

Running Head: Lecturing for Success

Lecturing for Success: Integration of
E-Lectures in the High School History Setting

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Abstract

This action research project was conducted to determine if the instructional method of E-Lectures would have an impact on student performance in culturally diverse 11th grade Modern American History Classroom. Students participated in both a traditional lecture (the control) and an E- Lecture. At the end of each lecture student's pre-test/post-test data and student survey data was analyzed. The results of this project showed that student achievement on class assessments increased with the use of E-lectures and that students also preferred the E-Lecture method over the traditional lecture. The findings also suggest that the E-Lecture significantly helps diverse populations, especially Native American Students, acquire content knowledge as well as promote success on unit exams.

Research Focus

I have been teaching 11th grade American History for five years in the same rural community that I grew up. My high schools current population is roughly over 900 students and its ethnic makeup is 40% Hispanic, 40% Native American, and 20% Caucasian. On a common day, 120 students enter my classroom and I teach 6 sections of Modern American History. As a teacher, my personal values and goals have always revolved around that fact that I want to create a classroom community where all students are successful, regardless of their background. I highly value active learning, cooperative group activities, technology integration, and other teaching methods that I hope make my classroom fun and overall beneficial for my students.

My school district has given teachers the opportunity to participate in professional development days once a month. During these days teachers attend various meeting and trainings, but we also have the opportunity to meet with our peers in what is called PLC's (Professional Learning Communities). During this time we meet with other teachers in our department and complete various tasks. This year we have been looking at our schools AYP (Annual Yearly Progress) data as it pertains to student success on the Social Studies portion of the NMSBA (New Mexico Standards Based Assessment). While reviewing this data, we found that over the past four years, even though we were having success as a department, not all ethnic groups were equal when it came to being proficient on the NMSBA. The one group that was drastically lower when it came to Social Studies proficiency was our Native American population. During the past four years, on average Native American proficiency was 21.76% lower than the Caucasian subgroup and 10.35% lower than the Hispanic sub group. This

made me think, “What am I doing wrong or what could I be doing differently as a teacher?”

Over the years, I have also noticed that all my students, including my Native American populations simply hate to take notes. In general, class notes take up a very small portion of class time, as most time is concentrated on hands on activities and cooperative learning activities that my students love. But as an educator I still find that notes and lecturing is an important tool to learn the content. As a teacher, my notes have evolved from rudimentary lectures, to PowerPoint’s full of images showcasing events and important vocabulary. PowerPoint’s have even been posted on my website so that students could access the notes at home, print them out, and cut out the dreaded writing portion that takes place in the classroom. Yet, the complaints still exist. I can hear the groans in my head now. Just other day I was lecturing with a PowerPoint briefly explaining the different plans for Reconstruction after the Civil War. I looked out to many of my students rushing to jot down this information. I thought to myself, “Is this the best way to present this information to my students?” All my students dread notes and at times I find myself bored lecturing on the same content over and over again for 6 periods. So I know my students must be bored as well.

With this action research project I will be integrating a method of note presentation called an E-Lecture and determine if this new method successfully helps student success in my classroom, particularly my Native American student population. Data will be collected by comparing student success on one unit exam, using traditional method of lecturing, to success using the E-Lecture method on another unit exam. Data will also be taken by qualitatively interviewing students through a survey to determine

which method they enjoyed most and which method they thought was most effective in teaching them the class content.

Literature Review

Every day in classrooms throughout the country, students are being presented with class content in the traditional lecture method of instruction. As a high school history teacher, I use this form of instruction at least once in a three week unit. Demetriadis and Pombortsis (2007) report in their study on learning efficiency, that the traditional lecture is the major mode of teaching in most classrooms throughout the world. But is this really the best or most efficient method in delivering of the course content? Lents and Cifuentes (2009) detail in their study on web based learning enhancements, that there is nothing wrong with the traditional method of instruction. In their view, many instructors perform highly prepared lectures and are information dense, but the downfall is that it is mainly to passive student listeners. Twigg (2009) supports this idea that the lecture is passive by arguing that the lecture is simply a one way presentation of ideas and it truly fails to activate student's minds. Further, students become dependent on the educator telling them what they need to know and can avoid taking the responsibility for their own learning (Machemer & Crawford, 2007). Kekkonen-Moneta and Moneta (2002) also explain that the traditional method of lecture hopes to effectively transmit information, but it is difficult especially in their instance where student class sizes are over 100 students. In my own classroom, the class sizes average about 25 students. I have to ask myself, do my traditional lectures meet the needs of all students in my classroom?

Lents and Cifuentes (2009) explain that the traditional lecture may not be the best method for all students, especially the non-traditional low income student. Many times these students have other serious time commitments, like jobs that take them

away from school or the need to care for their children or fellow family members. These students may miss class time, not because they want to, but because they have to. If a student misses a lecture they miss a large piece of the puzzle. Folley (2010) explains that students from some cultural backgrounds may also be uncomfortable directly questioning the lecturer when understanding of the content is needed. So these students, who lack understanding, are left behind as the rest of the class continues on. He further explains that for these students, a different type of lecture may actually create a more comfortable environment. The traditional method of lecture also fails to appeal to a new tech savvy millennial generation and doesn't meet their demands (Pardue & Morgan, 2008; Nicholas 2008; Nimon, 2007). To these techy students, who are also students in my classroom, they find the traditional method of lecture just plain boring.

Many educators believe that the traditional lecture, if it is the sole mode of teaching in a classroom, is ineffective in promoting learning. Rather, students should be participating in activities based on the constructivist view, of active learning (Marbach-Ad, Seal, & Sokolove, 2001; Jungst, Licklider, & Wiersema, 2003). As a teacher, the traditional lecture makes up a very small portion of my instruction, as I only lecture once in a three week Social Studies unit. But in my experience, the lecture still has some value with my high school students, especially when it is blended with active learning classroom activities. There is even research that shows in some settings, particularly the university setting, that the lecture is superior (Struyven, Dochy, & Janssens, 2008), or at least comparable (Van Dijk, Van Den Berg, & Van Keulen, 2001). As a teacher my hope is that the majority of my high school students will continue on to the university

setting, where the traditional lecture is the norm. So in my mind, implementing a lecture is still an important piece in preparing my students for college.

So how can I change this traditional methods of lecture by making it appealing and helpful to my young students and at the same time prepare them for college? Demetriadis and Pombortsis (2007) suggest a modification of the traditional lecture called the E-Lecture. They explain that the E-Lecture is a method of lecturing through the use of technology. Many times, the teacher records the lecture discussion to digital media like Power Point, and then he or she posts it on the internet. Students then access the lecture via the web individually during class time or outside of school. Lents and Cifuentes (2009) explain that the E-Lecture has many benefits. They report in their finding that students enjoyed these lecture because they can pause the presentation. Many times in the classroom it is hard to ask the presenter to slow down. So the pause feature allows the student time to compile their personal notes. Brecht and Ogilby (2008) and Lents and Cifuentes (2009) report that students also enjoy that they can rewind difficult concepts that are presented. This allow for them to re-hear information in order to grasp understanding. Ridgway, Sheikh, Sweeney, Envoy, McDermott, Felle, Hill, and O'Higgins (2007) reported in their study that students enjoyed E-Lectures more than conventional modes teaching which includes the traditional lecture. Demetriadis and Pombortsis (2007) and Gosper, Green, McNeill, Phillips, Preston, and Woo (2008) support this, showing that students enjoy the E-Lecture because it allows for flexibility. If a student misses class, they will not miss content because they can access that information via the internet and if needed, reuse it to review content. Neumann, Neumann, and Hood (2011) explained that E-Lectures also helped students acquire the

information more effectively. They report that the E-Lecture helped student understandings and developed a deeper level of student processing.

So with all the positives of the E-Lectures, there must be some negatives too? Lents and Cifuentes (2009) found that their E-Lectures presented difficulties with keeping students on task. If students have access to the web, there may be more appealing information online than that of the E-Lecture. This may definitely be a challenge in my setting with high school students. Jadin, Gruber, and Batinic (2009) also reported that their main difficulty was that E-lectures lacked immediate teacher-student communication. If a student has a question on something they cannot simply raise their hand as in the traditional lecture. Neumann, Neumann, and Hood (2011) came across difficulties with technology. An example of this is the possibility of computers losing access to the internet or presentations failing. Kekkonen-Moneta and Moneta (2002) at first had some difficulties with some students who were not familiar with the use of technology. At first these students were resistant but they ended up enjoying it more than the traditional method.

