Using Web 2.0 Resources to Enhance Literature Studies

A Grant Proposal

by

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Abstract

Monticello High School, like many other schools, is working hard to improve the reading ability of its students. One area that has been identified is the use of technology to promote interest in reading. Web 2.0 technologies encourage students to not only view and experience information on the Internet, but to also create and share their knowledge and opinions. Podcasting is a Web 2.0 technology where students create video or audio episodes that can be downloaded and enjoyed on demand. Through this grant, Monticello will begin a project of sharing podcasts created by high school students detailing their viewpoints on novels that they read. The intent is to increase interest in reading and retention of content by incorporating the Web 2.0 technologies into literature education. After initiating the project, results of interest and effectiveness will be collected and shared to all school and community stakeholders as well as other schools in the area.

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Chapter 1: Introduction

Monticello High School (MHS), like many schools, is continually looking for ways to increase reading scores and abilities. Teachers are continually trying to find ways to engage their students and develop an interest in reading, as well as the ability to analyze the literature students read. The problem of getting teenage students interested in reading becomes bigger and bigger every year as advances in technology draw their interest to other entertainment sources that are more immediate and fast-paced (Carter, Ballard, & Vallee, 2009). Today's students possess an incredible knack for, and knowledge of, technology, but lack critical technological literacy skills (Vie, 2008). This would indicate that a way that schools could have success reaching today's students is by the use of innovative methods to teach age-old skills.

The millennial generation is embracing Web 2.0, which is focused on creating and manipulating web content rather than simply consuming it. Millennials want to put their own stamp on things and then show their creations to the world, rather than simply being told what is what. By December of 2007, 64% of online 12 to 17 year-olds had created Web 2.0 content (Lenhart, Madden, Rankin Macgill, & Smith, 2007). In addition, 39% of online teens had shared their artistic creations online, a number that continues to rise (Lenhart, et. al., 2007). Because of this, simply reading a book and regurgitating information in the form of an exam or book report may not be attracting their interest as much as other methods might.

One specific popular Web 2.0 technology is podcasting. Podcasting involves recording oneself, in either audio or video format, editing and compressing the content, and then publishing the content (or podcast) to the Internet with a special RSS feed attached to it. This RSS feed can be subscribed to by users through software like Apple's iTunes and will trigger the software to automatically download the podcast to the subscriber's computer and, potentially, their mp3

player. Think of it as having a free digital magazine delivered right to your computer automatically every time a new issue is published. Podcasting has a direct application, not only in the English classroom, but potentially many classrooms. The current problem for Monticello High School is the lack of availability, of not only the best software for doing podcasts, but also the access to computers needed to create these and other Web 2.0 technologies.

Statement of the Problem

A problem exists that classroom teachers do not have enough access to technology and software to construct truly innovative lessons, specifically for reading comprehension. Interviews with the MHS English teachers (see Appendix E) indicate a desire to create interesting projects using technology but frustration over the lack of computer lab time to do these projects. The availability of a small mobile lab of laptops specifically designed to make podcasting and other Web 2.0 technologies could significantly increase student interest in analyzing literature as well as other classroom topics. Currently at Monticello, teachers must schedule many days, to weeks, in advance to use the one available computer lab that is shared between all teachers K-12. There are no student-use laptops available. Having a set of classroom laptops would significantly improve flexibility in scheduling and would allow teachers to better engage students. These laptops should be equipped with software that makes doing podcasts and other Web 2.0 technologies simple. Additionally, the availability of this technology would allow teachers to differentiate lessons for students with special needs or gifted and talented abilities.

Purpose of the Study

The purpose of this proposal is to demonstrate that Web 2.0 and podcasting technologies are beneficial tools in the classroom, specifically for analyzing reading. Additionally, it is my

goal to obtain financial resources to purchase a small set of classroom laptops to be used in creating Web 2.0 content.

Definition of Terms

  Blog. Blog is short for weblog, and means an "easily editable webpage with posts or entries organized in reverse chronological order" (Zawilinski, 2009, p. 650).

  Comic creating. Comic creating is a type of Web 2.0 technology where students use an online application to create a story in comic book format.

  Discussion board. A discussion board is an online forum where a question is posed and numerous different users can post their thoughts and opinions. Comments on a discussion board can be threaded, meaning that one post is directly in response to a previous post, or unthreaded, where each post is its own independent thought.

  Millennial. Millennial refers to "children who have grown up since the emergence of the World Wide Web and the assortment of related digital technologies (e.g., cell phones, text messaging, video games, and instant messaging)" (Considine, Horton, & Moorman, 2009, p. 472).

  Podcast. A podcast is an electronic recording of video or audio that is made available on the Internet. What makes a podcast unique is that it is syndicated using Really Simple Syndication (RSS), which allows content to be automatically downloaded to a user's computer when new episodes are made available. While a user can subscribe to a podcast and receive one in this fashion, podcasts can also be experienced individually online or manually downloaded without subscribing (Hew, 2009).

RSS. RSS stands for Really Simple Syndication and is a string of code that gets uploaded to the internet along with an audio or video file and provides a feed for the audio or video file to be automatically downloaded to a user's computer. RSS allows users to subscribe to a podcast.

Web 2.0. Web 2.0 is a term used to describe the evolution of the use of the Internet. While previous use of the Internet was typically limited to presenting and viewing information, Web 2.0 adds the ability for the typical user to create and share content online. Prior to Web 2.0, the internet was considered Read Web, it is now considered Read-Write Web (Rosen & Nelson, 2008).

