

Podcasts for Information Literacy at the Gordon Library

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Brendon M. Willey

and

Matthew C. Heslop

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Professor Erwin Danneels, Major Advisor

Abstract

This project investigates the potential usage of Podcasts by students and faculty at Worcester Polytechnic Institute to teach students college-level research methods. We interviewed students about research methods and study habits. We find that students have little initial interest in information literacy topics, but when exposed to them understand their value to support their curriculum. We developed recommendations for the Gordon Library to incorporate Podcasts into its information literacy programs.

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1 Introduction

Living in this age of information overload, knowledge of how to locate journals, magazine articles, and books, no matter what the topic, would be common. However, with easy-to-use search engines such as Google, people are relying less on scholarly articles and books for their research. Fewer people are taking the time learn how to do quality research and instead rely on freely available information. Website enquiries will usually produce an overload of information full of potentially unreliable sites.

This project will investigate how Podcasting can help increase the informational literacy of students and faculty at Worcester Polytechnic Institute, Worcester, Massachusetts. Educational Podcasts are available on the Worcester Polytechnic Institute Gordon Library website that contain a virtual tour of the library, the history of Worcester Polytechnic Institute, and select information literacy topics. This project will also investigate the advantages to face-to-face instruction and online learning that Podcasts can offer.

Information Literacy is the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand (Jackman 2006).

Podcasts supplement face-to-face instruction for the Gordon Library on informational literacy. They will teach students and faculty to recognize the need for information, and how to identify, locate, and evaluate this information. It is possible that by using audio files to educate users on certain types of research students will be more inclined to utilize these methods, therefore saving research time and also lead them to reputable sources. Students will no longer have to sift through tons of useless information on the internet to find one useful site. They will instead be pointed directly to reliable databases and shown how to navigate through them. By using Podcasting as an “instructor,” lessons on information recovery will be available to any persons interested 24 hours a day, 7 days a week.

2 Background

2.1 Definition of Podcasting

Podcasting is a term which is a combination of two words; iPod, which originated from Apple's MP3 player, second broadcasting which is defined as transmitting a program through radio or television.

Podcasts are MP3 audio files delivered over the internet using Really Simple Syndication feeds for playback either on a personal computer or a MP3 player. Through the use of an RSS feed and software used to create audio files are able to create or download audio files which may be used for various reasons, including personal enjoyment, business, or recreation. Items available through RSS feeds are usually audio or video files but they can also be downloadable PDF's, texts and images.

Podcasts can be made with any audio recording application or platform. The audio recording must then be transferred to a computer and converted to MP3 format. MP3 is the standard format for Podcasts. This ensures that all users will be able to play the file on their computer or MP3 player. Podcasts can be played on any computer or MP3 player with software supporting MP3 format. An iPod or iMac does not necessarily have to be used in order to create and/or listen to a Podcast (Housley 2006).

Podcasts are used in numerous ways and new uses for them are still being discovered. A few examples of popular uses for Podcasts include feeds from Wall Street Journal and other major papers, news radio, and talk shows.

2.2 History of Podcasting

Podcasts are a direct descendant of weblogs; also called blogs. Blogs are opinionated files that internet users post on a website. Blogs are read and commented on creating an online conversation open to the internet public. Any person with internet access could write their own opinion on topics ranging from politics to a musician's social life. Blogs quickly became popular due to their ease of use and free platforms such as Blogger.com. Blogger.com categorizes its content allowing the user to choose a topic and read or make their own additions.

With the development of RSS feeds, reading blogs became much easier. RSS feeds allowed blog readers to receive "feeds" or updates of their favorite blogs as soon as new information was posted. A program called an aggregator was developed that occasionally checked for changes to a user's favorite blogs and notified the user when changes or additions were made. RSS feeds are now used by traditional media outlets, like newspaper and radio, to savvy readers who add the feed URL (uniform resource locator) into their aggregator. Popular aggregators include Newsgator, Bloglines, and Google Reader.

As blogs increased in popularity people began to think of ways to improve them. Bloggers came up with the idea of audioblogs. An audioblog would be similar to a blog but instead of connecting to a webpage to read text a user could download an audio file with someone speaking. This occurred in conjunction with the explosion of MP3 players being sold (Follis 2006). Bloggers now had the option of recording themselves, speaking their own opinions for others to listen to, instead of typing on a computer. This method of Blogging, however, was not very popular before the turn of the century. These audio recordings were made into MP3 files and were considerably larger than text files. Before the invention of broadband and cable internet connections many users had a dial-up connection which allowed a maximum of 56k of bandwidth. Downloading large audio files could be timely depending on the size of the file and speed of the internet that particular day. Today's internet connections, such as cable and broadband, are

capable of downloading audio at much faster rates than a dial-up connection and could have been a factor in the popularity increase in podcasts.

In the late 1990's Adam Curry, a broadcasting and internet personality well known for his stint as an MTV video jockey, began throwing around an idea to develop a quick and easy way for audio files to be automatically downloaded from the internet onto his personal computer. Curry was aware of the potential of his new idea and became concerned with pushing the advancement of this technology. Curry wished for an evolution in audioblogs similar to that of weblogs, and user-friendly software to speed the process. In October 2000, he met with software developer David Winer, the inventor of the RSS feed, to discuss the topic (Curry 2006).

Winer, who had already been pushed by the users of his RSS system to include audioblogging capabilities, agreed to help advance the technology. In early 2003 he developed a new component to RSS feeds called an enclosure. This would allow the address of an MP3 audio file to be passed through an RSS feed and the files would be automatically downloaded. Using an enclosure and RSS feeds, audioblog feeds could be constantly monitored and updated with an aggregator similar to weblog technology. This development laid the path for Curry's ultimate goal of transferring audioblogs directly from the internet to an MP3 player.

It was Curry's desire for audioblogs to be downloaded directly from the internet and then be transferred to a portable MP3 player, without user intervention, automatically. It was possible to transfer and audioblog to an MP3 player but the user had to download the file from the internet then transfer it manually. Curry began developing software that would allow audioblogs to be directly downloaded to his Apple iPod. The user would only have to subscribe to an RSS feed by adding the feed's internet address into their feed aggregator and the file transfers would be done automatically. Feed aggregators, such as Gregarius, are available to download for free. Aggregators are also built into many audio-playing platforms such as iTunes.

The name “podcast” was given to audioblogs by Ben Hammersley in an article he wrote for the British newspaper called “The Guardian”(Curry 2006). Adam Curry and David Winer picked up on the term and used it in presentations they gave on their new technology and it became common use. The term was entered into the Oxford American English Dictionary as “word of the year” (Oxford University Press 2006).