So what do the results conclude when it comes to E-Lectures? Do the positives outweigh the negatives? Is it a better method than the traditional lecture method? One thing that the results do show is that when it comes to test scores generally speaking the E-Lecture method is just as effective as the traditional method. Lents and Cifuentes (2009), Kekkonen-Moneta and Moneta (2002) and Demetriadis and Pombortsis (2007) all found in their studies that students who participated in the E-Lecture succeeded at about the same rate as students who attended a face to face traditional lecture. Another study by Phillips and Loch (2011), detailed that students from low

socioeconomic backgrounds exhibited the greatest improvement when participating in E-Lectures. Neumann, Neumann, and Hood (2011) also found that the E-Lecture particularly benefited students who were visual learners, Folly (2010) and Brecht and Ogilby (2008) detailed that the multimedia Lecture had great value with teachers and students who used it and Demetriadis and Pombortsis (2007) report that students enjoy E-Lectures more than traditional methods. So in conclusion, when it comes to E-Lectures, Students may score the same on assessments, but they find value in it and so do their teachers, they enjoy it more than traditional methods, it appeals to a wide array of student populations, it may particularly help students who come from low income families and it has the possibility to help students that may miss my class.

Purpose and Research Questions

The purpose of this action research project is to determine if the instructional method of E-Lectures will positively affect student performance in my 11th grade Modern American History Classroom. I am also interested to see how these E-Lectures affect my students' attitudes toward learning history and if E-Lectures specifically help student performance when it comes to my Native American Student Population.

The following research questions will be addressed:

Primary Research Question:

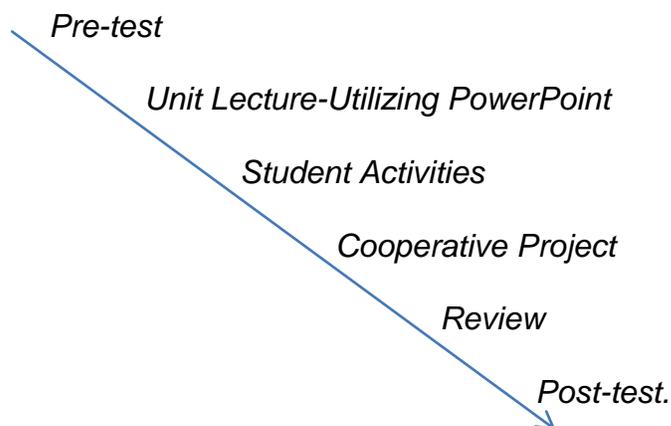
1. In what ways will the implementation of E-Lectures increase student performance in an 11th grade Social Studies Classroom?

Secondary Research Questions:

2. To what extent will the implementation E-Lectures increase student performance, specifically with my Native American student population?
3. How will the process of participating in E-Lectures change student's attitudes towards learning History?

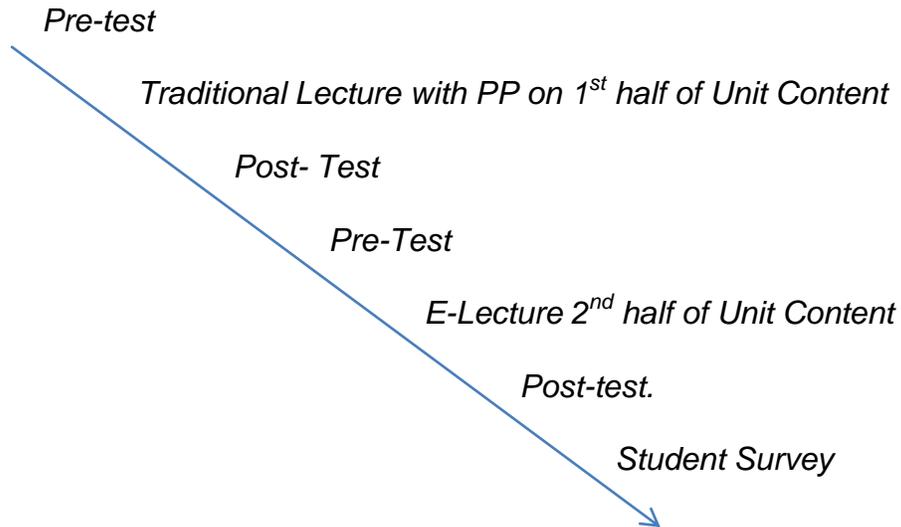
Intervention

As described in the literature review, there are many benefits when it comes to integrating E-Lectures into the classroom. With that in mind, I plan on implementing E-Lectures in all of my 6 sections of Modern American History. But, because of large numbers of students that I teach every day, (current number is over 125 students), I wanted to keep my study manageable and will only be gathering data from two of my classes. The classes will be chosen will based off current demographics that represent and reflect the population of my high school. Commonly when I teach a unit in my classroom the unit sequence is as follows:

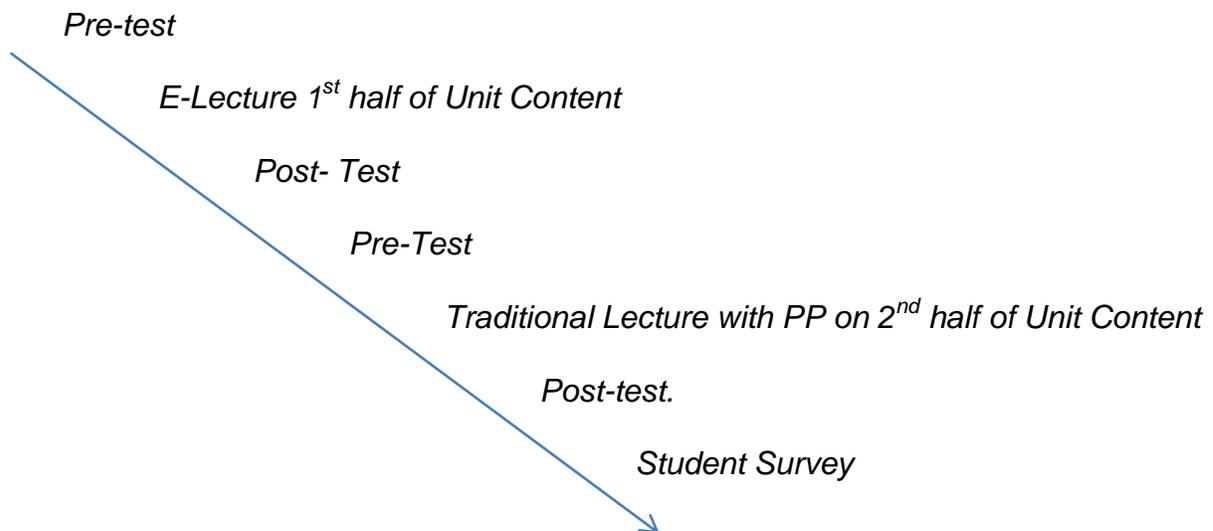


In order to narrow my study to the true benefits of the E-lecture vs. the Traditional method (which I use PowerPoint), for this unit of intervention I will not have my students participate in any unit activities, a student cooperative project, or a review, because I do not want the implementation of those items to affect my results. I will also be breaking up my unit content into half's in an attempt to separate the variable that some of the content presented in the lecture might be harder or more difficult to understand. So the following method will be used in my classroom study:

Group A: Class A of Modern American History



Group B: Class B of Modern American History



The diagrams show how I plan on implementing my study. The unit that students will be participating is the Unit on the Great Depression. The first part of the unit will be on *The Dust Bowl* and the second unit will be on the *Causes of the Great Depression* and its affects. I will be using the exact same PowerPoint's that I have been using in my classroom in the past. The only thing that will change is that when students are participating in the E-Lecture they will be observing it in a computer lab while listening to

audio that I recorded over the PowerPoint slides. At the end of each unit I will also be conducting a student survey with the hope to determine which method they enjoyed the most and in their opinion which method help them most effectively learn the content.

Students

The students that we be participating in my study come from Grants High School that has a current population that is roughly over 900 students and its ethnic makeup is 40% Hispanic, 40% Native American, and 20% Caucasian. Grants High School is located in the NW corner of New Mexico in the Four Corners region. The school is located in the town of Grants which is in the heart of Cibola County. Most people would say that the community is rural with a population just fewer than 9,000 people. The main employers include one of the three prisons located in the county, two of Native American casinos, the nearby coal mine, or the nearby power plant. The County also has a rich heritage, with many nearby Spanish Land Grant communities, Two reservations to the east (Laguna pueblo and Acoma Pueblo), and the Navajo Nation in the western part of the county. The classes that will be chosen hope to reflect this rich heritage as well as the demographic makeup of the school.

