class?

4) How do you think PowerPoint effects the relationship between students and professors?

5) How has technology in the classroom changed since you yourself were in school?

6) Why do you choose not to post your presentations online after they have been presented in your lectures?

7) How has PowerPoint effected the culture within the classroom since it was introduced?

8) Do you think PowerPoint has staying power for the future in the classroom? Why?

Interview of Student Back in College

1) How do you feel about using PowerPoint in the classroom?

2) How has PowerPoint changed the culture of the classroom?

3) How many interactions did you have with your professors when you returned to college compared to your first college experience?

4) How has PowerPoint affected the way that you do work and think in the classroom?

Interview of Professor of Radiology

1) What are your thoughts on PowerPoint?

Written Reflection on Final Video

Ethnographic films are often subject to much skepticism in the eye of an anthropologist, who is always looking for the mark of not showing the full truth in what is being portrayed. In making the ethnographic film portraying the effect of PowerPoint in the classroom, those values were kept in consideration in its production. A danger in filmmaking is that the filmmaker may favor and show their own theories and “espouse those theories above all else” (Sherman 1998: 207). To counteract that in this film, I solely used interviews to portray opinions and showed three different viewpoints from different age groups and situations. I showed the interview of a young professor who has exclusively used nothing but PowerPoint to teach, a student who went to college before and after the invention of PowerPoint, and an older professor that has been teaching before and after PowerPoint’s invention.

“Ethnographic film is film which reflects ethnographic understanding (Heider 1976:8).” As a way of doing this, the film was connected to research in the portion of scholarly research that accompanied the film. I also tried to speak as little as possible, only enough to explain what was occurring in the film. The expository mode was used sparingly in this film using narration to introduce each interview so the audience knows who is talking and what view their background may cause them to hold (Nicholas 1991:34). The interactive mode was highly used though as it was an interactive type of film due to its use of interviews to portray information (Nicholas 1991:44). I was not shown, or heard, in the interviews itself both due to time constraints in the video and the desire to take more time to show the opinion of the interviewee, rather than having any focus on me. It was also important to be reflexive in anthropological work (Rudy 2000:152). To reveal my terms of filming, I stated that these were interviews and stated the questions that was asked so that the wording and any possible bias of my questions could be known.

“One of the most unambiguous criteria for any film is simple technical cinematographic competence (Heider 1976:47).” This to me was one of the most important parts. I made sure the images were clear, and the sound was also very clear and audible with clear diction from the interviews as well as my own small bit of narration. This is important to not distract from the message of the film and creates an order that makes sense. Ordering the interviews from youngest to oldest interviewee helped that flow as well.

Sources

Heider, Karl G.

Nicholas, B.

Ruby, J.

Sherman, Sharon R.