2.3 Current Uses

The possible uses for Podcasts are endless and still being developed today by colleges, libraries, businesses and many other institutions. They are being used as an educational tool, a method for delivering news, opinions and other purposes. Podcasts are most commonly used for recreational purposes. These Podcasts may include talk shows, tutorials, interviews, commentaries, and more. The Podcasts can be listened to on the home computer or stored on portable MP3 players to follow the listener where ever they go. Top Podcasts of today include The Fan 590 Prime Time Sports, Newsweek On Air, Now on the News PBS, and many others (Podcast Bunker 2006).

During the Podcasting boom, colleges, libraries, business and other institutions began to realize that these audio files may be used to their advantage. Duke University purchased and distributed iPods to its freshman class in September 2004. The iPod will be used by Duke students for storing audio books and recorded class lectures. School officials believe that the iPods will enhance the teaching many courses especially language lessons (Reardon 2004). These students gained the ability to play back lectures for review or reference. This also presents a convenience for the professor giving the lecture. Professors, who may be giving a certain lecture many times over the course of a year, now has the option of recording it and making it available on the internet. The professors may refer the students to this Podcast instead of giving the lecture again.

OPAL (Online Programming for All Libraries), a collaborative effort by libraries to provide cooperative Web-based programming and training for library users and library staff members, has made its audio content available as a Podcast. OPAL holds live discussions in online chat rooms where participants can interact by text chatting and microphones. The service is offered, free of charge, to anyone willing to participate. Lori Bell, Director of the Mid-Illinois Talking Book Center, noted, "OPAL is one of the first library programs in the nation to Podcast audio content of public access programming (Bell 2005).

Small and big businesses are also making use of Podcasts. Companies are using Podcasts as orientation tools for new employees, methods of training, and a way to update employees on latest news and updates within their community. Anders Gronstedt is president of Gronstedt Group, a training and consulting company that develops and delivers customized solutions to help organizations improve sales, service, and frontline performance (Kaplan-Leiserson 2006). Gronstedt has made audio files to train some of his employees for important tasks. He has even modeled the audio files after talk shows, including humorous commercials and jokes to engage the listener (Kaplan-Leiserson 2006).

Podcasting is a new technology that is still being brought to the public attention. It is an emerging technology and has not yet been widely adopted. Podcasting is being tested in many different situations for many different purposes and may eventually be used by most internet users. Many websites dedicated to Podcasting and related technologies have been made to further their development and increase popularity. Popular sites include podcastalley.com, podcastbunker.com, podcast.net and many others. These sites include links to popular Podcasts voted on by users, latest news, history, and external links to similar websites.

2.4 Podcasting and the Gordon Library's Educational Mission

The main objective in the Gordon Library's educational mission is to teach students and faculty information literacy. Information literacy, according to American Library Association, is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information (Association of College and Research Libraries 1989). This is an essential skill for self-learning after college, be it for graduate school or personal use. In an age where anyone can make public their own opinions or ideas, specifically through the internet, it is becoming more difficult to discern valuable information from useless opinion. The Gordon Library offers a wide range of programs to help students and faculty recognize useful information and put it to use.

Gordon Library currently offers students of all classes many instructional courses on information literacy and other topics. They offer an orientation for new students and faculty as well as an audio tour of the library for freshman, general programs on research skills, one-on-one consultations, and also web-based self-paced library skills tutorial with an assessment component on myWPI (Blackboard Course Management System) for Interactive Qualifying Project groups. During the 2005-2006 academic year, the Gordon Library held 252 instructional offerings to more than 3000 attendees (Worcester Polytechnic Institute 2006).

Podcasts have also been incorporated into the Gordon Library's information literacy instruction through the library's website. In the fall of 2005 Gordon Library made its first Podcast which was an audio tour of the library intended for new students and faculty. During the summer of 2006 Gordon Library brought together 14 faculty, staff, students, and alumni to read Mildred McClary Tymeson's *Two Towers*, a book on the history of WPI. This academic year the library has produced four short Podcasts on information topics. All of these Podcasts can be directly accessed through the Gordon Library website or can be heard on MP3 players loaned by the library itself.

Podcasting would supplement the teaching of information literacy in different ways for different classes of students at WPI. The three main projects that all students must complete to graduate from WPI, the Sufficiency, the Interactive Qualifying Project, and the Major Qualifying Project are generally completed by sophomores, juniors, and seniors respectively and all entail different aspects of research. We must also consider freshman as they too could find useful some sort of aid in changing from high school-level to college-level research for their introductory classes. Podcasting could be used as a means of teaching students how to use certain online databases, how to find a database of information relevant to the research topic at hand, how to properly cite an information source when referenced in a paper, or any number of things. These Podcasts could be used as a supplemental tool used for classes offered through the library, or could be actual recordings of the classes themselves. Students would then have the benefit of learning research methods on their own time, at their convenience.

One of the goals of this project will be to determine how Podcasting will supplement Gordon Library's process of carrying out its educational mission. Through research, interviews, and surveys with WPI faculty, students and outside WPI, with librarians utilizing this emerging technology, we will decide where Podcasting fits best.

2.5 Emerging Technologies and Future Implications

Since new technologies are being produced everyday, it will be worthwhile to investigate these upcoming technologies and then analyze where exactly Podcasting technology is going to gauge whether or not it will become obsolete in the near future.

Just as Podcasts were direct descendants of weblogs, it seems as though Vidcasts will be descendants of Podcasts. A Vidcast or Vodcast is simply a video Podcast. Since many new MP3 players now have video capabilities this seems like the next logical step. This would add a new dimension to Podcasting. A

Vidcast user would now have the benefit of seeing a video of the person who is making the audio files or other visual information. This would open up many doors in the portable media world. If a user had subscribed to instructional Podcasts of some sorts they may now be shown visually how to carry out these instructions. Instead of being told through a Podcast how to navigate an online journal database, the instructor could now use a video of the actual navigation to supplement the audio. Vidcasts are currently available on some websites and are delivered to users via the same RSS technology that weblogs and Podcasts use.

Many companies are jumping on the Podcast and Vidcast bandwagon and trying improve these technologies and make them available to more internet users. One company at the forefront of this technology is WebmasterRadioFM. WebmasterRadioFM is an interactive, internet-based radio network that is currently working on an artificial intelligence capable of allowing people to search through media files on the web, particularly Podcasts (Miller 2005). These media files include anything from audiobooks, to Podcasts, to radio shows. The CEO of WebmasterRadioFM, Daron Babin, was quoted saying "Print, if it's not dead yet, is dying quickly". This could make for drastic changes in the way we acquire information or do research (Miller 2005). As more and more people begin listening to Podcasts the technological advancements will increase at a faster rate. In a Bridge Ratings Industry study on Podcasting, it is estimated that 4.8 million people downloaded a Podcast in 2005. This is up from 820,000 Podcast downloads in 2004. The study estimates that by the year 2010 the Podcast audience will grow from between 45 and 75 million people (Bridge Ratings LLC. 2005).