I have selected two classes for this study. The classes that will be chosen will be labeled Class A and Class B. Both of these classes are general education classes and none of the students are Honors students. The data below will hopefully give you a picture of the classroom setting:

- Class A: 21 Students – 9 female and 12 males
 - 7 Hispanic, 10 Native American, and 4 Caucasian
- Class B: 23 Students- 9 female and 14 males
 - 9 Hispanic, 11 Native American, 2 Caucasian, and 1 African American
 - 1 Student on an IEP and has a learning disability

Collaboration

I plan on collaborating with my fellow teachers in my department. The method of this collaboration will be that I will be asking my peers in my department help with analyzing of data. During our school PLC (Professional Learning Community) days we spend time as a department working on things that pertain to student success. My hope is that I will give them information on the results of the project and they then will help me come to some conclusions on its overall effectiveness of E-Lectures. The hope here is also that the results prove to be a way of sharing my ideas, in the hope that they see that it is E-Lectures are effective and that they too might want to utilize E-Lectures into their classrooms.

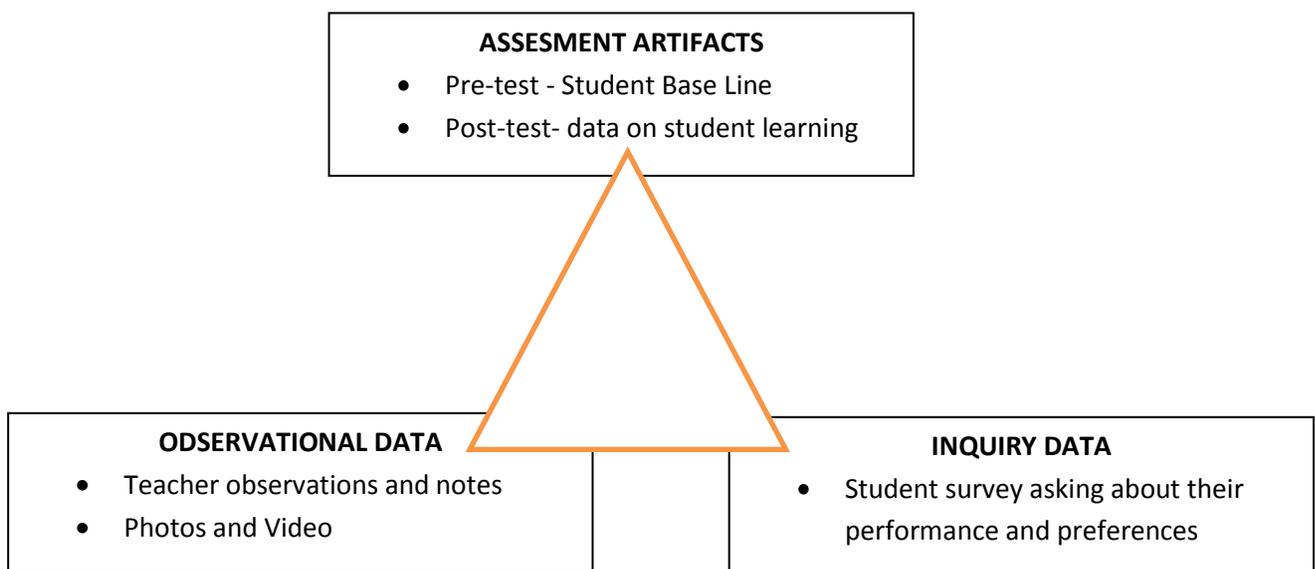
Data Collection Plan

The primary research question of this action research project is: In what ways will the implementation of E-Lectures increase student performance in an 11th grade Social Studies classroom? For this question I will use a number of data sources. As shown above in the *Intervention* section, students will participate in a pre-test (see Appendix F) for each unit. The reasoning for this method is to attempt to create a baseline of students' abilities prior to the intervention of E-Lectures. By this pretest I will be able to assess my student's prior knowledge on the content. After the intervention, students will participate in a post-test summative assessment (see Appendix F: The pre-test and the post-test is the same test, but different for each unit) to determine the effectiveness of the E-lectures in comparison to the traditional method. These assessments will show me growth of student learning. I will be looking at student performance growth – pre-test to post-test with both methods and with this data, I hope to determine which method is most effective. For this primary research question observational data and inquiry data will also be taken. I will be taking field notes and journaling in hope to identify students' progress, student on task time, difficulties and successes that take place, and other observations that might come up. Following the post-test, Students will take a survey (found in Appendix C) asking their opinion on which method is most effective in increasing their overall performance and understanding of the unit content.

The secondary research questions are as follows: To what extent will the implementation of E-Lectures increase student performance, specifically with my Native American student population? How will the process of participating in E-Lectures

change student's attitudes towards learning History? With the first question the same data sources will be taken as the primary research question, but I will be looking at these data sources as they pertain specifically to my Native American student population in those classes. The hope is that with these data, I can come to conclusions on what method works best with my Native American population and if this is the same for all cultural groups in my classroom. For the last question I will be collecting additional observational and inquiry data specifically on my student's attitudes toward the implementation E-Lecturing. Observational data of journaling and peer observations will be taken. My hope is that a peer educator can observe my class during the different lecture methods and determine which method that they believe that my students were most alert and engaged. Additionally, questions will be added to my survey to inquire about which method they prefer the most. Overall, hopefully the method that the students enjoy the most is also the method that promotes the most student success and learning of the Unit content.

Project Triangulation



Plan for Increasing Validity

There are many types of validity applicable in this action research project. The first is the Truth-Value validity. With my project I will take various measures to make sure that my project is both accurate and truthful. I will attempt to do this through persistent observation of my students while they are participating in my project. I have also created a data collection plan that allows for triangulation of results to maximize validity. It does this by integrating assessment artifacts, observational data and inquiry data. I will make sure to use accurate data recording techniques through use of my grade book and grade master scorer. This will allow me to efficiently and accurately come to conclusions about the effectiveness of E-lectures on the student population in my classroom.

I will also be using Applicability and Consistency validity. I would like my results to be highly applicable to other classrooms, especially in my other Modern American History class periods. It is also my plan to present this information to my department as well as other schools in our district, so that teachers can look at my results and determine the effectiveness that E-Lectures might play in their own classrooms that have similar student populations. The project makeup is very consistent with the demographics of my school population that is 40% Hispanic, 40% Native American, and 20% Caucasian. The two classes that were chosen represent the larger demographic makeup of my school and even the school district. I believe that the data from these classes will truly be transferable to other Social Studies classrooms as well as other subject areas in our school. The design of the project also allows other teachers to

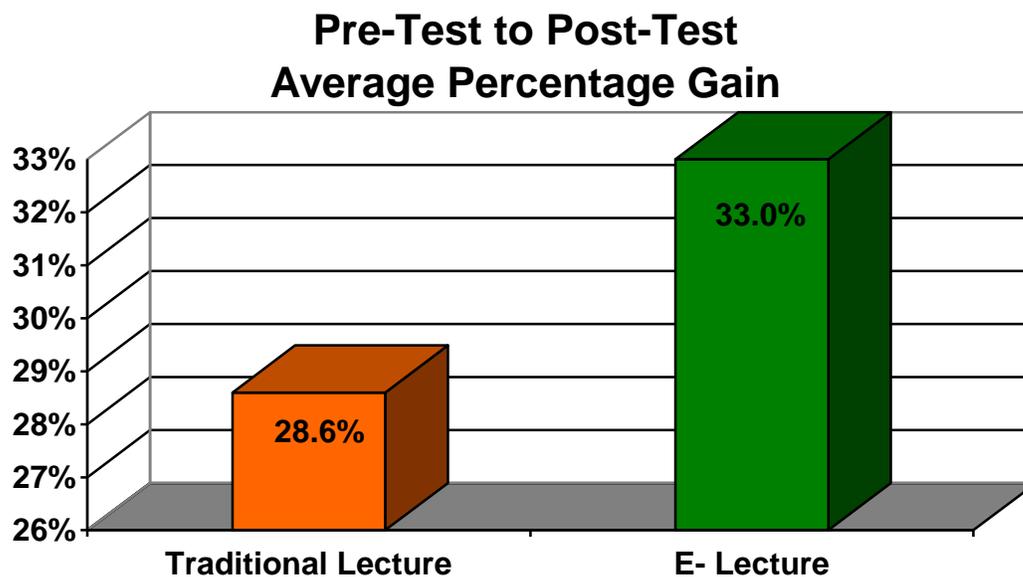
implement the same test framework into their own daily lectures and test student success in their own classrooms with a student population like mine.

