The introduction of interactive multimedia DVD to the electronic media studies

Randal L. Lau

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The introduction of interactive multimedia DVD to the electronic media studies

Abstract
The purpose of this project is to show how technology is able to improve student achievement and increase student productivity. Finding new and exciting ways to integrate technology into today’s classrooms is a challenge. The use of an interactive DVD will be introduced to the students in the Electronic Media Studies classes in the fall of 2003. The project was based upon the research reviewed and documented within this literature review. Students will no longer be listening to the instructor lecturing in front of the classroom, they will be actively involved in an interactive multimedia presentation, where they are free to explore the information and develop their own conclusions, using higher order thinking skills.

Keywords
Computer-assisted instruction; Educational technology;

Disciplines
Curriculum and Instruction | Educational Technology | Other Film and Media Studies

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The Introduction of Interactive Multimedia DVD

To the Electronic Media Studies

A Graduate Project

Submitted to the

Division of Education

Department of Curriculum and Instruction

In Partial Fulfillment

Of The Requirements for the Degree

Master of Arts

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8/21/03
Date Approved

Terri McDonald
Graduate Faculty Reader

8-22-03
Date Approved

J. Ana Donaldson
Graduate Faculty Reader

8/21/03
Date Approved

Rick Traw
Head, Department of Curriculum and Instruction
ABSTRACT

Technology is often looked at as a savior to education. Technology itself is not going to improve education. Simply introducing technology to students will not increase student achievement or productivity, the technology must be integrated into the curriculum with specific goals and objectives in mind. The purpose of this project is to show how technology is able to improve student achievement and increase student productivity. Students need to be motivated to learn. Finding new and exciting ways to integrate technology into today’s classrooms is a challenge. Technology in the classroom is here to stay and teachers need to know how to integrate it into the curriculum. The use of an interactive DVD will be introduced to the students in the Electronic Media Studies classes in the fall of 2003. The project was based upon the research reviewed and documented within this literature review. Students will no longer be listening to the instructor lecturing in front of the classroom, they will be actively involved in an interactive multimedia presentation, where they are free to explore the information and develop their own conclusions, using higher order thinking skills.
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Introduction

The project developed by the author was an interactive multimedia digital video disc (DVD), for the students in an electronic media class in the Council Bluffs Community school district. The class is part of a hands-on vocational program jointly administered by the Council Bluffs Community Schools and Iowa Western Community College. Upon the completion of the program, students will have earned three college credits. Students in the class work in modules that take approximately ten class days or fifteen to twenty hours. Module capstone experiences range from a live ten-minute newscast to computer animation.

The instructor was having problems allocating his time to answer student questions during the first two days of the modules. There were six different groups concurrently starting six different assignments. The instructor was having difficulty budgeting time and getting students started on their projects. Students were handed a packet with all of the directions and information to get them started. Some students were complaining that the instructor was busy with other students when they had questions.

To address this issue the instructor developed an interactive multimedia DVD for students to use the first two days of the digital-imaging module. All of the information that the instructor taught the students in the first two days of the module was transferred to the DVD. The DVD includes information ranging from file formats for storing the images, composition tips and explanations of image sizes and resolution.

Purpose Statement

The interactive DVD is not meant to take the place of the teacher but to enhance student learning and productivity. The tool is similar to having a help index filled with
frequently asked questions and answers. Students are able to access the information on the DVD and see examples of digital photos. Students who miss the first day or two of the module are able to check out the DVD and do their assignments at home. Having access to photos on an interactive DVD allows students to see samples of good and bad techniques. The use of the DVD by the students frees up more time for the instructor to spend time with students and allows more equity and better time management. Another advantage to using the interactive DVD is that it allows the students to be at the center of their own learning. The use of an interactive DVD gives students choices and a new learning tool. Students are not thrown to the proverbial wolves; they still have guidance and direction from the teacher.