3 Methodology

The essential goal of this project was to determine if Podcasts are an effective tool for educating students and faculty on informational resources, tools, and concepts. The librarians are not aware of how Podcasts from the Gordon Library website are being used by WPI faculty and students. There are no current means of gathering feedback from Podcast users in order to determine the value and potential of podcasts. Through data collected by research and interviews with Worcester Polytechnic Institute students and faculty, we developed a plan for The Gordon Library to use Podcasting effectively to educate students and faculty on information literacy.

In order to achieve this goal our project was divided into smaller objectives and spread out over three terms of a school year.

- *Researched history and current uses of Podcasts at Gordon Library and around the world;*
- *Conducted interviews with Worcester Polytechnic Institute students and faculty;*
- *Developed a plan for the Gordon Library to effectively incorporate Podcasting.*

3.1 Research

The first step in achieving our goal was to become familiar with podcasting as it is currently used. Podcasts are used to broadcast a large variety of media including interviews, news, and opinions, so we focused our research mainly on educational and instructional Podcasts. We researched the current uses of Podcasts on a variety of websites on the internet, including websites of other libraries throughout the United States. We researched emerging technologies and the implications these technologies will have on the future use of podcasts.

Christine Drew informed us of how the Gordon Library was currently using Podcasts for teaching information literacy topics, primarily research methods. She also showed us the library's Information Literacy Goal and Instruction for 2006-2007 and we discussed where Podcasting may fit.

The Gordon Library began using Podcasts on their website in August 2005. Drew created the library's first Podcast and is in charge of their production. Drew determined that more than 3,000 downloads of 32 MP3 files occurred in the first 14 months of the project. Librarians were unable to determine who these visitors were and their reasons for using these podcasts. This information could only be obtained by conducting interviews with Worcester Polytechnic Institute students and faculty.

3.2 Student and Faculty Interviews

Once we gained thorough knowledge of the history and current uses of Podcasts at Worcester Polytechnic Institute and around the world, we developed a set of interview questions for students and faculty. We interviewed 1 professor and 29 students from all academic classes, both male and female during October through December 2006. One group member conducted the interview while another typed their responses on a laptop computer. We asked mostly open-ended questions to keep the interview much like a conversation. The meetings were conducted in a casual manner in hopes that the participant would open up and share their true feelings.

The main goal of the interviews were to find out if the participants were using Podcasts and if so had they heard of the Gordon Library's Podcasts . We structured our questions in order to get a sense of how the student was learning in the classroom and what their study habits were. We then asked the interviewee their opinions on learning via Podcasts as opposed to learning in the classroom for both undergraduate classes and single session programs such as

those offered at the Gordon Library. Questions structured in this way would give us insight into the student's learning style. We would then be able to formulate whether or not this was related to their ability or desire to learn via Podcasts.

We also asked participants to discuss their study habits. We asked how often they study, go to class and complete tasks on time. Once the participant was discussing these topics we asked them whether or not they felt they had the motivation to attend a class on research topics in their free time. With these questions we hoped to find whether or not these individuals would have enough self motivation to take this class without a professor requiring them to. We also hoped to find a correlation between study habits and self motivation of different academic classes. To gain further insight into this we asked the junior and senior year students if their study habits had changed since they were freshman.

Finally, we recorded the participants' gender, age, and academic major in case we found a correlation between these statistics and their preference for audio learning.

3.3 Data Analysis and Recommendations

Once we felt a sufficient amount of interviews were conducted we organized the data by separating males and females, then academic classes. We searched for similarities in responses from members of the same academic class and compared them to members of the opposite sex also in the same academic class. We also compared the responses of different academic classes while pay particular attention to the differences between junior and senior year students and freshman and sophomore year students.

Based on this data our group made recommendations to the Gordon Library on how to incorporate Podcasts in their website and also which topics they should discuss.

4 Findings and Discussion

4.1 Research Habits

The interviewees relied on many different sources for information when doing research projects. Generally students used internet search engines and books as their primary information sources during high-school and their first two years at Worcester Polytechnic Institute. As juniors, however, all students at Worcester Polytechnic Institute are required to complete a project called the Interactive Qualifying Project. Professors at the school advise a team of students or a single student in a certain project. Before beginning this project most professors will require their team of students to take a research methods class offered through the Gordon Library. In this class students learn how to develop a research plan and differentiate between reliable and unreliable information sources. The students are shown how to navigate online databases that contain journals, scholarly articles, and books. These databases are subscribed to by Worcester Polytechnic Institute and are available to all students and faculty on the campus network.

Students who have learned these research techniques say they benefit greatly from them. They begin to rely more on the databases they discovered in this class for their research and less on online search engines. Many believe that their previous methods of research would not have been sufficient for junior and senior level work. Their quality of research is much better after taking this class. A few students also stated that had they known about these online databases during freshman and sophomore year they could have done higher quality research in a shorter amount of time. Many of the same students also said that although they found the class useful they would not have been motivated to take the class in their free time due mostly to their personal lack of interest. All the students our group interviewed, regardless of their strategies for finding useful data, believed their methods to be sufficient for any assignments they had in the

past. A student with no interest in bettering their formula for conducting research, and that found their current research methods sufficient, would have no reason to learn these new tools or concepts. Many students even went as far as to express their distaste for doing any type of research regardless of the topic. One student said “I hate doing research and writing papers and I would never learn other research methods unless a professor made me.”

Although all students found their current research methods sufficient, some said they found an abundance of unreliable resources on popular search engines. Distinguishing between reliable and unreliable data is not always an easy task. If a website is professionally designed and proficiently written, one could be led to believe this writer was also proficient in its content, which may not be true. Students may believe they found a reliable source when in fact they did not. If the student questions the content of the website he or she is then required to do additional research to verify or discredit its content. This adds more time to the research process than is necessary. Students could instead be searching through databases of reputable publications. Some students who rely only on internet search engines may not recognize the errors in their research methods and consider sifting through unreliable data a part of the research process.

4.2 Student Use and Perceptions

In the data collected through interviews with students and faculty at Worcester Polytechnic Institute we found that an overwhelming majority of people had never used a Podcast or even heard of them. This is consistent with a report from the Pew Internet and American Life Project. According to their study done in August 2006 only 12% of adult internet users had ever downloaded a Podcast and only 1% downloaded them repeatedly (Madden 2006). Some studies indicate that the Podcast audience is increasing steadily. According to new data from the Pew Internet and American Life Project 12 % of Web users surveyed in August 2006 said they have downloaded a podcast. This is up from

7% who said the same in a survey conducted between February and April (Davis 2006). Podcasts could eventually be downloaded repeatedly by internet users.

Many students liked the idea of Podcasting if it were to replace a class they were required to take, such as the research methods class at the Gordon Library. Students would have the ability to download the Podcast from the internet and listen to it at their leisure by a certain due date. They would also have the option of putting the Podcast on their MP3 player and listening to it as they completed daily tasks. Some students said they wake up and plan their daily activities in the morning and the flexibility Podcasts offer would be a great convenience. Students also said that coordinating a time for every member of a project group to attend the research methods class was a hassle. If this class were available on a Podcast this problem would be alleviated.