Two other forms of validity that are crucial in my project are Outcome validity and Catalytic validity. I will use these results found in this project to directly affect my own teaching. I will do this by participate in an ongoing reflection of my findings as well as enhancing my E-Lectures to make them overall more effective in my classroom. I will also reproduce this testing the future, as well as integrate other activities that may enhance my E-Lectures. I will continue these tests in years to come, because as we know student populations change over time. E-lectures may be the most effective in today's classrooms, but in the future they may not. At the rate of technology a new form may lecturing may come along that will be more applicable for my classroom population. Day by day I will continually reflect on this process to make sure that the process of E-Lectures is the most appropriate way of introducing content to my student population.

To increase validity of my study, I will use a number of strategies. I will be using peer debriefing by discussing my study with my peers. I will ask them for help when it comes to analyzing the results of the study and identifying any biases that may have been clouding my interpretations of the data. I will also attempt to provide a thick description of the setting of my classroom and the process of my study. This will give the audience a true understanding of the setting and give them an opportunity to see if these results are transferable to their own classrooms. I will also share my results, not only with my peers, but with all stake holders. That includes my students, their parents or guardians, and administrators.

Results

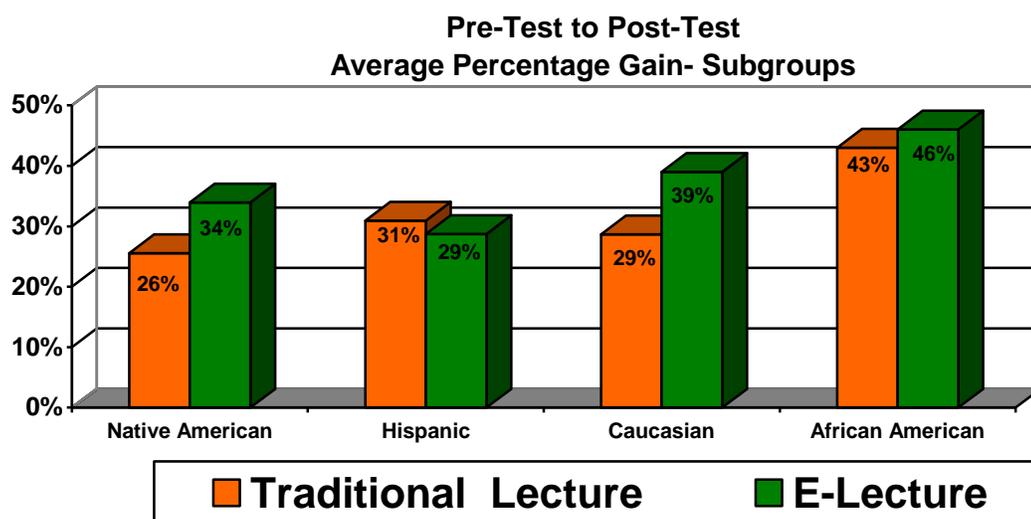
The main goal and primary research question for this project was to explore if the implementation of E-Lectures would increase student performance in an 11th grade Social Studies classroom? The chart below demonstrates the data found by showcasing the percentage gain, pre-test to post test, of each method.



As you can see the traditional method (the control) in this project promoted on average a 28.6% in gain of content knowledge, while the E-lecture promoted on average a 33% gain in content knowledge. That is a total gain on average of 4.4% with the E-Lecture. To some this may not seem like a significant gain, but as a current educator in the world of high stakes testing, a 4.4% gain could be the difference of making or not making federal mandated AYP (Annual Yearly Progress), specifically as it pertains to student success on the Social Studies portion of the NMSBA (New Mexico Standards Based Assessment). Because of these results, I have come to the conclusion that the implementation of E-Lectures significantly improved the performance of my student's acquisition of content knowledge when compared to the traditional method of lecture.

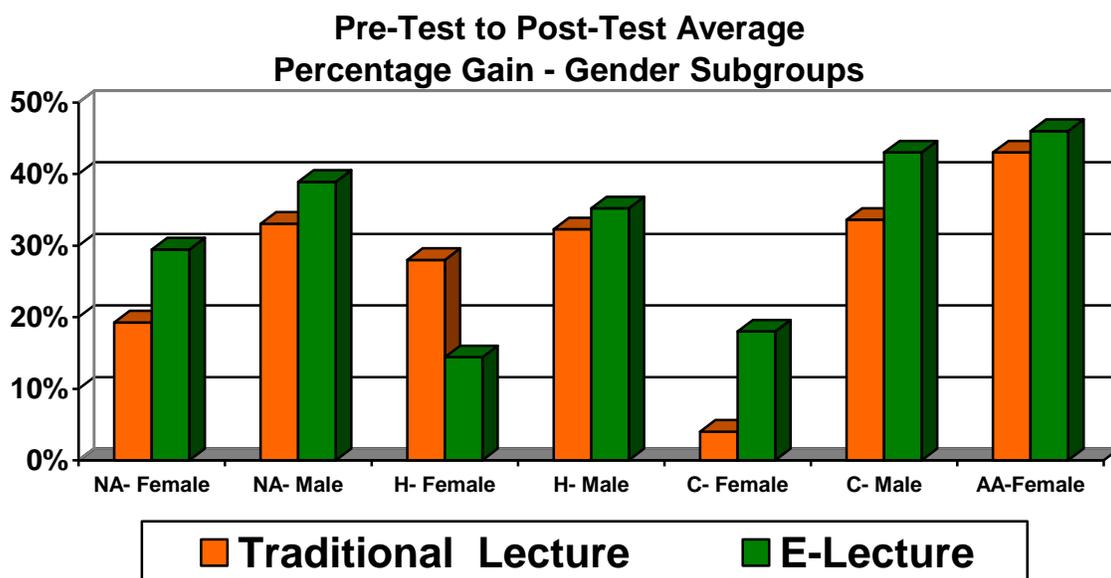
When I started this project I also wanted to explore if the implementation of E-Lecture could help specific cultural groups in my classroom. As I mentioned earlier, after reviewing the NMSBA data at our school, our Social Studies department found that over the past four years, even though we were having success as a department, not all ethnic groups were equal when it came to being proficient on the NMSBA. The one group that was drastically lower when it came to Social Studies proficiency was our Native American population. During the past four years, on average Native American proficiency was 21.76% lower than the Caucasian subgroup and 10.35% lower than the Hispanic sub group (See Appendix H). Even though our school is out performing the majority of schools in New Mexico when it came to proficiency with our Native American subgroup on the Social Studies portion of the NMSBA, something more could be done.

One of my secondary research questions was to find out to what extent will the implementation E-Lectures increase student performance, specifically with my Native American student population. The chart below highlights the data that I found as it pertains to specific cultural groups in my classroom.



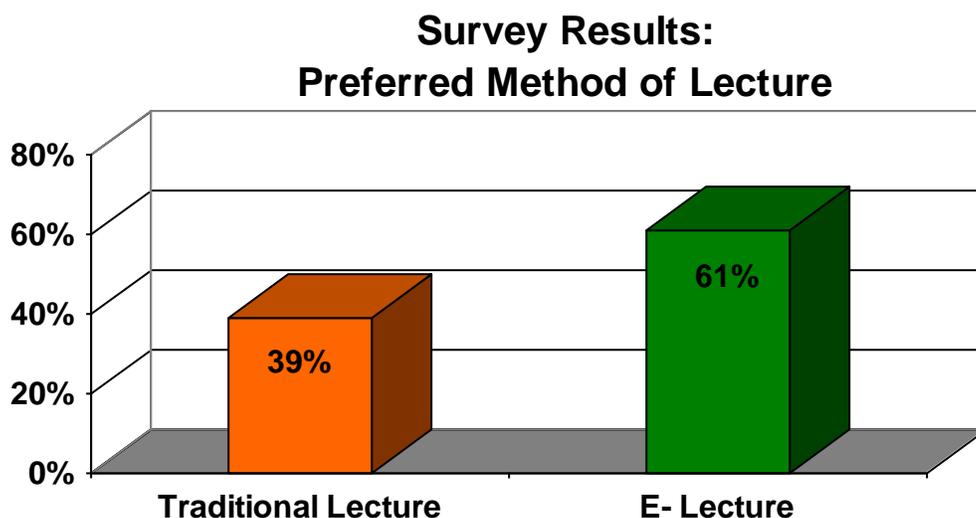
On average, my Native American students gained 8% in content knowledge, my Caucasian students gained 10%, and my one African American student gained 3%. This data in my opinion demonstrates that E-Lectures could significantly help my Native American students acquire class content. It is also important to note that the only subgroup that decreased with the use of the E-lecture was my Hispanic population, which was by 2%. I am planning on doing further research in the future to determine if this again would be the case, but as a practical and research based educator, individual classroom modifications could be made in the classroom setting. For example, conducting the traditional method with those who are more successful with that method, and supplying E-lectures for those students that do better with those means. This would in a sense, create a classroom of true individualized instruction and in my opinion a test like this one should be conducted at the start of class and throughout each school year.