Methodology

The literature review refers to articles from trade journals, magazines, books, studies provided by the US government, the World Wide Web, and texts used by the author in his masters degree program. The author thought it was important for the credibility of the paper to cite educational publications. The reviewer determined that the authors of the articles and studies were respected and credible within their fields. Sources were obtained from the University of Nebraska Omaha library, Wilson Web educational database, and the Council Bluffs Public Schools’ professional library. The five domains of instructional technology were very useful in the production of the project. The five domains according to Seels and Richey (1994) are Design, Management, Development, Utilization, and Evaluation. All five domains are dependent upon each other. It is hard to design a project if the developer does not know how what
kind of resources he or she will be working with, what if any team members will be
involved and how the project will be utilized and evaluated.

Literature Review

It is important for educators to know the history of technology in an education
setting. By knowing how technology was introduced and used in the past, teachers will
better know what technologies and strategies have shown positive gains in student
achievement and which ones have failed. It is also important to know how to plan and
produce multimedia for the classroom. Having a good plan and tying the technology to
standards and benchmarks is a vital part of the development of multimedia for the
classroom. Educators often overlook copyright laws. There are serious penalties to
educators who are caught violating copyright laws. The literature review will discuss
some common copyright laws that are often overlooked and provide an explanation of the
fair use laws for educators. The future use of technology will also be discussed.
Knowing what advancements are possible for tomorrow will help in the integration of
technology in today’s classroom.

History of Technology in Education

The beginning of the twentieth century brought many changes to business,
education, and society as a whole. Technology changed the way Americans operated
their factories and schools. Teachers and administrators in the early twentieth century
faced many of the problems that teachers and administrators face today. Some of these
common problems include unfamiliar technology, lack of training, and lack of money. A
new way of thinking was affecting the way business and education were being operated.
This new way of thinking was called progressivism (Cubin, 1986). Progressivism
challenged the formal structure of education. Supporters of progressivism wanted teachers and students to work on activities and projects that encouraged working collaboratively instead of having to sitting in rows with their hands folded waiting to be told what to do (Cubin 1986).

The early part of the twentieth century brought the invention and use of radio and television into the classroom. Many of the teachers were hesitant to use film and radio in the early 1900s for many different reasons: lack of skills by the teachers, cost of film and equipment, accessibility of the equipment, and finding appropriate material to use for the classroom (Cubin 1986). Many of the reasons listed are still used by teachers today when asked why they do not implement new classroom technologies. One of the reasons teachers feel anxious about adding technology to their curriculum is the fear of being replaced by technology and the lack of available research.

Kliebard (1987) points out that Edward A Ross thought that schools needed to have a greater social purpose. Ross was also a supporter of schools being an instrument of social control. Like business, schools should be more efficient in the way that they operate. Allowing students to use technology as a resource will increase efficiency in the classroom, and eliminate idle time waiting for the teacher to answer their questions. Technology can also promote a higher level of thinking skills.

All educators strive to achieve a quality education. Technology is one tool to assist teachers in accomplishing this goal. According to Oberling (1998) quality education is defined as:

1. "technical competency in the field.
2. competency in communications, computation, and technology,
3. The ability to apply new knowledge as needed, arrived in information judgments, and function in a global community,

4. Attitudes such as flexibility, ease and diversity, initiative, motivation, and teamwork, and

5. The ability to address complex, real-world problems under enterprise conditions" (p.427).

Some educators have hesitated to use new technologies in the classroom because they did not feel comfortable with the technology. School administrators need to provide training to teachers on how to use and integrate technology into the curriculum.

Knowing the history of technology in education and existing research will assist educators when choosing and implementing new curriculum.

The Use of Media and Multimedia in the Classroom

In the past ten years there have been numerous studies conducted on the effects of multimedia on classroom achievement. There are many different uses for interactive multimedia in the classroom. Some interactive multimedia can be a stand-alone unit within the curriculum frameworks, others can be used as a tool to aid the teacher in instruction. This section of the paper will share some results of studies involving television, computers in the classroom, and interactive multimedia.

A study was conducted on the problem solving skills and achievement of non-science majors in an Environmental Science course at a mid-western university. The purpose of the study was to see if the addition of computer and interactive multimedia to classroom instruction would impact student learning (Frear & Hirschbuhl, 1999). The test group was given virtual field trips and interactive multimedia simulations to
encourage participation and interaction. The control group had no simulations or virtual field trips. Both groups were given a Group Assessment of Logical Thinking (GALT) test to measure student cognitive development. Both groups tested about the same in the pre-test, but the results were much different the in the post-test. The test group showed significantly more gains in the posttest than the control group did (Frear & Hirschbuhl, 1999). The study supported the notion that interactive multimedia increases student achievement.