Not all students, however, were this optimistic about Podcasts. Students who like the idea of Podcasts replacing a class seemed to be self-motivated. Many of those who were not self-motivated believed they would not be able to listen to Podcasts on their own time. Without a set schedule many believed they would become lazy and not listen to the Podcasts at all. This seemed to be especially true with the freshman and sophomore students. The juniors and seniors also noted that their current schedules are much more demanding than those of freshman and sophomores and they may not have the motivation to learn with Podcasts on their own time.

Many students disliked the idea of being taught by an audio file because they claim to learn better with visuals. Some students expressed their preference for Power Point lectures with pictures for classroom learning. Since Podcasts offer no visual stimulus this could be a problem for these types of learners. In the case of using Podcasts for replacing research methods classes, some students may have difficulty particularly with learning how to navigate online databases without seeing the actual process.

5 Recommendations

Despite the current unpopularity of Podcasting at Worcester Polytechnic Institute, it may still be a useful tool for the Gordon Library. Podcasts, just spoken word, could potentially replace or supplement all instructional sections of the library website. Although our group is not recommending the replacement of all instructional text with audio files, the ability to interchange the two leaves unlimited possibilities. Certain sections of the Gordon Library website may best be suited with complete replacement by Podcasts and other sections may benefit from Podcast supplementation. The final choice will depend on the subject matter it is replacing and its intended use for the website visitor.

5.1 Student Interests

The most significant facts discovered in the student interviews were the lack of interest in and motivation for learning information literacy topics. The majority of the students our group interviewed said they would only use the library website or any of its course offerings if a professor required them to do so. These students had no interest in learning any sort of information literacy topic in their free time. However, some of these same students after taking the Gordon Library's research methods class for their Interactive Qualifying Project found it beneficial and wished they had taken it earlier in their college careers. This could mean a few different things. It is possible that some students simply do not know what the Gordon Library has to offer the Worcester Polytechnic Institute students. It is also possible that there are students who have no interest in the libraries offerings. A few students that use the library website regularly said they do not think they would have had the motivation to use it as freshman and sophomores. This could lead one to believe that over the course of their college careers, and as their workload increases, they begin to recognize the need for

certain skills learned outside of their regular classes. The students may then have developed the motivation to take these classes on their own.

Students seem to be glad they have certain skills once they have learned them, even though they have no apparent interest in these skills outside of the classroom. This shows that students may need to be forced to learn certain skills outside of their regular undergraduate courses. The research methods class the Gordon Library offers should be made mandatory for all incoming freshman. Student could learn how to develop a research plan, and how to navigate online databases. It may be helpful to explain to freshman why their previous methods of conducting research may not be suitable for college-level projects.

5.2 Freshman Orientation

One method of teaching students good research habits may be to incorporate a research methods class into the freshman orientation process. Teaching this course to a whole class of freshman during orientation may create a problem. If the entire freshman class attended this course all at once in a large auditorium the teacher would have difficulty keeping everyone focused on the subject. Students attending the class in many small groups may cause a time constraint since orientation lasts only five days. One viable option would be to make the class available on the web. The instructor could make a Podcast of the course, along with a short quiz on the information to ensure the students are listening to the file. This quiz would have to be made mandatory for all incoming freshman to take, otherwise a majority would not bother with it.

Teaching this research methods class via Podcasts would offer many advantages over teaching in the classroom. If a student did not understand a section very well they would have the option of replaying it. This would also help shy students who would not wish to ask questions in the classroom. Foreign students, whose native language is not English, would also benefit from Podcasts. They would have the ability to replay certain sections and look up certain words they may not know.

One would have to think of a creative way in which to make the Podcast and quiz mandatory. Since curricular classes are in no way associated with or affected by a student's participation in orientation activities this quiz could have no bearing on a student's grades. Passing curricular classes is what earns a degree and if a student knew these facts, he or she may not listen to the Podcasts regardless of who tells them to and for what reasons. Completion of the quiz could, however, give the student something they will need such as access to their email account. Upon completing the quiz they could be given a password that allows them to set up their email account. Not until they completed the quiz could they be given access to email.

The designer of this Podcast and quiz must take into consideration different learning styles of the students so that all will benefit. Many students said they must be shown specifically how to do something in order to learn best. They cannot simply be told what to do. Others said that as long as the speaker in the Podcasts wasn't particularly dull they would be fine without the visual aspect. The Podcast could be made to supplement a webpage that contained pictures and examples of the specific actions being discussed. This would alleviate any confusion the visual learner may have and would accommodate both auditory and visual learning styles. Studies have been conducted to show some of the advantages of learning with both auditory and visual stimulus. A study on Deriving Instructional Design Principles from Cognitive Theory done by Mayer and Moreno (1998) showed that students who learn with concurrent narration and animations outperform those who learn with concurrent on-screen text and animations (Moreno 1989).

Many students explained the difficulty they had with other aspects of the orientation process as well. The leap from high school to college is a significant one for most students. Students arrive not knowing what to expect both socially and academically. Teaching incoming freshman research methods is a great start. In addition they could also benefit from knowing what to expect throughout their next three years. It would be helpful to inform students on how often they can expect to study, how the workload will increase from year to year, how to

register for the three projects that all students at Worcester Polytechnic Institute must complete to graduate, and most importantly, how to effectively manage their time to complete all these tasks. All of these topics are part of the college learning process that all Worcester Polytechnic Institute students go through. Giving them some background knowledge in projects they must complete to graduate before they acquire them could alleviate much confusion for students. A section of the Gordon Library website could be dedicated to the orientation process and contain Podcasts or articles on topics similar to these.

Consideration in the length of the Podcasts must also be taken. Many students expressed that they would not listen to a Podcast if it were too long in length. Listening to a Podcasts that is 45 minutes or more could be very boring especially if the author is not a good speaker. Students also said if they would not want to have to memorize the times at which they stopped the Podcast if they had to listen to it in parts. An easy way to solve this problem would be to divide a lengthy Podcast into sections, similar to the chapters of a book. Each section could be five to ten minutes long and cover one certain topic. The listener would then have the option of listening to the Podcast in sections or downloading all the files and putting them in a play list to listen to all at once.

5.3 Vidcast

In the interviews we also explained to students what a Vidcast was asked if they would prefer them over a Podcast. Most all students said that a Vidcast would be preferred over a Podcast simply because it would alleviate any confusion the listener may have with audio only. A Vidcast would allow audio narration to the student and also supply a visual of how to complete the task. These opinions expressed by students perfectly parallel the study on instructional design by Mayer and Moreno (Moreno 1989).

One negative aspect of Podcast or Vidcast learning would be that if a student still had a question about the material there would be no teacher for him or her to ask. The student would then have to rely on email to get a response.