I also wanted to break down the test data even more to see if gender contributed to pretest/post test percentage gain. The next graph below shows this specific data as it pertains to gender.



This data shows that surprisingly six of the seven subgroups increased with the use of E-Lectures. Native American Females, Anglo Males and my sole Anglo female benefited the most from the use of E-Lectures gaining over 10 percentage points with the E-lecture. The only subgroup to decrease was Hispanic Females. Again specific modifications could be made in order to individualize instruction for those students. As a teacher, I can imagine myself lecturing through the traditional method to a small number of students in my classroom while others participate in an E-Lecture over the same content. I believe that this would truly maximize learning and the small group instruction of the traditional method would even amplify the effectiveness for those who do better by traditional means.

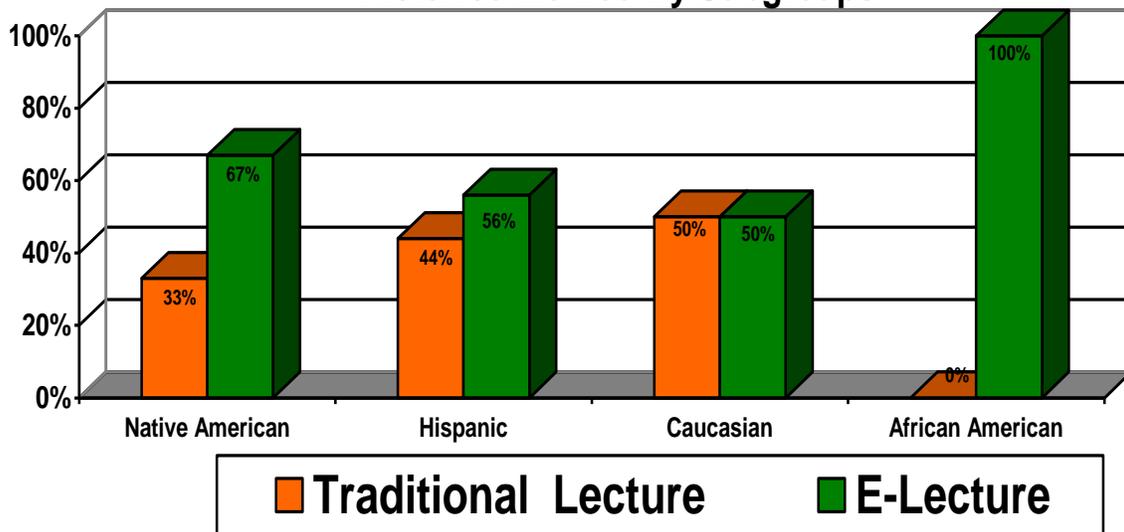
My next secondary research question for this project was to see if the process of participating in E-Lectures would change student's attitudes towards learning History. In a sense, I really wanted to know which method that they preferred the most when learning about history. One way that I collected data for this question was to conduct a student survey at the end of the project. The chart below highlights this data.



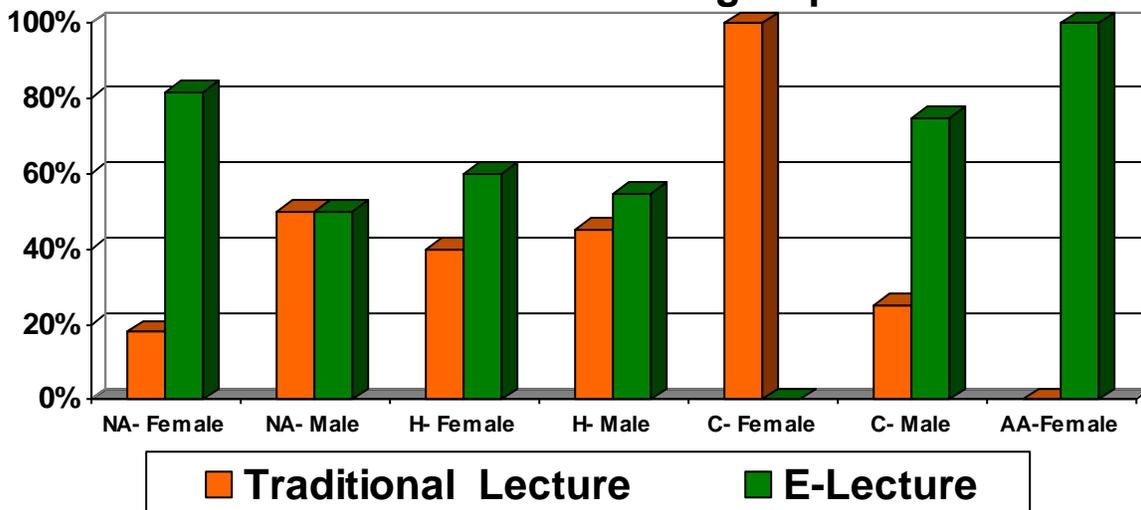
As you can see on average 61% of my students preferred the E-Lecture over the Traditional Method. After reviewing the literature and watching students participate in the e-lecture this was not surprising. After reviewing my field notes and discussing the activities with my peer observer, we found that overall students seemed more engaged while participating in the E-Lecture. There was also less classroom distractions and the E-Lecture was a more effective way to use class time. It also seemed to appeal to students who truly enjoy the use of technology. Many times when students come to school are stripped of everything technology. Rules like no cell phones and no Mp3 players truly limit their interactions with technological items that they enjoy the most. E-Lectures may not fully fill this void, but they give students effective time with technological content. It is also important to note that I also conducted this survey with all my classes, even though they were not part of the test group. Their data was even more supportive of the integration of E-Lectures with 80% of the students preferring the E-Lecture method.

Like the previous data, I also wanted to break the survey down by ethnicity and also by gender to see if any themes emerged. The charts below show this specific data where I found that on average, all groups preferred the use of E-Lectures over that of the Traditional Method. The first chart demonstrates that specifically my Native American and Hispanic students prefer the E-Lecture. The Second chart breaks this data down further by gender. The only subgroup in this chart of students who preferred the traditional method was my sole Caucasian Female student. It is also important to note that though she preferred that the Traditional Method, she amazingly enough gain 14 percentage points by utilizing the E-Lecture.

**Survey Results-
Preferred Method By Subgroups**



**Survey Results Preferred
Method - Gender Subgroups**



The last data that reviewed was my student’s short answers on the survey. Again I wanted to see which method they liked the best when learning about history and why specifically they preferred that method. After analyzing this data I found that some common themes emerged. Students who preferred the Traditional Method did so

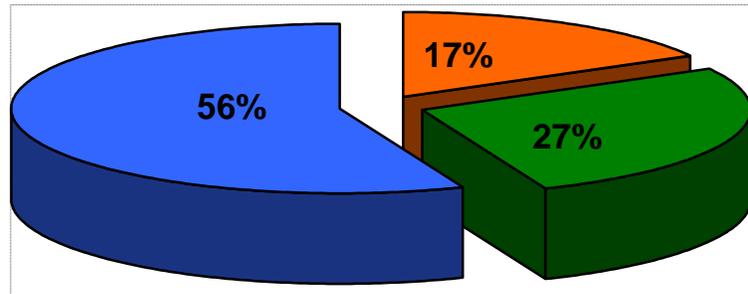
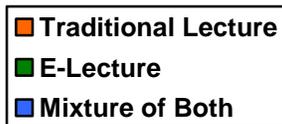
because they preferred listening and watching an actual person instead of sitting in front of the computer. Others mentioned that they had difficulty paying attention and were distracted by other items on the web. The majority of students, who disliked the E-Lecture, disliked it because it didn't provide social interaction and questioning, with the teacher and most importantly their peers. It is my professional understanding that the majority of my students enjoy school solely because of the social benefits that it provides. These students felt like they were losing some of those benefits. A solution of this problem would be to conduct class discussions after the E-lecture. This would provide for a deeper understanding of the topic as well as the social interaction that students crave. In this test I did not conduct discussions in order to truly test and validate my results. In the future we will have discussions after E-Lectures.

