Technology in the Liberal Arts & Humanities courses in Universities

Topic: Should Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops be integrated into the courses, or will this technology only hinder the learning process (i.e. by being a distractor) instead?

INTRODUCTION

Technology today is shaping the way students and professors of all ages are accessing not only what they are learning, but also how and where they gain that learning. To be specific, there are two sides in the wave of technology. One side is shaping learning by being accessible through mediums such as Smartphones, MP3 Players, Ipads/Tablets, Nooks/Kindles and laptops. These "portals" not only give access to books and study materials, but email capabilities to peers and professors. The other side of this technology wave is the integration of hybrid, blended and online courses compared to the traditional, face-to-face classrooms that most students and professors are accustomed to.

As technology slowly pushes it's way into all aspects of culture, student/professor life and school, many Universities are taking this opportunity to integrate technology into classes that previously had no connection with technology (Liberal Arts and Humanities, any class outside of STEM). Universities are now integrating hybrid, blended and online classes into the Liberal Arts and Humanities classes in Universities, in a move that can be summed up as "boldly going where no one has gone before." This research will examine higher education and address one specific question, "Should Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops be integrated into the courses, or will this

technology only hinder the learning process (i.e. by being a distractor) instead?"

LITERATURE REVIEW

The first article available is about a study that was done by Gouri Banerjee at a small Liberal Arts and Science college. This college is transitioning from face-to-face teaching, to a greater focus on learning rather than teaching using technology. This article represents the smaller colleges out there and the population of faculty who have still not acknowledged the urgent need to improve educational outcomes by using technology. Banerjee states "Many faculty do not recognize how deeply technology has embedded itself into the lives of students and remain skeptical about teaching with technology" (Banerjee, 9). The professors, who have recognized that online and blended learning is the future and that learning can be accomplished using technology "portals," are perplexed at the point of integrating their face-to-face courses. For students, many expect to meet on a regular basis for a lecture class, Banerjee mentions that students don't necessarily use a lot of technology for their classes at this school, only for social interaction, but that is slowly changing (Banerjee 11). This study covers a two year period, 240 undergraduate students and questions regarding technology in their courses, their preferences for how much technology is used and their attitudes towards learning with technology. Overall, students preferred learning with technology and that "the use of technology in courses improved learning" (Banerjee 14). Their attitudes towards technology was positive and even those who did still prefer face-to-face contact still remark that "using technology for learning offered – greater convenience, time shifting, better pacing, more access, and ease of communication…" (Banerjee, 14).

The second article available is primarily about a study done on in-class laptop use and whether it has an effect on student learning or not. Carrie Fried conducted this study on 137 undergraduate students from two sections of a General Psychology course (Humanities course). Her research was on a lecture-oriented class where laptops were not required or used in any organized fashion (i.e. for projects or specific research) and the students were told at the beginning of the course that they could bring their laptops if they wanted to take notes, but that they would not need it for any specific purpose. However, outside of class, students were required to log into a course Website and complete weekly surveys on various aspects of the class including class attendance, classroom experience and laptop use. Fried reports that out of the total amount of participants more then half used their laptops in class (64.3% of students) (Fried, 910). Overall, Fried's report covers a study done on laptops that provides results indicating that laptops are a negative factor in the classroom. She states "students admit to spending considerable time during lectures using their laptops for things other than taking notes and that laptop use interfered with students' abilities to pay attention to and understand the lecture material…"(Fried, 911). However, she does mention that this study was not conducted on a class were laptop use was controlled, and in the cases where laptop use is controlled, the outcomes are different (Fried, 912).