Since these students would be listening to the Podcast or Vidcast around the same time, the teacher's e-mail box could be flooded with questions. Many students may not get the help they need.

Incorporating a new feature such as Podcasts or Vidcasts into the Gordon Library website may promote more online traffic. Adding Podcasts to high traffic areas of the website may spike people's interests in these topics.

6 Conclusion

An overwhelming majority of the Worcester Polytechnic Institute students we interviewed initially had little interest in information literacy topics. Students take classes on research methods and study habits only if it is required of them. They rely on high school level research methods which are often inadequate for college research. However, after taking courses at the Gordon Library, students mentioned that they benefit greatly and expressed regret about not taking them earlier in their college career. This suggests that students do not have the motivation to learn these skills on their own even though they later recognize the need. We conclude that the administration should consider making these classes mandatory for first year students. Librarians at the Gordon Library could collaborate with the coordinators of the New Student Orientation and Associate Dean of the First Year Experience to incorporate information literacy topics. Supplementing these classes with Podcasts or Vidcasts may add a new element to learning that students may enjoy and allow them to better retain the information. Students could be introduced to the demands of college-level research and adequately prepare themselves for their future curriculum.

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Appendix A: Sample

Appendix A1: Academic Class Representation

| | Male | Female |
|------------|------|--------|
| Freshman | 3 | 3 |
| Sophomores | 4 | 3 |
| Juniors | 3 | 4 |
| Seniors | 3 | 2 |
| Graduates | 3 | 1 |
| Professors | 1 | 0 |

Appendix A2: Academic Majors Represented

| Academic Major | Number Represented |
|----------------------------------|--------------------|
| Biology | 1 |
| Biology/Biotechnology | 3 |
| Bio-Medical Engineering | 9 |
| Chemical Engineering | 2 |
| Civil Engineering | 2 |
| Electrical/Computer Engineering | 1 |
| Management Information Systems | 1 |
| Manufacturing Engineering | 2 |
| Mechanical Engineering | 5 |
| Mechanical/Aerospace Engineering | 2 |
| Writing | 1 |

Appendix B: Student Interview Questions

- Do you use Podcasts or Blogs? If so, for what purpose?
- Have you ever used instructional Podcasts?
- Would you be more inclined to learn certain skills or take certain classes if they were offered through podcasts rather than spending time in a classroom or doing research?
- Why would you prefer or not prefer this method?
- On research projects you have done, what methods have you used to acquire information?
- Do you believe your methods of data collection were sufficient for the project?
- Would you attend a class that taught research methods, do you think this would be useful?
- Would you be more inclined to learn this information via podcasts, something that is available on the web for use at your convenience?
- How do you think Gordon Library could use Podcasts as an orientation tool for freshman?

Appendix C: Professor Interview Questions

- Do you use Podcasts or Blogs? If so, for what purpose?
- Have you ever used instructional Podcasts?
- Would you be more inclined to learn certain skills or take certain classes if they were offered through podcasts rather than spending time in a classroom or doing research?
- Why would you prefer or not prefer this method?
- What are your feelings on referring students to library podcasts on research skills?
- What do you feel there is to lose or gain from teaching via podcasts?
- How do you think Gordon Library could use Podcasts as an orientation tool for freshman?

Appendix D: Interview Notes

Amanda (Sophomore – Mechanical Engineering)

1. Has heard of podcasts but never used one before.
2. She wouldn't like the idea of taking a class that is strictly podcasts because she asks many questions in class. She also benefits from meeting people in her class and working with them outside of class which she would not be able to do with an online class
3. She thinks podcast supplementation could be used but that recording lectures and making them available via podcasts would not be a good idea. She believes most people including herself would stop going to classes if this happened.
4. She has used Google for most all of her research. She will use books if her professors request her to do so but otherwise she will rely only on the internet. She has not used any of the informational resources offered in the library.
5. She would not be motivated enough to take Christine's class on her own nor would she take the time to learn research methods if they were available on a podcast. She does not use the library website for anything
6. If she were forced to take Christine's class, she would prefer to take it with a vidcast so that she could be shown exactly what she needed to do to get to these databases and navigate them.
7. She likes the idea of using podcasts as an orientation tool. She did not personally have a hard time getting adjusted to college life but many of her friends seemed to.

Benjamin (Senior-Bio Medical Engineering)

1. Has heard of podcasts but has never used one.
2. Would have the motivation to listen to a podcast because he says he plans out his day from the moment that he wakes up so his schedule would be flexible enough to listen to podcast.
3. Has done research for sufficiency, IQP and occasionally for his classes. He says has used resources such as, the internet, journals, online databases and books from the library.
4. He has used the database services offered. He would not be inclined to take Christine's class but said that this would have been helpful prior to his other projects.
5. He feels that Christine's podcast would be helpful for the freshman and sophomore classes.
6. He feels that vidcasts would be very helpful because some students may lack the focus to sit and listen to someone talk through a headphone.
7. He said he did not have any difficulty transitioning from high school to freshman year. He admits that these podcasts along with the orientation information that freshman learn in the first few days would be helpful.

Bethany (Freshman – Civil Engineering)

1. Has never used podcasts or heard of them.
2. Would be much more inclined to take classes if they were offered via podcast, would like being able to learn on her own time.
3. Has relied completely on the internet for research, always uses Google. Only uses books if a teacher requires her too. She has had to sift through useless information on Google but has always found her methods sufficient.
4. Would consider learning research methods on her own time if they were offered through podcasts, feels it would be a quick and easy way to learn.
5. Would prefer that podcasts were supplemented with online pictures if the podcasts concerned navigating online databases. However she feels that depending on who makes the podcasts they could still be vague, and doesn't like the fact that she couldn't immediately ask questions.
6. After I told her about vidcasts she said she would probably prefer them over podcasts. The visual aspect would make things even easier.
7. Thought that the orientation process was difficult. Had a hard time setting up email and learning where buildings were. She had to rely on her friends to help her out. Feels that instructional podcasts would have been extremely helpful.

Catherine (Senior – Bio Medical Engineering)

1. Has heard of podcasts but has never used them.
2. Would like to have classes that were offered through podcasts. She plans her whole day when she wakes up so online lectures would give her much more flexibility.
3. She rarely uses Google for research. She relies on books and internet databases that WPI offers. She was not aware of these before her IQP when her project advisor showed these databases to her and her group.
4. She would have been motivated to take this class on her own had she known it existed. She would much rather research method classes available online in written form or podcasts. She would have preferred this method over coordinating a time to take Christine's class.
5. Says she would use podcasts on her free time for her own interests such as listening to the news. She has simply never taken the initiative to do so.
6. Says some students may benefit more from video podcasts personally she would be fine with only the audio provided a knowledgeable and well-spoken person made the podcast.
7. Feels that podcasts or even just a website should be dedicated to freshman orientation. The site should contain info on setting up email, where accounting office is, etc.