Students who preferred the E-Lecture mentioned various reasons. They enjoyed that the E-Lecture integrated technology and that if they missed class for athletics or other reasons they could still benefit from the content. They also mentioned that they like the pacing of the E-Lecture. Those students who wanted to go fast could go at their own speed, and those students who work at a slower pace could pause and rewind. Another theme that emerged was that the student's really enjoyed that they were not distracted. Many times classroom disruptions such as other students talking, classroom visitors, or announcements over the intercom slow down or distract their attention. The E-Lecture provided them with a focused environment where they could work at their own speed.

With the survey I also asked two more important questions. 1. Which method did they think helped them learn history the best? 2. Would they prefer the class to use the

only the Traditional Method, the E-lecture, or a Mixture of both? For the first question results mirrored the preference results. 61% of the students thought the E-lecture was the best in teaching history and 39% thought that the Traditional method was the best in teaching history. Their reasoning mirrored their previous replies mentioned above. With the next question the results were a little different. 17% of the students would like to only use the traditional method, 27% of students would prefer to only use the E-Lecture method, and 56% of students would like to use a mixture of both.

Survey- Lecture Preference



Conclusion

At the beginning of this project, I really had some questions regarding the effectiveness of my lectures. My students were at times bored and either could not keep up with my pace or for others I was moving too slow. Like my students, many times I found myself bored as well, lecturing the same content for six periods with many unforeseen distractions. So I set out in search of a method that would not only benefit me as an educator, but more importantly benefit my students and promote learning in my classroom. I found a tool that promoted students interests in technology, enabled them to work at their own speed, and effectively promoted the acquisition of content knowledge. This tool is called the E-Lecture. After testing this method of lecturing in my own classroom, I found that my students acquired content knowledge at a greater percentage (4.4%) and that it particularly benefited groups that historically scored low on standardized assessments in Social Studies (My Native American population increased by 8%). I also conducted a student survey that demonstrated that the majority (69%) of students in my class prefer the E-lecture over my traditional lecture.

I feel that this process has truly benefited my classroom and it will continue to benefit my students for generations to come. It is also my intention to continually reflect on the implementation tool and revamp my own lecturing methods so that I may benefit all students in my classroom. This means, utilizing this data as well as future data to determine methods to help students acquire content knowledge most effectively and efficiently. I foresee promoting individualized instruction by creating E-Lectures for those students who enjoy it and benefit from it and conducting traditional lectures to

others in a small group setting. It is my hope that this will make a substantial impact on my class and my schools test scores on the NMSBA.

Reference

- Brecht, H., & Ogilby, S. M. (2008). Enabling a comprehensive teaching strategy: video lectures. *Journal of Information Technology Education*, 7(IIP71-IIP86).
- Demetriadis, S., & Pombortsis, A. (2007). e-Lectures for flexible learning: a study on their learning efficiency. *Journal of Educational Technology & Society*, 10(2), 147-157.
- Folley, D. (2010). The lecture is dead long live the e-lecture. *Electronic Journal of e-Learning*, 8(2), 93-100.
- Gosper, M., Green, D., McNeil, M., Phillips, R., Preston, G. & Woo, K. (2008). The impact of web-based lecture technologies on current and future practices in learning and teaching. *Australian Learning and Teaching Council*.
<http://www.altc.edu.au/resource-impact-webbased-lecture-technologies-macquarie-2008>
- Jadin, T., Gruber, A., & Batinic, B. (2009). Learning with e-lectures: the meaning of learning strategies. *Journal of Educational Technology & Society*, 12(3), 282-288.
- Jungst, S., Licklider, B. & Wiersema, (2003). Providing support for faculty who wish to shift to a learning centered paradigm in their higher education classrooms. *The Journal of Scholarship of Teaching and Learning*, 3 69-81.
- Kekkonen–Moneta, S. S., & Moneta, G. B. (2002). E–Learning in Hong Kong: comparing learning outcomes in online multimedia and lecture versions of an introductory computing course. *British Journal of Educational Technology*, 33(4), 423-433.

- Lents, NH; Cifuentes, OE. (2009) Web-based learning enhancements: video lectures through voice-over powerpoint in a majors-level biology course. *Journal of College Science Teaching* 39(2), 38-46
- Machemer, P. L., & Crawford, P. (2007). Student perceptions of active learning in a large cross-disciplinary classroom. *Active Learning in Higher Education*, 8(1), 9-30.
- Marbach-Ad, G., Seal, O., & Sokolove, P. (2001). Student attitudes and recommendations on active learning. *Journal of College Science Teaching*, 30(7), 434
- Neumann, D. L., Neumann, M. M., & Hood, M. (2011). Evaluating computer-based simulations, multimedia and animations that help integrate blended learning with lectures in first year statistics. *Australasian Journal of Educational Technology*, 27(2), 274-289.
- Nicholas, A. J. (2008). Preferred Learning Methods of the Millennial Generation. *International Journal of Learning*, 15(6), 27-34.
- Nimon, S.(2007). Generation y and higher education: the other ytk. *Journal of Institutional Research*, 13(1), 24-41.
- Pardue, K. T., & Morgan, P. (2008). Millennials considered: a new generation, new approaches, and implications for nursing education. *Nursing Education Perspectives*, 29(2), 74-79. Retrieved from EBSCOhost.
- Phillips, P., & Loch, B. (2011). Building lectures and building bridges with socio-economically disadvantaged students. *Journal of Educational Technology & Society*, 14(3), 240-251

Ridgway, P. F., Sheikh, A., Sweeney, K. J., Evoy, D., McDermott, E., Felle, P., Hill, A.

D. and O'Higgins, N. J. (2007), Surgical e-learning: validation of multimedia web-based lectures. *Medical Education*, 41(2), 168–172.

Twigg, C. A. (1999). Improving learning and reducing cost: redesigning large-enrollment courses. *The Pew Learning and Technology Program*.

<http://www.thencat.org/Monographs/ImpLearn.html> [accessed April 16 2009].

Struyven, K., Dochy, F., & Janssens, S. (2008). Students' likes and dislikes regarding student-activating and lecture-based educational settings: Consequences for students' perceptions of the learning environment, student learning and performance. *European Journal of Psychology of Education* 23(3), 295-317.

Van Dijk, L. A., Van Der Berg, G. C., & Van Keulen, H. H. (2001). Interactive lectures in engineering education. *European Journal of Engineering Education*, 26(1), 15-28.

Appendix A

Literature Review Outline

1. Problems with traditional lecture
 - a. Major mode of teaching (Demetriadis and Pombortsis 2007)
 - b. Passive student listeners (Lents and Cifuentes 2009 and Twigg 1999) (Machemer & Crawford, 2007).
 - c. Not effective in large classes (Kekkonen-Moneta and Moneta 2002)
 - d. Not effective with all populations
 - i. Non-traditional low income students (Lents and Cifuentes 2009)
 - ii. Other cultural backgrounds (Folley 2010)
 - iii. Tech savvy generations (Folley 2010) (Pardue & Morgan 2008); (Nicholas 2008), and (Nimon, 2007)
 - e. Active Learning vs. Traditional Lecture (Marbach-Ad, Seal, & Sokolove, 2001), (Jungst, Licklider, & Wiersema, 2003), (Struyven, Dochy, & Janssens, 2008), & (Van Dijk, Van Den Berg, & Van Keulen, 2001).
2. Benefits of the E-Lecture
 - a. What is the E-Lecture (Demetriadis and Pombortsis 2007)
 - b. Students can pause information (Lents and Cifuentes 2009)
 - c. Re-Wind and re-listen (Lents and Cifuentes 2009) (Brecht and Ogilby 2008).
 - d. They enjoy it more than traditional methods (Ridgway, Sheikh, Sweeney, Envoy, McDermott, Felle, Hill, and O'Higgins 2007)
 - e. Flexibility (Demetriadis and Pombortsis 2007 & Gosper, Green, McNeill, Phillips, Preston, and Woo 2008)
 - f. Acquiring information (Neumann, Neumann, and Hood 2011)
3. Negatives of the E-Lecture
 - a. Keeping students on task (Lents and Cifuentes 2009)
 - b. Lack immediate teacher feedback (Jadin, Gruber, and Batinic 2009)
 - c. Computer problems (Neumann, Neumann, and Hood 2011)
 - d. Technology experience (Kekkonen-Moneta and Moneta 2002)
4. Findings