Wiki. Wikis are "collaborative websites where anyone can add to or edit content that has already been published" (Richardson & Mancabelli, 2007, p. 15).

Methodology

Chapter two will review current literature relating to using Web 2.0 technology in education. Specific topics include: How the current generation of students uses technology, how Web 2.0 technology is used, the use of podcasts in education, innovative ways of teaching reading comprehension, and what software most easily enables students to create podcasts.

Chapter three will discuss the goals and objectives for adding these Web 2.0 technologies to our classrooms.

Chapter four will outline a timeline and action plan for implementation. It also includes a budget for the requested equipment detailing how the money will be spent and an evaluation plan to assess the use and effectiveness of the new technology. A dissemination plan for communicating the project's implementation is included.

Finally, the grant cover letter and proposal are attached.

Chapter II: Literature Review

Students demand an interactive learning experience. Millennials want to create content and share their opinions in a wide variety of ways. Simply reading, writing, and sharing with the teacher will not keep students interest. Technology, podcasts, and other Web 2.0 tools can be successful in creating an interactive learning experience for millennial students.

How Students Use Technology

Today's teenage students are online a great deal. According to Pew, 93% of teens are Internet users (Lenhart, Madden, Macgill, & Smith, 2007). What is changing is the how Millennials are using the Internet. While we tend to think of technology as isolating, leaving a student with just her and her computer, in fact Millennials are a very social group. Rosen and Nelson (2008) described this generation of learners as being comfortable and enthusiastic about using collaborative technologies to be creators of content rather than consumers. In addition, these students "gravitate toward group activity, seeking interaction within thriving online communities of generative individuals" (Rosen & Nelson, 2008, p. 220). This is only one form of technology that students use. Van Horn (2006) broke down a typical teenager's day as including roughly 3 hours of watching television, 1 hour of watching movies, 1.5 hours of listening to music, and 45 minutes of playing video games. This does not include the nearly 1.5 hours they use their cell phones for (Bonamici, 2007).

Clearly, technology is not something that students just use, but it is part of who they are. Technology is integrated into many aspects of their daily lives. Instead of limiting access to technology, it seems to make sense to embrace technology as a more appropriate medium for instruction. However, we cannot assume that the use of technology in the classroom is always good. Determining whether technology is being used correctly in the classroom is an important

part in the feedback process. Byrne (2009) suggested evaluating the use of technology on whether it is improving efficiency, motivating learning, deepening understanding, and teaching how to learn. Having an evaluation tool helps ensure schools are spending money on technology appropriately.

Educational Web 2.0 Use

Listing all Web 2.0 tools and services would be nearly impossible. Tool categories include applications for: photos, music, video, e-learning, games, collaboration, design, blogging, travel, business, money, storage, management, and communication (Yakuel & Shahar, 2011). In fact, deciding on how to use Web 2.0 tools can be overwhelming for the teacher that is already strapped for time. Go2web20.net, a collaborative web site for online applications and tools, has 70 pages of tools, with over 45 tools per page. There are, however, a number of tools that have very direct and pertinent use in the classroom.

The better way to approach using Web 2.0 tools is to design classroom lessons that will be enhanced if they were made collaborative in nature. The goal should be to "capitalize on the higher-level thinking skills these tools enable — encourage reflection with blogs, invite evaluation and synthesis within wikis, and ask for planning and assessment using charting tools" (Baumbach, 2009, p. 19). As part of their lessons, teachers will ideally be using the Web 2.0 tools that encourage application, analysis, synthesis, and evaluation. A well-designed lesson will do these things, and Web 2.0 tools can be used to enhance the lesson even further. Collis and Moonen (2008) noted students already make the Internet their first point of reference for self-directed study. Additionally, they note, students' use of Web 2.0 technologies is "pervasive and integrated" and "personalized." The task, then, is for "pedagogical innovation through the affordances of technology" (Collis and Moonen 2008, p. 96). This pedagogy for learning can be

considered a social constructivist model, through which social interaction is used to construct knowledge (Rosen & Nelson, 2008).

Podcasting in Education

There are many advantages to using podcasts, a specific Web 2.0 tool, in the classroom. A podcast is an electronic recording of audio or video that is made available on the Internet. When a user subscribes to a podcast, all new episodes are downloaded automatically to their computer. Podcasts can be consumed or created, depending on the specific classroom need, and these different uses create different levels of interactivity and depth of discussion. Podcasts can be listened to, they can be created, and they can be discussed. Podcasts are also flexible in their consumption. They might be watched online, listened to on an mp3 player while riding the bus, or played over a TV with Internet connection (Robinson & Ritzko, 2009).

Listening to, or viewing, a podcast can be an effective method for reviewing or preparing for a lecture or discussion on a topic, allowing students to bring the classroom home (*Podcasting in the classroom*, 2008). This use, however, is not that much different from a standard lecture. The real power of podcasts happens when students become the creators. "Creating podcasts teaches students to do research, to communicate successfully, to speak effectively, and to grab an audience's interest with sound" (Sprague and Pixley, 2008, p. 231). A student's podcast can then be listened to by other students, with the creator's opinions being critically discussed online using another Web 2.0 tool like a wiki or a discussion board. For example, a teacher could assign a project requiring students to create video podcasts set in 2011 with the characters from *The Outsiders*. These podcasts would demonstrate what the divisions between the two social classes might look like now and how their feud might be played out. This assignment requires synthesis, a higher level reading comprehension strategy, to adapt a story to the modern day.