Chris (Graduate – Manufacturing Engineer)

1. He uses podcasts almost everyday to listen to radio shows. He also listens to the news on occasion.
2. He rarely went to class and really only did what was necessary to pass his classes. If podcasts were made a necessity for one of his classes he would have used them simply because he was told to, but he would have no preference either way.
3. He rarely used databases that were offered at WPI. He relied mostly on the internet and always found his methods sufficient.
4. He attended a class on research methods at the library his junior year at WPI but didn't use much of anything he was taught. None of his professors ever had a problem with the work he did.
5. He thinks podcasts might encourage kids to learn research methods since these are a new technology but personally he would not make the effort.

Eva (Sophomore – Bio Medical Engineering)

1. She has used podcasts before, only to see what they were because she got an iPod for Christmas.
2. She has taken after-school classes on public speaking in high school and says that her decision to take a class offered through podcasts would depend on the person speaking. Many teachers at WPI are from other countries and it would be very difficult to understand what they were talking about without seeing what they were doing on a chalkboard or projector.
3. Relies on books and search engines for research. Has always found these methods to be sufficient.
4. She would not take a class on research methods on her own time because it does not interest her. If it were necessary for one of her regular classes then she would take the class.
5. The class being offered through a podcast would not make any difference to her; she would still not take the time to learn research methods because it does not interest her.
6. She believes our idea of using podcasts as an orientation tool was a great idea and would have found it helpful herself. A podcast on what to expect throughout your college career would have alleviated some of her stress in the first few weeks.

Jessica (Junior – Bio Medical Engineering)

1. Has heard of podcasts but has never used them. Said she would probably use them for news since she reads the news online everyday.
2. She doesn't think she would be motivated enough to take a class that was offered through podcasts, believes supplementation would be great for review of a lecture.
3. The deciding factor for her on taking a class with podcasts would be who made them, if the speaker was boring and dull she would not take classes offered through podcasts.
4. Always relied on Google and books for research until she took class with Christine for IQP, now she uses online databases more frequently.
5. Would not have taken the initiative to learn research methods on her own time even if they were offered through podcasts, she always considered Google to be sufficient so there was no need for it.
6. Says she remembers having a hard time with setting up her email and finding buildings during freshman year. There was no one to tell her how to do this stuff except her friends, and they did not always have answers.

John (Junior – Bio Medical Engineering)

1. He has heard of podcasts but has never used them before.
2. He said that he would be motivated to take a class or classes that were taught using podcasts. He admits that some of the classes that he had been to could easily just had been an audio file that they could have downloaded and listened to in his free time.
3. For the projects that he has completed at WPI, he has only relied on internet search engines for to find information. He says that this method was sufficient for gathering information for his projects.
4. He is not aware of the online database services offered at WPI and says that he would not be inclined to know how to use them.
5. He feels that podcasts are sufficient to replace one of the workshops that were offered by Christine and would be more inclined to learn through podcasts rather than to attend one of the workshops.
6. He says that even though he would listen to podcasts if they were offered, he would much rather watch a vidcast.
7. He said that he had a difficult time with the orientation process and says that it would have been helpful if he had received a podcast that had information that helped the freshmen with setting up their internet and email account.

Joseph (Senior – Bio Medical Engineering)

1. He has not heard of podcast nor has he ever used them.
2. He says that he would not have the motivation to take a class that was only podcast. He says that if the class incorporated some podcast along with the standard lecture it would be useful for those classes where the professor only had the students watch video clips or listen to audio clips.
3. He has done research for his IQP and a few of his other classes. He relied on books from the library, Google, journals and online databases. He says at times the internet was insufficient and unreliable for information.
4. He was aware of the database services offered by the WPI Gordon Library.
5. He feels that it would be more efficient to use a podcast to replace a class that only met once such as Christine's research methods class than to actually meet in person and waste time reserving a classroom and having to repeat the information learned at this session over and over again.
6. He feels that vidcasts would be practical and if not more preferred student to podcasts.
7. He said that he had some trouble with the orientation process more specifically that he didn't really know what to do when he need help with his email of internet jack.

Justin (Senior – Mechanical Engineering)

1. Has heard of podcasts and has used them before.
2. Would not be willing to attend a class that was strictly podcasting. Admits he has trouble going to regular scheduled classes.
3. Has done research using the books in the WPI library, internet search engines and the online databases offered by WPI library
4. He is aware of the online databases offered by the WPI library. He would not be inclined to take Christine's class at this point in time but he says some of his project partners needed help with their research methods.
5. Does not feel that podcasts would be useful to learn about research methods. He says that actually being there would be more helpful to him than listening to someone giving directions and not seeing what was actually going on.
6. He thinks that both vidcasts and podcast might be necessary, Vidcast he says for those who absorb things visually and podcast for those that are intuitive.
7. He did not have a difficult time with freshman orientation, but admits that some of his floor-mates needed help with technical processes such as internet set-up.

Kelly (Freshman – Mechanical Engineering/Aerospace)

1. Her parents use podcasts to listen to the news but she has never used them herself.
2. She thinks it would be useful if professors could record their lectures and make them available as podcasts for people that didn't ask questions in lecture. Note that freshman lectures are usually very large so this may work best with intro classes. She doesn't think it would be wise for freshman to take online classes because they would not yet have the motivation to do so.
3. She tries not to rely on search engines for her research since it is often difficult to tell who made the websites and where they got their info from. She uses mostly books.
4. She has not used any information resources available on the Gordon Library website. She has not had to do any research yet at WPI.
5. She thinks a website with information resources would get great to have available if she could not find the information she needed in books or on the internet. She would be motivated to use it on her own if she felt the need to.
6. Feels that Vidcasts or podcasts along with pictures on a website would be the best choice for teaching info literacy topics so that people could have both audio and visual. If you are trying to replace a class then you must do so with audio and visual.
7. A little more help with freshman orientation would have been beneficial. She felt as though she didn't know how much she should be studying or what her professor expected from her. Possibly make a podcast discussing the leap from high school learning to college learning.

Kevin (Sophomore – Chemical Engineering)

1. Has never used podcasts or blogs.
2. Would be more inclined to take classes via podcasts, would feel more motivated to finish work on time given the ability to learn material on his own time.
3. Feels podcasts would allow a person to review key parts of a lecture, especially shy kids who do not ask questions. Supplementation along with regular class would also be preferred because everything could be reviewed on his own time.
4. Would go to books first, would go online if was allowed, uses Google mostly for online research. Has trouble sorting through trash on Google, has found his methods of research to be adequate.
5. Would not take a class on research methods on his, would be more inclined to learn methods on his own if they were offered via podcasts.