In "Technology, Learning, and the Virtual Liberal Arts Classroom" Susan Frost and Deborah Olsen conducted a study on a program called "Sunoikisis" that is a program being used to change "the way classics [are] taught in over a dozen liberal arts colleges" (Frost and Olsen, 20). This program combines online lectures and discussion with

face-to-face tutorials on each student's home campus. With this program, students have the ability to study a more advanced a diverse array of subjects. When on campus, the students use Internet access (on their laptops) and access a virtual liberal arts classroom. Sunoikisis, as designed, shows "that technology, creatively employed, can enhance a liberal arts curriculum" (Frost and Olsen, 20). Their study was conducted over a 3 year time period combining interviews, data collection and research. They concluded a few things, first that "because of the collaborative design of Sunoikisis courses, instructors always speak not only to students but to colleagues as well" (Frost and Olsen, 21) which leads to better communication and greater learning advantages. They also concluded that this program helped bring "classicists in small liberal arts colleges" together to enhance learning and that a face-to-face seminar providing information about the layout of the program greatly helped (Frost and Olsen, 21). Also, the ability for students to access this program anywhere (on their personal devices) brought to light the issue that some freshman and sophomore students found "the anonymity of their peers and off-campus faculty…to be discomforting" but that the junior and senior undergraduates were able to work around that discomfort and set ground rules for interaction (Frost and Olsen, 22). Overall, this program gives students "a contextualized, multidimensional view of the texts they study, fostering a 'thickness' of teaching materials that reflects the complexity of learning in the humanities" all at their own personal (device) convenience showing that the relationship between technology and learning can be shaped (Frost and Olsen, 22).

The next article available is all about "M-Learning" which is also called "mobile

learning" and is part of a new "learning landscape created by the availability of technologies supporting flexible, accessible, personalized education" (Kant, 1). Kant states that educators, designers and developers should being thinking about mobile devices and how they can be used for modern teaching and learning environments. This report covers that mobile learning is "any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies" (Kant, 2). These mobile technologies include laptops, MP3 Players, notebooks (Tablets) and mobile phones (Smartphones). This new "M-Learning" focuses on the learner, and provides a way for the student to access on-the-spot education. Kant states that not only is "M-Learning" convenient, it is also collaborative and instantaneous, which leads to the "reception of instant feedback and tips" (Kant, 2). Mobile learning is rooted in the belief that interaction combined with collaboration in a traditional classroom (face-to-face) is not as effective as it once was and that there is a new shift that needs to be focused on. "M-Learning" also covers two areas of education, the computer lab and students with disabilities, with the ability to help students at a greater level then a face-to-face teacher can provide. When it comes to "practical learning tasks" (i.e. cooking or machine maintenance) the student has the ability to instantly access the needed information on their mobile device. As for learners with disabilities, Kant states, "mobile devices…help them organize their lives and achieve some independence…" (Kant, 6). One example Kant provides for helping students with disabilities is a mobile dictionary application available on Smartphones, Tablets and laptops. This type of program would help students

with dyslexia or other learning disabilities. Overall, Kant states that "M-Learning" is not a gimmick, but that rules and responsibilities on the student should be placed in the classroom and curriculum and in the end, mobile learning will provide a greater access to available knowledge.

In "Unstructured vs. Structured Use of Laptops in Higher Education," Robin Kay and Sharon Lauricella executed a study on the use of laptops by 177 undergraduate students. They examined the impact of a structured use versus unstructured use of laptops and the behaviors of students during both. In the "structured" class, it means that the professor approved the use of laptops and that the classroom/lecture would be using the laptops to enhance the learning process (i.e. the professor gives a lecture, then the students use their laptops to do an extensive practice, complete a virtual experiment or use course-related software (Kay and Lauricella, 34)). For the "unstructured" classes, the professor ignores the laptops and continues teaching in traditional lecture style, this permits students to choose what they want to do with their laptop and can lead to distractions, lower learning levels and less satisfaction in the course. One important thing about this particular study is that the students Kay and Lauricella were surveying were student's coming from STEM classes who were being required to take a Humanities class, either Philosophy or Issues with the Family, for credit. Overall, the results of the study concluded that the students who took a structured format course used their laptops significantly more for note taking, engaging in academic activities and actually favored the structured approach. The students who took the unstructured class were more likely to spend time on instant messaging, game playing and non-academic emails. This study

helped provide results “that are consistent with previous research indicating that structured use of laptops results in more positive behaviors than unstructured use” (Kay and Lauricella, 38). They also state that they wanted to “explore the role” that a structured course using laptops has on learning and discovered that to “integrate meaningful laptop activities into a class results in more time being spent on activities that support learning” (Kay and Lauricella, 38).