Other students can then view this video and go onto a discussion board that has opinion questions asking students to evaluate the video and to debate whether they think it is an appropriate representation. These are assignments that will evaluate reading comprehension as well as produce high-level thinking. Additionally the assignment would encourage creativity, participation, critical analysis, and appropriate dialogue.

Podcasts can be useful tools in catering to different learning styles and differentiating instruction. Reporting on a reading by recording thoughts for other students to hear is empowering for a student with a writing deficit. Since struggling learners are often able to understand and speak a language before they are able to read and write the language, completing a podcast is a way for these students to demonstrate comprehension without the labor of trying to write with perfect spelling and grammar. Students with poor reading skills may benefit from having text read to them, as a teacher can create a podcast of students in the class reading different chapters of a book that can then be downloaded by the struggling reader (Ralph & Olsen, 2007). This would allow struggling readers to listen to the story being read while they read along. In addition, podcasts can be rewound and sections can be read again if they are not understood. According to Hew (2008), students that used podcasts to supplement their ESL learning felt the podcasts enhanced their learning. Being able to rewind, listen along, and speak rather than write is quite helpful to English-as-a-second-language (ESL) students. Finally, podcasts allow many opportunities for differentiation to meet different student learning styles. Podcasts allow creators to read, speak, act, videotape, edit, create music, listen, and demonstrate. These are just a few skills that can be utilized when creating a podcast, and with so much flexibility, a teacher should be able to craft an assignment that reaches students in ways that meet their abilities. Done well, a lesson will have students "develop(ing) podcasts that contain

original material or analyze and deepen the understanding of existing material" (Hew, 2008, p. 349).

Teaching Literacy

Being able to critically analyze reading is an essential skill to acquire, and one that applies to many occupations (Duffy, Hastie, McCallum, Ness, & Price, 2009). For example, nurses need to demonstrate an understanding of medical evidence by summarizing elements and debating authors' views. Additionally, being able to critically read literature has direct applications to online reading, which is where teens are more likely reading. "What students are consuming online usually has not been edited by anyone other than the author, and that changes the whole nature of reading. Readers need to be able to weigh truth, measure authority, and do all the things good editors do" (Richardson & Mancabelli, 2007, p. 18). Therefore it is now, perhaps more than ever, important to teach reading strategies.

From 1984 to 2004, the proportion of 17-year-olds who almost daily read for enjoyment fell from 31% to 22% (Tucker, 2007). Clearly, there are so many different interests in students' lives that reading for enjoyment takes a hit. Because students are reading fewer and fewer books, they have fewer books to critically analyze. With the use of technology rising and the rate of reading dropping, literature teachers have a difficult chore to bridge the gap and draw student attention back to reading. A possible way to do this is to incorporate the use of technology, such as podcasting and other Web 2.0 tools, into their classroom book analysis.

Handsfield, Dean, and Cielocha (2009) pointed out the use of online resources to use and produce texts has become essential for developing a critically literate individual. One example of these online resources include a comic creator where students are able to choose from different graphics presented to them, draw their own images, write captions, and then put them

together to tell a story in comic fashion. Another example is using a blog, where students can do their writing online and get feedback from the teacher as well as other students if they so choose. Handsfield et. al studied and explained the use of these tools in their language and literature classrooms. They found that successful integration of these tools into the curriculum required modifications to classroom pedagogies, but that successfully done, these technologies enhanced the learning experience. Additionally, they found that students were more likely to use these mediums in a skilled manner in the future. A third tool, digital storytelling, which can be done by creating a podcast, "can enhance student learning and higher order thinking skills" (Nelson, Christopher, & Mims, 2009, p. 83). Digital storytelling might include creating a script that is turned into a video and then shared online, or creating an old-time radio show with different readers and sound effects to tell a story. Creating comics, blogging, and digital storytelling are only three possible methods for teaching reading comprehension with the use of technology. With the Web 2.0 tools that are available, the possibilities may be endless, but when done correctly the results can be beneficial and challenging to the learner.

Hardware and Software Choices

Many Web 2.0 technologies require no specialized hardware or software since they are web-based tools that should work on any platform. The creation of audio and video files, however, requires recorders and editors to complete. There are a number of different tools available, but Apple computers and their standard iLife software seem to be the easiest to use due to their tight integration. One example of a class using podcasting to encourage learning through technology is the Coulee Kids podcast from LaCrosse, WI. According to Anderson (2005), the podcasting technology motivated students to take responsibility for their learning

because they knew the project had meaning. The lead teacher there is Jeanne Halderson, who is quoted in the article to say,

> "The technology is a tool to implement the curriculum. Podcasting is all about learning the content. If you don't have educational content, you have no podcast…If we didn't have Apples and iLife, much of what we are accomplishing simply couldn't be done." (Anderson, 2005, para. 10).

Nardo also argued for the use of an Apple computer when she stated, "Although podcasts can be recorded and compressed on Macs or PCs, for students and teachers; Apple's GarageBand provides an unusually simple to use production tool that already includes prerecorded jingles and sound effects" (2009, p. 28) Creating a podcast requires several steps, such as recording the audio, editing the audio, creating the RSS and web page, and then publishing the podcast to the internet. The GarageBand, iMovie, and iWeb software on an Apple are integrated to take the creator through the steps as simply as possible. To recreate this same process on a Windows-based computer, a piece-meal selection of software is required. Audacity can be used to record and edit the audio, an RSS feed creator like Feed Burner is needed to create the RSS, and web creation software such as Dreamweaver or online space like blogspot.com is necessary to create a web page. The problem with this method is that each step is done individually and the software pieces are not necessarily built to work together. This creates a much more complicated and time consuming process for taking the recorded material and getting it online.