Lincoln (Freshman – Mechanical Engineering)

1. He has not heard of podcasts and has never used them.
2. He says he never had a problem finding motivation in high school to get his work done and that he would not have a problem completing assignments for an online class or class that used only podcasting.
3. He did many research projects in high school and used mostly books. He used the internet with success as well and was always able to sift through the useless information he found.
4. He was not aware of the online database services offered by the WPI library.
5. He would be willing to learn more research methods if he ever thought his own methods were insufficient. Books and Internet have always worked for him, however he has had no research projects at WPI so far.
6. He feels that vidcasts would be better to use than podcasts. It would be a lot easier for him to learn these methods if tutorials were available online.
7. He did not have any difficulty with the orientation process but he had to help out many people with setting up emails, registering for classes, and signing up for classes. An orientation podcast or website would be a good idea.

Marina (Junior – Bio Medical Engineering)

1. She has listened to podcasts of a radio talk show before but she does not use them on a regular basis.
2. She likes podcasts used for her own interests but doesn't think she could sit down and listen to a lecture, feels this would be very dull. Most of the professors she has had are hard enough to listen to in person. Listening to a dull professor without visuals would put her to sleep.
3. For research she will first go to the internet on various search engines, only if this proves insufficient will she use library resources.
4. She would not be motivated to learn research methods or any information literacy topics on her own no matter how they were offered. She hates research and writing, she would never do anything of the sorts unless a professor or advisor made her do so.
5. Given the choice of taking Christine's class or listening to it on a podcast she would rather take the class so she could be shown specifically how to navigate the library website and databases.
6. If the information was made available through a vidcast she would prefer that over going to the class since it would provide both the audio and visual aspects.
7. Thinks our idea of a website with podcasts to better adjust freshman to college life is a good idea. She suggests a tour of the campus.

Mark (Junior – Civil Engineering)

- Has never used Podcasts or Blogs,
- Doesn't think he would be motivated enough to take podcasting only or online classes, however would like classes that were supplemented with podcasts.
- Would have been more inclined to take a class on information literacy if it were offered via podcasting.
- Says coordinating IQP groups schedules all to take info literacy classes is a pain. A podcast that could be listened to on personal time could alleviate this stress
- Relies heavily on online databases for research since IQP, used only Google and very few books prior to IQP
- Has always seemed to find sufficient information with books and internet.
- Would not have taken a research methods class if not made to, nor would he have the desire to learn research methods via podcasts if not made to by a professor.
- Takes notes in class but does not usually refer back to them, does not go to a class to just listen.

Mary (Junior – Biology/Biotech)

1. Has heard of podcasts but has never used one.
2. Needs to have mandatory lectures that she attends. She has a hard enough time going to class as it is and feels that online classes would make this even worse. She has always done her best with strict teachers. She would not be motivated enough to learn on her own.
3. She was shown how to navigate databases available through WPI but still does not always rely on them for research. She would much rather use books from the library or Google. When doing projects like IQP she would rely more on databases of journals and scholarly articles.
4. She would not learn about any info literacy topics on her own unless she was forced to. However she would have rather had a teacher make her listen to a podcasts than take a one-session class such as the one Christine gives to project groups.
5. She had no problems with the orientation process; her orientation leader showed her and her floor around campus and was very knowledgeable about the school.

Matthias (Freshman – Mechanical Engineering)

1. He has not heard of podcasts and has never used them.
2. Would not be motivated to take classes taught only using only podcasts but thinks they would be a nice break from class if they were required every now and then instead of going to class.
3. Has not been given any projects that he has had to do research for as yet but has used Google and yahoo search engines for his projects in high school.
4. He was not aware of the online database services offered by the WPI library. He is interested in learning how to use these though for future projects but doesn't believe he is interested enough to learn them on his own.
5. He does not feel that podcasts would be useful to replace one of Christine's workshops because because he believes they could be very confusing without someone showing him what to do.
6. He feels that vidcasts would be better to use than podcasts so that he could be shown what to do.
7. He did have some difficulty with the orientation process and states that podcasts may have been helpful to help him transition better during the first week. He would prefer to have a website that was dedicated to the orientation process. This seems to be a common theme.

Matt (Freshman – Chemical Engineering)

1. He has not heard of podcasts and has never used them.
2. He would like to have lectures recorded so that he could listen to the on his MP3 player while he was at the gym or doing other daily activities. He would not have a problem finding the motivation to do so.
3. He feels it would be a nice change of pace to have an assignment of listening to a podcast in one of his classes and feels this would be the best way to add them to a professor's curriculum.
4. For research he has done in the past he has always used various search engines or encyclopedias he has at home. He has always found his methods sufficient. He would be willing to learn other research methods if he felt he needed to do so but has not had the need yet.
5. He has not used the library website for anything and was unaware of the informational resources available through the website.

Maxwell (Sophomore – Mechanical Engineering/Aerospace)

1. Has not used podcasts and does not know what they are.
2. Considers himself a visual learner, does best with PowerPoint presentations with pictures.
3. Does not get a lot out of learning just by listening, needs to be shown specifically how to do things.
4. Uses books and Google for research, uses Google more than anything, his methods have always proved sufficient.
5. Would attend class to learn research methods but would rather use a website with specific instructions and pictures teaching how to do research, would not use podcasts.
6. Needs to see writing in lectures so he can go back to them, podcasts would not be an option for him because he would have to memorize certain things were said in a podcast.
7. Would use podcasts for learn research methods if they were broken down into specific types of research, book, encyclopedia, journals, then into certain fields, ME, CE, etc.
8. Would have found a podcast on physical setup of library useful which does exist but he had no idea it did. Setting up classes, setting up email and typical freshman things would have been nice to learn via podcast.

Melinda (Sophomore – Biology/Biotech)

1. Has heard of podcasts but has never used them.
2. Would not have the motivation to take classes that were strictly podcasts, she needs to go to class and have assignments due in class to make sure she keeps going. Feels she would be too lazy and not do the work if she had the ability to learn the material at any time.
3. Has not had to do any research at WPI so far but would rely on books as she did in high school to do research. She does not like the internet because it is often unreliable.
4. She was not aware of the database services offered at WPI but would like to know how to use them. She would be inclined to take Christine's class on her own without a project advisor telling her to do so.
5. She feels that podcasts would be useful for replacing a one-session class such as Christine's research methods class and would be more inclined to learn on her own this way. However she feels that replacing a semester-long class with podcasts would make her lazy and most other students she knows as well.
6. She feels vidcasts would not be necessary if the podcasts were made by a well-spoken person.
7. She did not have a difficult time with the orientation process but says that most of her friends did, she often had to help people out with setting up emails. Feels podcasts would be useful as an orientation tool.

Michael (Sophomore – Electrical and Computer Engineering)

1. Has never used podcasts
2. If a class was offered with podcasts in addition to lectures then he would be more inclined. Feels they should be used as a supplement to lectures.
3. Uses mostly Google and believes his methods to be sufficient. Feels as though he can find all information he needs off of Google.
4. Would however feel more inclined to learn other research methods of he knew of a website that offered instruction.
5. Most likely would not take a class on research methods but would much rather learn on his own via podcasts and would take the initiative to do so.
6. Doesn't believe podcasting as an orientation tool would work because it would be one more technical thing. There should be an orientation website with everything freshmen have to do. This is where podcasting may be useful. Podcasting should definitely not supplement the orientation process but should replace it.