The use of television for instruction was widely used in the 1960s and 1970s. The best example was in Samoa in the late 1960s and early 1970s. Schools used instructional television to teach students. Programs were televised from a central studio and broadcast to schools throughout Samoa. The use of television was very popular with the students at first but the newness of this new technology began to wane and student interest dropped. Instructional programming dropped from twenty hours a week to only a couple of hours a week. Researchers reported that television had become a supplemental or enrichment service, to be used when the teacher thought appropriate (Cubin, 1986). The students in Samoa were very inactive, simply sitting in front of a television watching the screen. Knowing that students need to be actively involved in the learning process will help educators design more effective curriculum.

A meta-analysis looking at over 200 studies, involving students K-12, higher education, industry, and the military compared learning information in a traditional classroom lecture format with learning the same information presented in a multimedia format. Classes ranged from biology and chemistry to foreign language and electronic equipment operation. The study concluded that the measurable learning achievements
were higher in the multimedia classroom compared to the traditional classroom lecture format (Nijjar, 1995). The researcher goes on to state that he believes that students learn best by actively taking part in the learning process.

The use of multimedia in the electronic media studies class will improve student achievement, if it is tied to objectives and benchmarks and if it allows the students to be an active learner. The instructor must also be comfortable with the technology being used. Once the history of technology in education and use of multimedia in the classroom is known, the next phase of developing an interactive DVD can proceed.

Planning and Producing Multimedia

The definitions of multimedia being used in this paper are, “still or motion video, text, graphics, audio, and animation controlled by a computer... It is a combination of hardware, software, and storage technologies incorporated to provide a multi-sensory information environment” (Galbreath, 1992, p. 15). Multimedia has different meanings to different people. The definition depends on each situation. Multimedia can include all of the previously mentioned elements or only a few of them, as long as there are multiple resources it can be considered multimedia.

Before creating any new curriculum the developer must take a look at the instructional design. Instructional design can be defined as “determining and specifying objectives, strategies, techniques, and media for meeting instructional goals” (Gentry, 1994, p. 59).

There are many different models that one can turn to when designing instruction, and each model may say something different. There are five main elements that must be addressed when designing instruction they are:
1. setting objectives,
2. conducting needs assessment,
3. planning the instruction,
4. selecting strategies and materials and
5. evaluating and revising (McDaniel & Lui 1996).

Those five elements are very similar to the elements that Seels and Ritchy (1994) discuss when defining instructional technology: design, development, utilization, management and utilization. All five of these should be considered, and followed, when designing any instruction, including the development of interactive multimedia as a teaching tool.

The creation of multimedia just doesn’t happen. There needs to be a structured process that is followed. The six main phases of multimedia development are:

1. funding.
2. planning.
3. designing.
4. producing.
5. testing, and
6. marketing. (Lui, Jones & Hemstreet, 1998)

Not all multimedia developers use these six phases but they do use similar methodology. Again, these six phases are very similar to the five domains discussed by Seels and Ritchy (1994). Not all multimedia is used as an instructional tool, but similarities can been seen when looking at the instructional development process and the development of multimedia.
As the first phase of multimedia development, funding is an element that everyone producing multimedia must consider when initiating a project. The developer needs to know if there is a limited budget or is the budget unlimited. Knowing fiscal guidelines will help in the next stage, the planning stage.

Planning what is going to be in the presentation is very important. Planning can involve setting objectives, conducting a needs assessment, planning instruction, selecting strategies and materials and having an evaluation tool (McDaniel & Lui, 1996). Designing multimedia can be an overwhelming task. If the presentation is broken up into small tasks the whole project will be much easier to design. If a developer is going to use a CD-ROM, he or she must be sure not to include more than 640mb of information. Determining the amount of necessary video, graphics, photos, text and audio requires careful planning. (Lui et. al, 1998).