Conclusion

We, as educators, are constantly trying to find ways to connect with our students. Today's students grow up using technology in many aspects of their daily lives; yet when they get to school they are often stripped of most of their ability to use technology. While technology

can be a distraction, as witnessed by the fewer number of teenage readers, it can also be a powerful tool to help students learn. Technology should not be considered the curriculum; instead it should be considered another tool at a teacher's disposal. To get the most out of technology a teacher should be willing to integrate it into his lessons and not simply use it to create ad hoc assignments.

Web 2.0 and podcasting are two technologies that lend themselves to the classroom because they create an interactive experience, requiring students to use their knowledge to create a new product. They are flexible tools that are useful when differentiating assignments and helpful in meeting the needs of struggling learners and ESL students. They have many direct applications to a literature class, such as having students critically produce, adapt, or debate material they have read. This ability to critically analyze reading is an essential skill that educators must continue to find interesting ways to teach to their students.

I propose that Monticello High School create a young adult literature podcast, which includes video and audio podcasts created by teenagers for a teenage audience. Examples of these podcasts could be movie trailers, short skits, radio programs, discussion panels, or book reviews. To do this, teachers at MHS will integrate the creation of the podcasts into their classroom assignments and work with the Computer Skills teacher to teach how to use the podcasting technology. Creating this podcast will require the purchase of three Macbook laptop computers and accessories. The goal will be to have students critically analyze their already required readings in a different way, with the intent of sharing their podcasts with other students to initiate discussion and debate.

Chapter III: Project Goals and Objectives

This chapter will outline the goals and objectives for this project. The purpose of this project is to increase student interest in reading and to assist teachers' instruction on how to analyze reading by incorporating Web 2.0 technologies, specifically podcasting, into the classrooms. Monticello School District is a small district in southern Wisconsin that houses the entire K-12 system in one building. There are approximately 120 students in the high school and 400 students in the district. The district has two computer labs and a library media center. One of the two computer labs is a classroom for the Business Education teacher and is occupied seven out of the eight periods of the day. The library media center is home to study hall every period, and the eight computers are typically reserved for the study hall students. That leaves one computer lab to be shared with all classes in the district. To make scheduling tougher, the computer lab is booked all day, every Friday for the library media specialist to do instruction with the elementary students. This leaves four days a week that the computer lab is available, and it is a battle to find time. Since MHS is on an eight-period day, it is very typical that teachers need to reserve the lab for several days in a row, which makes finding time even tougher. The English teachers at MHS have both recently finished their master's programs focusing on creating curriculum using technology, but they have been frustrated attempting to carry this knowledge over to the classroom, largely due to lack of computer availability.

There are six goals for the implementation of this grant project. All six goals pertain to using technology for the benefit of student learning. The goals include: acquisition of technology, implementation, monitoring of effectiveness, training opportunities for staff, evaluating student performance, and promoting the project.

Goal 1: Increase teacher effectiveness through increased access to technology

In order to make the following goals possible, teachers must have access to the tools needed to create the innovative projects they wish to do. Once teachers have access to the technology, they will be expected to integrate it into their curriculum. Lessons will become more collaborative as students will be expected to work in partners/groups for some of the projects. Lessons may become cross-curricular, as access to this technology will allow for history, computer skills, and perhaps even math and science to be brought into the projects. Ideally, lessons will become more enriched because of the opportunities available to teachers and students.

Goal 2: Increase student interest in English through the use of Web 2.0 technologies

By creating projects that allow students to create content in the manner they are accustomed to, teachers will increase student engagement in the classroom. Specifically, the English classes will create a podcast for young adult readers that can include such things as book reviews, movies re-enacting scenes from the book, or any other number of audio or video projects that relate to the stories students read. Additionally, teachers will have the opportunity to use any of the numerous other Web 2.0 technologies to augment their traditional lessons.

Goal 3: Create a tool to monitor the effectiveness of using Web 2.0 technologies to increase student interest

Students will be surveyed on their knowledge of and interest in podcasts and other Web 2.0 technologies. At the end of the year, they will be given a follow-up survey to determine their opinions on the use of Web 2.0 technology in their classes and whether their attitudes about reading and reading analysis have improved. These results can then be used to determine which technologies have been most effective.

Goal 4: Provide opportunities for staff to attend workshops on using Web 2.0 technologies specific to the laptops provided.

While the English staff involved has some training in Web 2.0 technologies, they will need additional training on doing podcasting with specific laptops provided. This training could possibly be done in house as well as using the opportunities that exist locally to receive training. Teachers may also receive paid time in the summer to develop lessons using the new technology that is provided.

Goal 5: Evaluate student performance on technology enhanced projects

Educators cannot assume that simply using technology will improve student understanding and ability. Therefore, it will be important to evaluate whether using the technology is improving student learning as well as piquing their interest. This will be done by using existing assessments, as well as creating new assessments, that evaluate student performance in relation to established state standards.

Goal 6: Promote student work to other teachers, districts, and community members

Students will feel empowered when they have the opportunity to create projects using their own knowledge and abilities. However, they will feel a greater sense of purpose if they know that what they are creating is being consumed by other people with real interest in the content. Therefore, it will be important to promote the podcast the students are creating by placing it on the school web site, notifying community members, demonstrating it at parent-teacher conferences, and forwarding it to local libraries and surrounding school districts.