Patty (Junior – Mechanical Engineering)

1. She has never heard of podcasts.
2. She would not want to take a class that consisted only of podcasts. She asks a lot of questions in class and she would not want to have to email a professor every time she had a question. She needs to be shown how things work on a chalkboard or projector.
3. She has always relied on various search engines to do research. She knows of the databases available on the WPI website but only used them for IQP because the rest of her group did so. She will rarely get books at the library. She has always found her research methods sufficient prior to IQP.
4. If research methods were offered online she would not take the motivation to learn them on her own. If she was forced to do so she would prefer a website with written instructions and pictures. She thinks that very few people would actually take the time to learn research methods if no one was forcing them to do so.
5. Vidcasts would be preferred over podcasts since she feels she needs the visual aspect to learn material the best. Suggests video taping a class or, in our case, someone navigating a database themselves to alleviate any confusion one may have with only audio.
6. Says a website dedicated on what to expect throughout your college career would have been helpful for her as a freshman. The website could include things information on IQP, MQP, Suff, and how to find these projects. She says some of this info is available on library website but is not organized well and no information exists about how to join a project group.

Rachel (Senior – Humanities and Arts, Writing)

1. She has never heard of podcasts before.
2. She would not use podcasts if they were made only to supplement a class. She prefers to take notes and ask questions during class so they would be useless to her. She also doesn't think online classes consisting only of podcasts would be a good idea because it would be a hassle to email a professor every time she had a question.
3. She uses library resources for the majority of her research and is well aware of what the school offers for databases. She learned most of this on her own time and through professors for classes.
4. A podcast teaching these research methods would have been very useful for her. She would much rather have been taught this information than learn it herself.

Ryan (Graduate – Manufacturing Engineering)

1. He has neither heard of nor used podcasts.
2. He would not have the motivation to attend a class that was only taught using podcasts.
3. Has done research at WPI for a few of his classes and his sufficiency, IQP and his MQP. He said that he used, internet search engines, books from the WPI library, online databases, for patents, journals, etc.
4. He was aware of the online services offered but would not have been inclined to take Christine's class had he not been forced to. He currently has a job and uses only a few books that he bought for classes for any information he needs.
5. Vidcasts would be a much better idea. He believes if you are going to take the time to make an audio file you could easily videotape the actions as well and add this to the file. It would make it much easier for those that do not learn well with just audio.
6. He did not have a tough time with the orientation processes but admits that it would help many students that had difficulties during their first couple of weeks.

Sarah (Sophomore – Biomedical Engineering)

1. Has not heard of podcasts.
2. She seemed motivated to learn about them since she does have an ipod and uses it for music and video. She just had not heard of podcasts until now.
3. She would like the idea of taking online classes or classes offered with podcasts but doesn't think many people would be motivated enough to take these classes. It would promote laziness.
4. She has been shown how to use online databases for a class she took freshman year. She has not used them since then and has not had the need. She usually relies on search engines to do her research and has not had a problem sifting through incorrect information.
5. She would not be motivated to take a class on research methods if she was not forced to. She knows how to get to the various databases that WPI subscribes to and would use them if it were necessary. A podcast would not motivate her any more to take the class
6. She thinks vidcasts would be better for learning purposes than podcasts but still believes they would make people lazy if they replaced class time.

Steve (Sophomore – Biology/Biotech)

1. Uses podcast to listen to the news and for information on topics he is interested in.
2. He would rather take a class that was offered through podcasting, would have the motivation to do the work and listen to the lectures and would prefer this method because he could do it on his own time.
3. Has used library resources, podcasts, databases, tour etc. Uses all available methods for research along with books and Google.
4. Podcasts supplementation would make regular classes and research classes much easier. Believes they would best be used for new students as an orientation tool.
5. Attended one of Christine's research method classes and learned other methods on his own time.
6. Has a friend that goes to URI. They make first year students listen to orientation podcasts, this is mandatory.

Trisha (Senior – Biomedical Engineering)

1. Has never used a podcasts nor has she heard of them.
2. Believes she would have the motivation to take a class online offered through podcasts but would much rather have podcast supplementation. Would like to have lectures recorded incase she missed a lecture or wanted to review what had been said.
3. Uses databases offered at WPI for most all of her research. She took Christine's class on information resources for her IQP and has relied mostly on these methods since then for her research.
4. She would not have been motivated to take Christine's class on her own. She is glad she did because it has proved very useful but she was not aware of its usefulness before she took it and therefore never would have if her project advisor didn't make her.
5. Podcasts would be a useful tool for Christine's class but a teacher would still have to motivate her to listen to them. This may not be the case for everyone, and may motivate others to learn these methods on their own.
6. She would more inclined to watch a vidcast over a podcasts if given the choice between the two
7. Doesn't remember having a difficult time with the freshman orientation process.

Ulrich (Sophomore – Management Information Systems)

1. Does not use podcasts or blogs.
2. Has not used instructional podcasts. Listens to professors does not take notes, however considers himself a visual learner.
3. If generally interested in a topic he would be inclined. Possibly would consider podcast learning if they were made into chapters or bookmarked, meaning he did not have to listen to a whole podcast at once. Podcasting classroom lectures incase one was missed would be good.
4. Podcasts without visuals would not be effective for Uli even for navigating databases. Step by step would be boring and dull. Brief podcasts would be useful, five minutes or less.
5. Relies on books mostly for research, online books, if teacher does not define types of sources to be used he will use Google.
6. yes
7. Hates research method classes, would only take one if a teacher made him, took research method classes in high school.
8. Would prefer webpage format for learning info literacy so would not have to hear things he already knows. It would be useful to bookmark podcasts or make chapters instead of long podcasts covering everything.
9. Had friend help him out with setting up email freshman year, would have found a podcast useful on setting up email and various things on the web.

Whitney (Senior – Biology)

1. Has heard of podcasts but has never used one before.
2. She has a friend at University of Maine in Orono who has taken an online class that had audio lectures that could be downloaded. She liked the idea and says she would have the discipline to learn the material on her own time. However she doesn't think she would have had this discipline during her freshman year.
3. She relies mostly on books to do her research. She used mostly google in highschool and the first 2 years of college but has learned of databases to search for journals and articles. One of her professors showed her this method and she has used it along with books.
4. She did not take Christine's class and wish she had during her freshman year of school but doubts she would have had the motivation to do so.
5. Thinks that podcasts could be useful for classes if they were somehow made optional. She doesn't think they would benefit everyone due to the discipline it takes to learn material on your own time.
6. We told her about possibly making a website that contained podcasts about living the college life and she agreed that this would be a good idea. Says something on study habits and research methods would have been very helpful, especially if these things were somehow made mandatory for all students to listen to.