The next article, “Transitioning to Blended Learning: Understanding Student and Faculty Perceptions” once again discusses laptop use in Universities. This study, conducted by Nannette Napier, Sonal Dekhane and Stella Smith, was completed over a two-year time frame at a small public Liberal Arts college in Georgia. This college “emphasizes student engagement, active-learning environments, and educational innovation” and at the same time, focuses on “face-to-face classroom experience while also exploring how portable technology solutions can allow students to learn, study and work both on and off campus” (Napier, Dekhane and Smith, 20). This study found that there was an overall satisfaction from students using technology for their courses, both males and females (even though females were a little higher in percentage). The technology in the course required “self disciples and time-management skills” that posed a challenge for some students, but it raised awareness of how to use the technology (Napier, Dekhane and Smith, 28). Overall, it is shown that as long as the students were provided some guidance with the technology in their courses, they had a high level of interaction with their instructor and had high student satisfaction.

The last article I researched is on a Canadian University and I felt it would be

important to see how students outside of our educational system feel about technology in the Liberal Arts and Humanities. Gregory MacKinnon conducted a study over a 5-year period on classrooms where students and faculty brought laptops to technology-enriched courses. This school, in particular, was the first of its kind to "implement a full cross curricular laptop program" (MacKinnon, 80). That being said, the results of this study show that there was an increase in student motivation due to the implementation of technology in the classroom. First year students suggested that "preparation of materials" (MacKinnon, 82) was at the top of the list for things that they liked that they could do with their laptops for their courses. At the end of the study, MacKinnon reports that "how and when to integrate technology into instruction is a complicated question" (83) and that it is important keep the school infrastructure in mind because if the course is ahead of the University, a gap can form and instructors want to avoid that if possible.

This literature review provided seven (7) different sources of information that, for the majority, agree that Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops should be integrated into the courses, and that this technology will not hinder the learning process by being a distractor, but in fact helps. Not only did I include studies in the U.S., but I also deemed it important to include a study from Canada. That study provided the same results as the others in the U.S., that technology is important to include in education, as long as there is structure in the school, with the teacher and the curriculum. Overall, I found from my research that as long as the professor is open to the idea of using technology in their course, the school slowly integrates technology into the classroom and the curriculum includes the use of technology in some way, then the

student can benefit from it.

METHODOLGY

For my research survey and interview, I decided to base the survey on the students in the IDT program at the University of Tampa and the interview was with one specific student inside that program. My survey had a total of thirteen (13) participants that answered a variety of multiple choice, matching and fill-in questions that were based on my research question. I wanted to find out what these students' opinions were on technology and whether or not they think the "portals" could be integrated into classes outside of STEM. I selected these students because they are the ones studying how technology is and will be effecting education (and other areas) currently and in the future. I recruited these students by asking them in class if they would be interested in taking a survey on technology in education. They all said yes, so I emailed the survey out to them that night. In the email, I included a brief description of the survey, as well as a due date. I asked them to complete it within a week's time, that way I had time to compile their replies. I measured up the survey in tally format since the number of participants was small. I used a free, online survey creator and as I said before, I emailed it to the students in the program. I analyzed the data using graphs combined with a write up on the rest of the data.

As for my interview, I randomly picked one of the students in the program while in class one night. I asked her if she would participate in an interview with me, she agreed and we set a time and a place convenient for the both of us. We had an informal

interview, where I recorded our conversation and took notes. After the interview was complete, I compared my notes and recording from the interview with the results from my survey. The only limitations I ran into had to be the time constraint. I had a short amount of time to create, send out and receive back my survey responses.

RESULTS

I. The Survey

My objective in creating and dispersing my survey was to find out how students in the IDT program specifically felt about technology overall. I wanted to find out what devices or "portals" they currently use and how often they use each device. I also wanted to find out which functions they use the most on these devices. Other questions I asked included which school disciplines they've taken. I felt that it was important to know if they took any Liberal Arts or Humanities classes because if they haven't, then they won't have the ability to properly judge whether or not integrating technology would be a hindrance or not. At the beginning of my survey, I provided a description about what the survey would cover, including which "portals" I'm focusing my research on (Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops).