Conclusion

The literature teachers at MHS have a desire to use more technology in the classroom and understand that doing so requires integration into their curriculum. However, using technology

simply for the sake of doing so is not a sound reason for adding more technology to the curriculum. To make sure the use of technology is beneficial, teachers first need to be trained on how to use the laptops to create podcasts. As the project is being implemented, teachers will need to alter their tools for evaluating student performance to include the use of technology in their evaluation. Additionally, since a basic premise to adding the technology is that it will help increase student interest, assessing student opinions will also be important to evaluating the success of the project. If the project is successful, sharing the project with the community and with other educators will be important because parents should feel their children's education is enriching and because teachers learn from the successes of other teachers. Finally, this grant proposal will alleviate the strain on the limited technological resources that are available at MHS, giving more students and teachers the opportunities to use technology more frequently.

Chapter IV: Project Methodology

This chapter will outline the implementation of the project starting with receipt of the

grant. The timeline, evaluation plan, budget and dissemination plan will be discussed. The

timeline will run from receipt of the grant money at the end of the October of 2011 to the start of

the school year in August 2012.

Action Plan and Timeline

By the end of October of 2011, districts will be notified of receipt of the grant. The

district is required to spend the grant money and to show proof of purchase of the items outlined

in the application by the end of the 2011-2012 school year. The request is for $4,221.70, with

$3,323.70 going towards the purchase of three Macbook laptops and peripherals, and $898 set

aside for training and prep time for the two English teachers to prepare lessons for the podcast

project. Upon receipt of the grant money in early November, an announcement will be given to

the school board and to the community via the school newsletter and web site. An order for a set

of Macbook laptops and accompanying equipment will be placed with the hopes that it will

arrive by the end of November.

A pre-survey of student knowledge of and interest in Web 2.0 and podcasting will be

given during November (Appendix B). The pre-survey will focus on students' knowledge of

Web 2.0 technologies and about podcasts in particular. The goal for the pre-survey will be to

determine students' existing knowledge of how to create podcasts in order to create lessons that

instruct students on the skills that will be necessary. The pre-survey will also lay the baseline to

determine how interested the students are in using technology in the classroom. This baseline

will be compared to a follow-up survey that students will take at the conclusion of the course.

The sample size for the survey will be small as there are typically no more than 35 students in a

grade level at MHS. The survey will also be subject to students' attitudes and efforts at the time of completion. The degree that these influences affect their responses will be considered when analyzing the pre-survey results.

During the month of December, the laptops will be initialized by the district technology coordinator so they can be used with the school network. Also, during this time, English teachers will be looking for and attending training on the use of the new laptops and on how to best integrate them into their curriculum. A One on One Mac Store Training program will be purchased for both teachers. This will allow them to take a Macbook to the Mac Store in Madison, WI, for personalized training on using the laptop and the podcasting software that comes with it. This program lasts one year and can be used at the teacher's discretion. With the wide availability of educational training, the educational technology assistant and the English teachers will actively look for additional training that would be beneficial to learn how to incorporate podcasting into a course. For instance, MHS belongs to CESA (Cooperative Educational Service Agency) #2, which provides instructional technology training to member schools. Additionally, the teachers will be given time during the in-service day in January to be taught how the laptops will work on the MHS network and to write curriculum utilizing the laptops. Finally, teachers will create assessments to determine the effectiveness of the technology-enhanced lessons. These assessments will evaluate how well students analyze what they are reading, as was done in the past. The assessments will also evaluate students on the use of technology to encourage students to explore as many creative aspects of the technology provided to them as possible. This will assist the teachers in determining whether students are learning the reading analysis concepts at a level equal to or greater than previous classes, and will provide information on how well the technology is being utilized.

Starting with the second semester in January, teachers will begin to implement the laptops into their lessons. Students will begin using Web 2.0 technology to create projects that improve interest and understanding in lessons. Students will also be introduced to the podcast project. The project will begin by each student reading a book and choosing a way to share concepts and understanding from that book by creating an audio or video podcast. By the middle of March, the district educational technology assistant will set up the web site for the podcast to be placed on and coordinate the laptops to upload to the site once a student finishes a podcast. There will be several podcasts in place to share with parents during spring parent-teacher conferences. The podcasts will be run on a computer and projector for parents to hear and view as they visit the school. The link to the podcast will be shared with local libraries and surrounding districts.

During the remainder of the school year, an additional two to three podcasts will be uploaded to the web site and made available to the public per week. Throughout the semester the teachers will be using their previously created assessments to evaluate students on their ability to understand and analyze the information that they are reading, as well as their utilization of technology. These assessments will be compared to those of students in previous years to determine whether the use of technology is having a positive effect on learning. The assessments will be in rubric format and will score students on different areas of reading analysis. The evaluation of technology utilization will allow the teachers to modify lessons for the coming year to better incorporate the technology that they have. These assessments will also be in rubric format and will score students on the degree and creativity with which they used the podcasting technology.

At the end of May, students will be given a follow-up survey to find their opinion on using Web 2.0 technology in class. Hit counts, which track the number of users that visit the web site, will be used to determine how much interest has been generated by the podcast. This information can be shared with interested stakeholders. The grant provider will be sent proof of purchase plus an explanation of how the grant money has been used. Again, the school board and community will be shown examples of student work and how the technology has been implemented in the classroom.