- a. Students succeed at same rate (Lents and Cifuentes 2009, Kekkonen-Moneta and Moneta 2002, & Demetriadis and Pombortsis 2007)
- b. Helps low Socio-economic students (Phillips and Loch 2011)
- c. Benefits visual learners (Neumann, Neumann, and Hood 2011),
- d. Both students and teachers value it (Folly 2010) & (Brecht and Ogilby 2008)
- e. Students enjoy it more than traditional methods (Demetriadis and Pombortsis 2007)
- f. Concluding statement

Appendix B

Timeline

October 24-28

- Contact principal and school district to secure proper permission for the study
- Hand out and discuss the informed consent forms with the students

October 31-November 4

- Initiate parent contacts and explain the research project in-depth
- Collect informed consent forms

November 7 - November 11 - Implementation

- Nov 7: Student pre-test #1

Class A: Traditional

Class B: E-Lecture

- Nov 8: Student Post-test #1

- Nov 9: Student Pre-test #2

Class A: E-Lecture

Class B: Traditional

- Nov 10: Student Post-test #2

- Nov 11: Student Survey

November 14-24

- Analyze data
- Create rough draft of action research project

November 28-December 5

- Create final draft and submit

Appendix C
Student Survey

Name _____

Class Period _____

Directions: Please answer the questions on this survey. There is no right or wrong answers and you will receive a 100% just by answering all questions to the best of your ability. Please be honest as your answers will in no way affect your grade.

1. Circle the method of lecture that you like the most?

E-lecture or Traditional Lecture

2. Why did you like this method the most?

3. What method did you like the least?

E-lecture or Traditional Lecture

4. Why did you like this method the least?

5. What method do you think help you learn History the best?

E-lecture or Traditional Lecture

6. Why do you think that method helped you learn History the best?

7. If you had to pick one lecture style for the rest of the year what style would you choose?

E-lecture or Traditional Lecture or Mixture of both

8. Why did you make this choice? Explain.

9. Is there anything else that you would like to add?

Appendix D

Informed Consent Form

Authorization for a Minor to serve as a Research Participant

Dear Parents,

My name is Milo McMinn and I am your child's 11th Grade Modern American History teacher. I will be conducting a study in my classroom to determine which lecture method is most effective, The Traditional method or the E-Lecture. An E-Lecture is a lecture where I digitally record my lecture and students listen to it via a computer. The reason that I am conducting this research is to improve my own skills as a teacher and to also zero in on which method is most effective in teaching History to the student population in my classroom. I am writing to ask permission to use the data that I collect from your child during this process. Participation in this study involves only regular classroom activities. You may contact me at any time regarding your child's participation. My phone number is 505-240-0674 and my email is milo@nmsu.edu. The Principal or the school has approved this study.

The purpose of this study is to determine if the instructional method of E-Lectures will positively affect student performance in my 11th grade Modern American History Classroom. The study will take place at Grants High School in my classroom and will take place during the month of November. I am simply testing to see if utilizing media sources like the computer when giving a lecture improve my student's success on unit tests. During the study, I will collect various forms of data to determine whether the E-Lectures were successful. Possible types of data I will collect include: student test scores, student surveys, video, photographs, and observational reports written by myself.

Benefits of participating in this study include a classroom environment where instruction is solely based off your child's individual needs which in turn will improve their overall classroom performance. Only myself and 6 other teachers in the history department will have access to the data collected in the study. Your child's participation in the project is strictly confidential. I will be the only teacher that has access to your child's identity.

Use of data from your child is voluntary. You may contact me at any time if you do not wish to have your child's data included in the study.

Please check the appropriate box below and sign the form:

- I do not give permission for my child's data to be included in this project.
- I give permission for my child's data to be used in the study. I understand that I will receive a signed copy of this consent form. I have read his form and understand it.
 - I additionally give permission for a picture of my child to be used in the study report and I understand that their name will not be listed.

Students Name

Date

Parent/Guardian Signature

Appendix E

Authorization for a School to serve as a Research Study

Project: E-Lecture project in Mr. McMinn's classroom

Researcher: Milo McMinn

Employment Affiliation: Grants Cibola County Schools

Location of Study: Grants High School

Supervising University Professor: Dr. Miguel Licona – NMSU College of Education

Purpose of the Study: The purpose of this study is to determine if the instructional method of E-Lectures will positively affect student performance in my 11th grade Modern American History Classroom.

Procedures to be followed: Pre-test, Traditional Lecture, Post-test, Pre-test, E-Lecture, Post-test, & Survey.

Time and Duration of the study: November 7th -11th 2011

Benefits of the study: Benefits of participating in this study include building a classroom environment where instruction is solely based off student's individual needs which in turn will hopefully improve overall classroom performance.

Person who will have access to the records, data, tapes, or other documentation: Milo McMinn and other members of the History Department.

I understand that participation in this project is voluntary, and I understand that a parent or guardian may withdraw his/her child from this study at any time by notifying the researcher.

Statement of Confidentiality:

The participation of the students in this project is confidential. Only the researcher, Collaborators, and supervising professor will have access to the students' identities and to information that can be associated with their identities

Please check the appropriate box below and sign the form:

- I give permission for school to participate in this project. I understand that I will receive a signed copy of this consent form. I have read this form and understand it.
- I do not give permission for my school to participate in this project

Principal Signature: _____

Date: _____

Appendix F

Name: _____ Class Period : _____ Date: _____

Dust Bowl- Pre & Post Test**Multiple Choice***Identify the letter of the choice that best completes the statement or answers the question.***IDENTIFYING MAIN IDEAS**

- _____ 1. A major environmental crisis of the 1930s was known as
- the Dust Bowl.
 - the Grapes of Wrath.
 - Black Tuesday.
 - the Great Crash.
- _____ 2. What was one effect of the dust bowl, wage cuts, and unemployment of the 1930s?
- The divorce rate nearly tripled.
 - Banks pardoned thousands of farm mortgages.
 - Hoovervilles sprang up in the throughout our nation
 - Most industries gave top jobs to married women.
- _____ 3. Many farms were auctioned off when farmers
- began to irrigate crops.
 - could not pay their mortgages.
 - combined households to save money.
 - destroyed crops to protest low prices.
- _____ 4. Dorothea Lange's photographs of migrant workers
- appeared in *The Grapes of Wrath*.
 - angered many unemployed mothers.
 - were lost in the Dust Bowl.
 - helped win aid for the workers.
- _____ 5. People's physical and mental health declined as a result of
- poor diet and anxiety.
 - a soaring divorce rate.
 - increased wages.
 - Farm Security Administration programs.
- _____ 6. During the Depression working women were
- embarrassed to be working.
 - respected for being family providers.
 - paid extra if they got married.
 - accused of taking jobs away from men.

- _____ 7. What did some people agree to do when a foreclosed farm was auctioned?
- a. hold an auction party
 - b. cooperate to buy and run the farm
 - c. keep bids low
 - d. give the original owners free seeds

Matching

IDENTIFYING KEY TERMS, PEOPLE, AND PLACES

Match each item with the correct statement below. You will not use all the items.

- a. Penny Auction
- b. Woodie Guthrie
- c. Jalopy
- d. Black Sunday
- e. Dorothea Lange

- _____ 8. Famous folk musician who sang about experiences with the dust bowl
- _____ 9. Famous photographer who took pictures of people affected by the dust bowl
- _____ 10. Where neighbors buy items at a very low cost and then give those items back
- _____ 11. A car used by Okies who were headed west.
- _____ 12. The day the great dust storm hit, blocking out the sun

Essay

CRITICAL THINKING

13. **Drawing Conclusions** Explain the effects that the dust bowl had on the common man particularly on farmers in the United States.