Out of the thirteen (13) people who completed my survey, for the most part, they all own some form of handheld technology. The most popular choices were the Smartphone, MP3 Player and laptop (10, 9, 12 people respectively). Next, was the Ipad with five (5) people, the Kindle had four (4) people, the Nook and Tablet both had one (1) person each. These were results I expected, but I was surprised that not everyone had

a Smartphone.

However, I did find many interesting things about the responses. First of all, I found that the majority of students (11 people out of 13) in the IDT program used both their Smartphones and laptops for relatively the same things. Among those activities were social networking, checking information (the weather, news, sports, etc.), using maps (to plan routes and get directions) and conducting personal business (shopping, banking, paying bills, etc.). The graph labeled 1A shows the difference between Smartphone use and laptop use. I also included the category "don't have either" or "not available" for those people who don't use either.

A second interesting thing I found was that there wasn't a majority of people for a certain amount of time. I gave the following options for device use:

1-3 hours

3-6 hours

6-9 hours

9-12 hours

12 hours or more

These options were in reference to how long they spend each week on any device doing Internet activities for school related tasks. I found that this question was important in correlating how much current students use their "portals" compared to the studies I found. Out of all of the available options, I was shocked that more people don't use their technology driven devices for school related tasks, but, I admit that even I still use pen and paper for a lot of my studying, so maybe they do too. These results are labeled in the

graph 2A.

One question in particular, that I knew I had to ask, because it relates to my question "Should Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops be integrated into the courses, or will this technology only hinder the learning process (i.e. by being a distractor) instead?" was "have you ever taken any classes in the following disciplines?" I listed the following:

Literature/ English/ Writing

Psychology/ Sociology

Biology

Business

Natural or Social Science

Engineering

Health Science

For this question it was important to discover whether or not the students I was surveying had any experience with the Liberal Arts or Humanities. I also wanted to see if the IDT students had taken a variety of classes before joining the program, or if they stuck to one general area. For the most part (except for Engineering) all of the disciplines I listed were taken between 6-13 people. These results are labeled in graph 3A. I found this question particularly important because my research is on technology in Literature and Humanities classes (and I may dabble in technology in classes overall) and if the students have not taken any classes in those disciplines, I need to know.

At the end of my survey, included in the overall 21 questions, I asked for the participants to reply to three questions that required them to type in their answers. Those questions were:

What is it that you like the most about technology in the classroom?

Which subject do you think would be the hardest to integrate technology into? Why?

Would you take a class is ALL technology devices were banned from it? If you answer "no", why?

This last part of my survey, I felt, was the most interesting out of all of the questions. I asked for them to type out their responses for these questions because I thought that would be the best way to really get an idea of their opinions on technology in the classroom. Overall, the answers were around what I thought they would be. Many people put "quick access to information" for the first question, for the second that it "varies," and there was a general split between yes and no for the third question. However, what I found the most insightful were a few of the responses I got back for these questions. Here are three responses I found the most helpful in generating an idea about how IDT students feel about technology in the classroom:

> "The use of technology is increasingly becoming a foundational basis for much of what we do in our lives, both in our scholarly pursuits and our daily lives. Accordingly, it's important that our educational growth remain relevant with the needs of the time. For example, cell phones have generally replaced phone booths; our education must be tailored to consider that reality and consistently

evolve with the rapid pace by which tech molds our lives."

"I guess I would question why the instructor or institutions were so adverse to technology that they felt the need to "ban" it. Is there some good reason to force a student to take notes with a pen and paper when they might be more efficient and learn better if typing them into a tablet or computer?"

"I need to be able to receive messages from my family and/or childcare provider if there is an emergency. I could live without the laptop if I had to though. I like following along with the slides, and having the ability to look up something that the professor said more in depth if I am really interested in it. I do take handwritten notes though."