At the conclusion of the school year and in anticipation of the coming year, assessments and surveys will be analyzed to determine how to best use the technology in the coming school year. Teachers will be able to use in-service days and days in the summer to prepare lessons for the coming year. Finally, during the back to school in-service days in August, the English teachers will demonstrate to the other staff members how they have used Web 2.0 technologies in their classroom with the hope that other areas use the technology for their subjects.

Evaluation Plan and Tools

Students will be surveyed to establish their familiarity with and interest in Web 2.0 technology and podcasting. This information will be used to direct the project team in preparing the lesson plans for the project. A copy of this survey can be found in Appendix B. To determine whether creating these podcasts is improving reading comprehension, three different types of data will be collected and analyzed. The first data will be a year-end follow-up survey of students on their impressions of the effectiveness of the Web 2.0 and the podcast projects. The questions will focus on the students' opinions on the use of podcasts to analyze literature (Appendix C). Results of the survey should help the teachers modify the podcasting project for future classes and give an indication whether the students feel using technology is beneficial to

their learning. The second set of data will be the assessments the teachers give to their students throughout the semester. This will determine whether the use of technology has been beneficial to student learning. If the assessments are consistently saying that students are struggling to analyze the material, especially when compared to previous classes, the English teachers will have to determine what causes of the lack of success and evaluate how beneficial the use of technology has been to their classes. Likewise, if students are consistently scoring higher on their analyses than previous classes, then the teachers will have to determine how much technology has to do with the improvement. The last, and more secondary, sets of data to be analyzed will be tracking podcast downloads and library usage to determine the interest these podcasts have created for other potential readers. Hit counts for the podcast web page are readily available from the administrator terminal of the web page. These counts show trends like whether certain types of podcast episodes draw more viewers, or if interest in the podcast grows or falls over time. The school librarian will run a report from her catalog database to determine whether check-out rates among high school students of young adult literature has had any substantial change from the previous year. This data will be analyzed and results will be shared with the appropriate stakeholders, such as the granting foundation, school board, parents, and other English and computer educators.

Dissemination Plan

Dissemination of information about how the technology is enhancing learning will occur throughout the timeline of the grant. The school board and community will be informed that a large-scale class project, the student podcast, is happening. Through the newsletter, the school web site, the local paper, and potentially a mass e-mail, they will be given a link to take them to the podcast page once it is established. The podcast will be continually updated so people who

subscribe will constantly get a sample of what work the students are creating. At the conclusion of the school year, the granting foundation, the school board, the community, and the administrators will be informed through personalized letters or through the school newsletter of the advances in the curriculum advances that have occurred because of the technology.

A big part of the podcast project is to promote it beyond the district boundaries. Ideally students in other districts would use the podcast as a resource when deciding what books to read or when trying to spark conversation about a novel. To do this type of promotion, the English teachers and the educational technology assistant will work to get the podcast promoted in as many different educational settings as possible. This includes registering the podcast with iTunes, sharing the concept with libraries, and discussing the podcast whenever possible when meeting with teachers at other districts. The Post-Messenger-Recorder, a local newspaper serving the Monticello, New Glarus, and Belleville districts, welcomes articles about activities happening in their community schools. The teachers will work with their students to write articles for the to publish. These articles will include pictures of the students in action. The articles will focus on how the podcast project is teaching students communication, analysis, and promotional skills, as well as how doing the projects encourages students to read more. Finally, students and staff will track how far away from Monticello interest in the podcast spreads. The hit counts and web traffic information will provide this usage data.

Budget

The budget for implementing the podcast project is broken down into two areas, personnel and equipment. The educators that will be using the new technology are already familiar with some Web 2.0 technologies and will not require as much training as a teacher that has limited experience and training in the subject. The teachers will require some training on the

use of the laptops and practice in completing the entire podcast upload. They will also need time to write curriculum that integrates the technology into their courses. The amount budgeted for personnel is $898, which will be taken from the grant. The remainder of the grant money will be used to purchase technology to make the podcasting possible. Since the budget for the Foundation for Rural Educational Development Technology Grant can be no more than $5,000, three will be the maximum number of laptops that can be purchased. The budget for the equipment, along with the accessories necessary for each, comes to $3,323.70. The total amount requested is $4,221.70.

Personnel.

The English teachers that will be implementing this technology will need training on how to use the software and time to prepare lessons and assessments. A yearlong membership for training with the Apple Store, costing $99 per teacher, will allow the teacher to schedule a personal training session at any time they would need during the year. To encourage the teacher to take training, there is money budgeted for the cost of a day of sub coverage for each teacher. Additionally, there is 10 hours per teacher of paid prep time, which will be paid for by the grant, to prepare the lessons and assessments that will be used during the semester and moving forward. The high school principal and educational technology assistant will be responsible for purchases and payments done with the grant money. Teachers using prep time will be required to show the lesson plans that have been created and turn in a time sheet to be reimbursed with the grant money. This time can be used at non-contract hours during the first semester to prepare for integrating the technology during the second semester. The pay of $25 per hour is the standard hourly pay for prep time at Monticello Schools, including benefits.

Equipment.

The requested budget for equipment is $3,323.70. This includes three Macbook laptop computers, bags, mice, and microphone headsets. Macbook laptops are requested because they have the easiest to use podcasting software already pre-installed on the computers and will require no additional software purchase. The computers will be compatible with the existing school network so they can be easily integrated into the classroom. Server space to host the podcasts will be on the school server at no additional cost. The total cost of the computers is $2,847. Though it would be wonderful to have a complete set of laptops for the classroom, the teachers indicated in their interviews that having just three available laptops would make a big difference because of the class sizes and nature of the projects. Students will work in groups on some projects and on a rotating basis to create their podcasts. This will encourage a continual updating of the podcast stream as it will stagger the times when students finish their podcasts. Lastly, three laptops is the most that can be requested due to the $5000 limit from the grant proposal guidelines.