Name: _____ Class Period : _____ Date: _____

The Great Depression- Pre & Post Test

Matching

IDENTIFYING KEY TERMS, PEOPLE, AND PLACES

Match each item with the correct statement below. You will not use all the items.

- a. Hawley-Smoot tariff
- b. Black Tuesday
- c. Hooverville
- d. Dust Bowl
- e. Twenty First Amendment

- _____ 1. Shanty towns built by the homeless during the Great Depression
- _____ 2. October 29, 1929 - day when the stock Market crashed
- _____ 3. Large dust storms in the central part of the United States.
- _____ 4. Amendment that repealed Prohibition
- _____ 5. 1930 import tax, the highest in history

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

IDENTIFYING MAIN IDEAS

- _____ 6. The collapse of the American economic system
 - a. affected only the German economy.
 - b. boosted American investment in Europe.
 - c. led to a worldwide depression.
 - d. increased demand for American-made goods.
- _____ 7. During the Depression, wage cuts and unemployment eventually affected
 - a. mainly women.
 - b. factory workers only.
 - c. mainly farmers.
 - d. all levels of society.
- _____ 8. Throughout most of the 1920s, Americans were generally
 - a. worried that the stock market would crash.
 - b. confident that business would bring continued prosperity.
 - c. delighted that wealth was evenly distributed.
 - d. concerned with economic danger signs.
- _____ 9. During the Depression, African Americans, Hispanics, and Asian Americans
 - a. made great strides in equal rights legislation.
 - b. often lost jobs to white laborers.
 - c. were less affected than other groups.
 - d. were encouraged to start their own businesses.

- ___ 10. In 1933, the Twenty-first Amendment brought an end to
- Prohibition.
 - stock speculation.
 - the Depression.
 - the United States Communist Party.
- ___ 11. Not long after Black Tuesday, the stock market crash was affecting
- only those who had invested heavily in stocks.
 - wealthy industrialists almost exclusively.
 - millions of Americans, many of whom had never owned stocks.
 - mainly stockbrokers and banks.
- ___ 12. After the Crash, thousands of American banks closed, because they
- had to print new money.
 - could not return depositors' money.
 - had invested in European banks.
 - charged too high an interest rate.
- ___ 13. To get the Bonus Army marchers to leave the capital, General MacArthur
- used force.
 - negotiated with the veterans' leaders.
 - gave a patriotic speech.
 - paid them their bonus.
- ___ 14. Roosevelt easily won the 1932 presidential election by promising
- a New Deal for Americans.
 - repeal of the Hawley-Smoot Tariff.
 - lower taxes.
 - a White House conference on business.
- ___ 15. What was the Second New Deal?
- a series of tax laws that primarily benefited the rich
 - a program designed to balance the national budget
 - a repeal of most New Deal policies
 - a wave of legislation including more social welfare benefits

Essay

CRITICAL THINKING

16. **Drawing Conclusions:** What kind of advice do you think a survivor of the Great Depression might give younger adults today?

Appendix G

Data Charts

	Native American 21		Hispanic 16		Caucasian 6		African American 1	
	E-lecture	Traditional	E-lecture	Traditional	E-lecture	Traditional	E-lecture	Traditional
Total Gain	713	542.6	459.4	495	234	172	46	43
Average	33.95%	25.84%	28.71%	30.94%	39%	28.67%	46%	43%
Survey	14	7	9	7	3	3	1	0
Survey %	67%	33%	56%	44%	50%	50%	100%	0%
	Native American-Female 11		Hispanic- Female 5		Caucasian - Female 1		African American-Female 1	
	E-lecture	Traditional	E-lecture	Traditional	E-lecture	Traditional	E-lecture	Traditional
Total Gain	324	212	72	140	18	4	46	43
Average	29.45%	19.27%	14.40%	28%	18%	4%	46%	43%
Survey	9	2	3	2	0	1	1	0
Survey %	82%	18%	60%	40%	0%	100%	100%	0%
	Native American-Male 10		Hispanic- Male 11		Caucasian - Male 5			
	E-lecture	Traditional	E-lecture	Traditional	E-lecture	Traditional		
Total Gain	389	330.6	387.4	355	216	168		
Average	38.90%	33.06%	35.20%	32.27%	43%	33.60%		
Survey	5	5	6	5	3	1		
Survey %	50%	50%	55%	45%	75%	25%		

	# of Students	E-Lecture Method – % Gain	Traditional Method – % Gain	Survey - E-lecture	Survey Traditional
Class A- pre to post gain	21	31.45%	28.43%	76.00%	34.00%
Class B- pre to post gain	23	31.60%	28.94%	48.00%	52.00%
Native Americans	21	33.95%	25.84%	67%	33%
Hispanic	16	28.71%	30.94%	56%	44%
Caucasian	6	39%	28.67%	50%	50%
African American	1	46%	43%	100%	0%
Native American Male	10	38.90%	33.06%	50%	50%
Native American Female	11	29.45%	19.27%	82%	18%
Hispanic- Male	11	35.20%	32.27%	55%	45%

Hispanic- Female		5	14.40%	28%	60%	40%
Caucasian - Male		5	43%	33.60%	75%	25%
Caucasian - Female		1	18%	4%	0%	100%
African American Female		1	46%	43%	100%	0%
Class A						
Female A- Native 1	N	36		5	1	
Female A- Native 2	N	-7		18		1
Female A- Native 3	N	7		5	1	
Female A- Native 4	N	35		17	1	
Female A- Native 5	N	64		35	1	
Female A- Native 6	N	14		30	1	
Female A- Native 7	N	36		17	1	
Male A- Native 1	N	17		17		1
Male A- Native 2	N	28		26	1	
Male A- Native 3	N	21		30	1	
Female A- Hispanic 1	H	14		-12	1	
Female A- Hispanic 2	H	7		68	1	
Male A- Hispanic 1	H	38		32	1	
Male A- Hispanic 2	H	43		54		1
Male A- Hispanic 3	H	71.4		70	1	
Male A- Hispanic 4	H	34		12	1	
Male A- Hispanic 5	H	50		29	1	
Male A- Caucasian 1	A	50		34	1	
Male A- Caucasian 2	A	24		76		1
Male A- Caucasian 3	A	28		16	1	
Male A- Caucasian 4	A	50		18		1
			31.45%	28.43%	16	5
Class B						
Female B- Native 1	N	46		14	1	
Female B- Native 2	N	19		-7		1
Female B- Native 3	N	58		64	1	
Female B- Native 4	N	16		14	1	
Male B- Native 1	N	41		49.6		1
Male B- Native 2	N	13		57		1
Male B- Native 3	N	88		76	1	
Male B- Native 4	N	36		7	1	
Male B- Native 5	N	59		15		1
Male B- Native 6	N	25		35		1
Male B- Native 7	N	61		18	1	
Female B- Hispanic 1	H	13		28	1	
Female B- Hispanic 2	H	6		35		1
Female B- Hispanic 3	H	32		21		1
Male B- Hispanic 1	H	12		30		1
Male B- Hispanic 2	H	13		33		1
Male B- Hispanic 3	H	60		29	1	

Male B- Hispanic 4	H	18	7		1
Male B- Hispanic 5	H	36	43		1
Male B- Hispanic 6	H	12	16	1	
Female B- Caucasian 1	A	18	4		1
Male B- Caucasian 1	A	64	24	1	
Female B-African American 1	AA	46	43	1	
		31.60%	28.94%	11	12
		1452.4	1252.6	27	17
		33.01%	28.56%	61%	39%

Appendix H

Grants High School AYP Growth Data*SOCIAL STUDIES AYP SCORES*

	2011	2010	2009	2008
Proficient and Above-Social Studies	46.50%	37.60%	19.30%	26.70%
Advance- Social Studies	4%	3.50%	1.10%	1.70%
Proficient- Social Studies- Social Studies	42.50%	34.10%	18.20%	25%
Nearing Proficiency- Social Studies	41.00%	43.90%	47.10%	55.60%
Beginning Step- Social Studies	12%	17.30%	31%	15%
Proficient and Above- Female	41.20%	27%	16.80%	25.50%
Proficient and Above- Male	51.50%	48.80%	21.70%	28%
Proficient and Above-Caucasian	55.20%	57.10%	30.20%	37.20%
Proficient and Above- Hispanic	50.50%	31.90%	24.60%	27%
Proficient and Above- American Indian	37.00%	29.50%	8.50%	17.60%
Proficient and Above- Economically Disadvantaged- Social Studies	41.20%	31.90%	16.20%	21%