II. Interview

For my interview, I sat with "Jane Doe" because she is a current student in the IDT program (name change was requested to protect her identity). I conducted this interview in a quiet conference room in the Sykes Building. I prepared a list of questions to address her with and I recorded the conversation as well as took notes. The interview was laid-back, with casual conversation and questions and went as I expected it would. During this interview I learned that she thinks integrating technology into Universities is a good thing, as well as integrating it into the Liberal Arts and Humanities courses. However, she did mention that it should be tested out first before integrating the

technology all at once. In regards to putting complete courses online, she said it really depends on which course it is. She believes that for some classes (such as accounting), being strictly online would be more difficult then an English 101 class and it also changes from undergraduate to graduate classes as well. Her opinion is that for some undergraduate classes, such as psychology (a Humanities class), that a hybrid or half online/half in class would be beneficial. She stated, "it really depends on the course, how it was built and designed, and then, determining from there if it is going to work."

As for the technology she uses for school, I found out that she prefers to use her laptop for her classes, unlike some of her classmates who use Tablets and Ipads (as noted from the survey). For these other handheld devices like the Tablet, she stated that it really depends on what she would need them for (in class) in order for her to purchase one. She believes that if she can accomplish everything the course requires with her laptop, then she will stick with that.

In regards to the discussion about the gap between US Universities and the rest of the world (questions I asked are provided at the end of this research), I discovered that she hasn't heard much about it. When I mentioned the Open Online Universities, she was shocked and found them very interesting. I then asked her if she thoughts Universities here in the states should switch to an Open Online University type setting (like the one the UK has) and she stated that "I think when you build a course, you have to cater to the learning styles [of the students], some people may do better online, but some people may need that face-to-face." For her, she wouldn't be against taking classes online, but she actually prefers that face-to-face contact.

Overall, I think some of the best questions during this interview pertained to whether or not graduates should use more online classes or if undergraduates would do better. In particular, one question I asked was "for undergraduate vs. graduate, which levels do you think would be more appropriate to integrate [online] first?" This question stumped her for a bit and she even stated that it was a good question and that it was a tough one to answer. She eventually said that she thought it would be more appropriate for the graduate level to begin with; see how they do, and then eventually incorporating it for the undergraduate levels, but keeping the option open to stay in the classroom.

DISCUSSION

This research has provided an overall view of whether or not technology would or would not be a hindrance in the Liberal Arts and Humanities classrooms. The specific technology I researched includes, Smartphones, MP3 Players, Ipads/Tablets Nooks/Kindles and laptops. Overall I found that, for the most part, studies have shown that technology in the Liberal Arts and Humanities classrooms is not a hindrance, but in fact, does help provide a portal for learning. Granted, it is reported that in some cases, for students who are unfamiliar with Liberal Arts or Humanities classes they should be placed in a structured format course for maximum learning potential. However, in more than one study I found, the author stated that more research is necessary in this area of study. From my survey and interview, I realized that my results closely mirror the studies that I researched. Most of the students in the IDT program favor technology in their classes including the Liberal Arts and Humanities. In all but one of the studies I researched, those students also favored technology, within certain limitations (whether

the course is structured or unstructured). Focusing on technology in the Liberal Arts and Humanities courses is new and still being trial-tested. Since many of the Universities I researched are still in the trail-testing phase of incorporating technology into the Liberal Arts and Humanities, the implications of the results means learning outcomes may or may not be positive. As I've already seen, from my survey, interview and research, not all areas show that technology is accepted everywhere; some people are steadfast in their beliefs that technology will not help. Hopefully one day there will be more research and studies conducted to back-up the effectiveness of technology in the Liberal Arts and Humanities. For right now however, researchers are posed with unanswered questions such as "Would a Nook/Kindle be more effective in a course for downloading books required, or are the books accessible via a laptop computer program?" or "Would the Sunoikisis program be beneficial in large Universities across the country, or just small Universities in the same area?" and until questions of this nature are answered, technology in the Liberal Arts and Humanities will be questioned and tested.

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Appendix

Graph 1A

Graph 2A

Graph 3A