The additional materials are necessary to make podcasting easy and to keep the materials safe. Each laptop will have a power cord and a number of smaller accessories that will accompany it, and having a bag for each will make it simple to keep all materials together. The bags provide additional protection to the laptops as well as making them easy to move from one location to another. The mice for the laptops make podcasting easier for students of all ages because they are more familiar with using a mouse than a touch sensitive finger pad. Making fine adjustments to recorded audio with an actual mouse is easier than using the track pad that is built into a laptop. Finally, the USB microphone headsets allow the students to record their voice while filtering out background noise. This creates a professional-sounding recording.

They also allow the students to listen to their recording without disturbing other students working near them. The total cost for laptop accessories is $476.70.

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Appendix A: Cover Letter

334 S. Main St.
Monticello, WI 53570
April 30, 2011

FRED Grants Committee
2020 K Street NW
7th Floor
Washington D.C. 20006

Dear Grant Committee

Please find my grant application for the Technology Grants for Rural Schools enclosed for your review.

In keeping with the Foundation's focus on education programs that foster innovative technology in the classroom, Monticello High School proposes a project that combines reading analysis and the Web 2.0 technology of podcasting to create a series of audio programs made by young adults for young adults. The goal is to increase the interest in reading and to improve reading retention by encouraging students to verbally or visually share their point of view with others over the Internet. Additionally, this grant will allow us to alleviate some frustration over the lack of computer resources found at Monticello. We believe this will have a positive effect on reading interest and in reading abilities. At the conclusion of the introduction of the project, we will analyze opinion, assessment, and usage data to determine the effectiveness of the project. We are requesting $4,221.70 to purchase equipment and training to make the project possible.

While podcasting technology is just beginning to enter the field of education, we feel that a project such as this will be an example for other educational programs and will spur interest and ownership in the project from the students. Your foundation's support will be seen not only locally, but regionally and beyond. Please do not hesitate to contact me via phone or e-mail should you have any further questions.

Sincerely

Mark Olson
Business Education Teacher
Monticello High School
olsonma@monticello.k12.wi.us
608.938.4194 x253

Appendix B: Podcasting Pre-Survey

Web 2.0 Student Technology Survey

Please read each question carefully and answer to the best of your ability.

1. Have you ever done any of the following things online? Please circle all you have tried.

Upload video   Edit video   Write a blog   Create a presentation   Edit audio

Edit pictures   Share pictures   Create a poll   Create music   Create a map

Create a book   Create a graph   Draw/sketch   Create a blueprint   Create a poster

2. Have you ever heard the term Web 2.0 (circle one)?   Yes   No

3. The activities listed on Question 1 are just a few examples of Web 2.0 technologies (a term that typically refers to the ability to create content on the internet). In general, how interested are you in creating content using Web 2.0 tools (circle one number)?

		Fairly interested, but would like to know more						These sound cool, let's try them
Only if I had to									
1	2	3	4	5	6	7	8	9	10

4. Have you ever viewed or listened to a podcast before (circle one)?   Yes   No
        If you answered yes, continue. If you answered no, skip to question 8.

5. How often have you viewed or listened to a podcast (check one)?

_____ Weekly   _____ Monthly

_____ Only a few times a year   _____ Not even once per year

6. What types of podcasts have you listened to? Circle all that apply.

        Arts   Business   Comedy   Education   Games/Hobbies

        Government   Health   Kids/Family   Music   News/Politics

        Religion   Science/Medicine   Society/Culture

        Sports/Recreation   Technology   TV/Film

7. How have you viewed or listened to these podcasts? Circle all that apply.

      Computer   iPod/mp3 player   Other _____

8. Would you listen to another student your age briefly discuss a book you have either read or are interested in reading (circle one)?

      Yes   No

9. Would you watch another student your age's video about a book you have either read or are interested in reading (circle one)?

      Yes   No

10. How often do you go online when not at school (check one)?

      _____ 5-7 days/week   _____ 1-4 days/week

      _____ 1-4 times/month   _____ less than once a month

11. Have you ever posted information online for someone else to view (circle one)?

      Yes   No

If you answered yes, continue. If you answered no you are done with the survey.

12. What things have you posted online? Circle all that apply.

      Comments   Pictures   Audio/Music   Videos   Documents

      Other_____   Other_____

Please return the survey to Mr. Olson once completed.
Thank you for your time and insight!

Appendix C: Podcasting Follow-up Survey

Web 2.0 Student Technology Follow-up Survey

Please read each question carefully and answer to the best of your ability.

1. Having now completed a course using podcasting technology, would you say you enjoyed creating this kind of technology for class?

podcasting made class worse		class was about the same						podcasting made class much more enjoyable	
1	2	3	4	5	6	7	8	9	10

2. Do you think creating a podcast is something you would try on your own?   Yes   No

3. Are you more inclined to listen to a podcast after making one?   Yes   No

4. What other types of technology projects might have been useful and interesting in class?
(Please list as many as you can think of)

5. What suggestions would you have for making the podcasting project better?
(Please list as many as you can think of)

6. Do you think that creating the podcast helped you to understand the book you were reading better?
                Yes   No

Please return the survey to Mr. Olson once completed.
Thank you for your time and insight!

Appendix D: Tables and Charts

Timeline

Podcast Grant Timeline	
Use grant money to purchase Macbook computers to have ready for start of 2010 school year.	November 2011
Perform pre-survey to determine interest in podcast formats	November 2011
Analyze pre-survey data to prepare lesson plans and determine best use of grant money.	December 2011-January 2012
Students select books to read.	January 2012
Students conclude reading books and begin writing scripts for podcasts.	February 2012
Students record and edit podcasts using laptops.	Late February 2012
Teacher reviews podcasts for appropriateness	March 2012
1-2 Podcasts per week are made available on the Internet	March 2012
Podcast site is advertised through local media and through contacts with other school districts	March 2012-May 2012
Students are assessed on their reading analysis knowledge and ability	March 2012-May 2012
Podcasts made available for listening and viewing at spring parent-teacher conferences	March 2012
Post project surveys for teachers and students are conducted.	May 2012
Survey results are analyzed	Early June 2012
Web traffic data is analyzed to determine the effect of podcasts.	Early June 2012
Summarized results of survey and project are presented to funding agency and Monticello School Board.	June 2012
Revisions to lessons are made based on analysis of survey information and lesson assessments	August 2012

Budget

I. Personnel

Description	Quantity & Cost	Budget Request
Prep time for analyzing survey data, creating podcast projects assignments, and assessments	20 hours at $25/hour (hourly pay rate @ Monticello)	$500
One on One Mac Store Training	2 memberships @ $99	$198
Substitute teachers for staff to attend training (1 day each)	2 @ $100	$200
Total Personnel		$898

II. Equipment

Description	Quantity & Cost	Budget Request
3 White Macbook laptops for recording and editing podcasts and videos	3 laptops @ $949	$2,847
3 Apple Magic Mice for easy audio editing control	3 mice @ $69	$207
3 STM Small Alley Shoulder Bags for 13" Macbooks to protect the laptop computers	3 bags @ $39.95	$119.85
3 ClearChat Pro USB Microphone Headsets for recording audio	3 headsets @ $49.95	$149.85
Total Equipment		$3,323.70

Total Requested Budget	$4,221.70

Appendix E: Teacher Interview and Response Summary

Monticello High School
Teacher Interview   Teacher Name_____
                                          Subject_____

1. What activities do you currently do to analyze literature in your courses?

Teacher 1:	Teacher 2:
-writing an essay -write a script -film a video -write a movie proposal/storyboard/trailer -not many tests	-discussions, predominantly -quizzes using the SMARTBoard -tests -graphic organizers -videos -written analysis -movie trailers

2. Do any of these specifically utilize technology? Which ones and how?

Teacher 1:	Teacher 2:
-filming video -making the movie trailer -have used Google Docs	-videos -Google Docs -SMARTBoard Quizzes

3. Have you considered using any Web 2.0 technologies to help develop the analysis or interest in reading? These may include such things as podcasts, wikis, video production, blogging, etc. Why have you decided for or against Web 2.0 technologies?

Teacher 1:	Teacher 2:
-wikis and/or blogging to do forced discussion -Wall Wisher- a discussion board using Post It notes	-Voicethread for discussion -wikis/blogs for discussion

4. Are there any technological limitations at Monticello? What would you suggest to improve any limitations?

Teacher 1:	Teacher 2:
-not enough computer lab time -cameras not compatible with software -blocked web sites Suggestions: -GarageBand and iLife easier to use, compatible (seen at a conference) -additional computers, mobile lab	-hard to get access to computer labs -lack of accessories like scanners, cameras, color printers -Flip cameras not compatible with Windows Movie Maker Suggestions: -more compatible software -more accessories/computers available -in her experience Macs have been better for editing

5. Are there any non-technological limitations in Monticello? What would you suggest to improve any limitations?

Teacher 1:	Teacher 2:
-money for technology -getting blocked sites okayed Suggestions: -teach how to use technology safely	-student attitudes toward learning. Often unmotivated and do just enough to pass -time to prepare the lessons seems to be a big barrier; with so many options it becomes difficult to find time to learn and prep Suggestions: -while different lessons may help, it would require a cultural shift

6. How do you think students would react to Web 2.0 technology use? What are the potential positives/negatives?

Teacher 1:	Teacher 2:
-People tend to think that our digital native students are very adept with technology, but we have many students unfamiliar with all but the most common technology. They have limited exposure and understanding. A positive would be that we have an opportunity to teach it is kind of scary that students can't do some of these things yet. -Her students have had a mixed reaction to new technology in class. Some have hated using it initially because they were intimidated by learning something new. Others are just	-Students have been frustrated initially, want to go back to the old way of doing things. -After they have learned the technology they have enjoyed it more. -Students are not as tech savvy as we anticipate.

opposed to doing anything school related.

7. Could you see any other possible uses for Web 2.0 technologies in your curriculum? Explain.

Teacher 1:	Teacher 2:
-Grammar class-knowing people will view work might force better grammar usage -Google Docs for writing (however now requests cell phone numbers and she is not comfortable having students share these) -Google reader-reading books electronically -Wikis for writing	-Has used a create your own toolbar that can be loaded into students' browsers for easy access to grammar resources -Google Docs for writing

8. Are there any other technological needs that you have? How might these needs be met?

Teacher 1:	Teacher 2:
-accessories -more computers in general (there is a big battle for lab time) -possibly iPads-good for reading disabilities and reading to students -interactive textbooks	-cameras -printers -scanners -time and training to do new lessons