With the development of DVD burners in the past few years the amount of information that you can store on a disc has increased dramatically from 640 megabytes to 4.7 gigabytes. DVDs will hold up to two hours of full screen full motion video, making them more desirable for tutorials and independent online classes. Many computers do not have DVD players, and the CD-ROM is currently the most common form of media used for multimedia projects.

Deciding what should go into a multimedia project to be used as an instructional aid can be difficult. There are a few things the designer must keep in mind when deciding what goes into the final project. Not all subject matter is suitable for multimedia. Some concepts may be better taught without aid of multimedia. Concepts that are abstract or hard to visualize are usually more easily understood by the students if
a good multimedia presentation is used. Lessons containing video, graphics, audio, and web links can catch the attention of students that may have a hard time learning from a textbook. (Iskander & Magdy & Catten & Jones & Jameson & Balcells, 2003)

Testing and evaluating the multimedia can be as simple as presenting the material to the class and tracking the reaction of the students. Students need to be challenged and presented with new and exciting ways to learn. The use of multimedia will be commonplace in most classrooms in the near future.

The final evaluation of the multimedia as a teaching tool, would be the level of achievement gained by students using multimedia and comparing the results with the level of achievement gained by students not using multimedia in the classroom.

The final phase of Lui's (et.al) multimedia development is marketing. This phase applies more to business than it does to education. Teachers do market their ideas and concepts to the administration, but as far as marketing it to the students, if the multimedia is produced well, it markets itself.

The actual development of a multimedia lesson is normally much to time consuming for a teacher. Many companies produce such multimedia lessons for educational purposes. "The Center for Multimedia Education and Technology (CAEME)... typically spends six person-months to develop each lesson which generally contain two to three hours of instruction." (Iskander et.al, 2003) There aren't very many teachers who have that much extra time to produce a multimedia lesson.

If a classroom teacher does decide to develop a multimedia lesson they should think about doing it in a team. When working in a team there are several factors that are needed for the success of a project. They are "(1) maintaining constant and clear
communications among all people involved in the process, (2) taking advantage of the individual developer’s talents, (3) using continuous evaluation and feedback, and (4) keeping on task and on schedule.” (Lui et. al, 1998) The developer used all four of these factors when producing the DVD to be used in the Electronic Media Studies class.

Communication among members of a group is an important element to the success of any project. The more people who work together to achieve the shared goals, the more successful the project will be.

Copyright and Fair Use for Education

Once the content and design of multimedia project is decided upon the developer must know the copyright laws. The United States Copyright law provides educators with the ability to use copyrighted material in the classroom. Any person creating multimedia resources for the classroom needs to read the fair use section of the copyright law. The fair use law provides some limitations for the use of motion media, text material, music, lyrics, and music, illustrations or photographs, numerical data sets, and copying of a multimedia project (University of Maryland University College, 1996). In 2002, a new copyright law passed providing rights in addition to the fair use. The new law allows educators to show or display copyrighted work in the classroom. These rights can be found in Section 110(1) of the Copyright Act (Harper, 2001).

The fair use copyright law places the following time restrictions on the use of copyrighted material for educational purposes:

- Motion media is limited to ten percent or three minutes, ever is less. This includes movies, television programs, and film.
• No more that one thousand word or ten percent of written material from a single source can be used. This would include passages from books and articles.

• Music, lyrics and music videos are limited to thirty seconds or ten percent of an individual work. An example might be if a developer wanted to use music from an artist and the song were four minutes long, he could only use ten percent or thirty seconds of that song.

• The use of photographs is limited to five photos from a single photographer or fifteen photos from a collection. Photographs of from books or magazines are included in this section.

• Multimedia projects are limited to two copies if copy written material is used (University of Maryland University College, 2003).

The copyright law provides guidelines that instructors can follow that will assist them when using copyrighted material in multimedia presentations. Students can use portions of copyrighted material when producing a project for school. Students may use their projects in a portfolio for job interviews or for entrance into higher education.

Educators may include portions of copyrighted works when producing their own multimedia project to be used in their classroom. Educators may use their project for: "assignments for independent student study, for remote instruction provided the network is secure and is designed to prevent unlawful copying, for conferences, presentations, or workshops for their professional portfolio” (University of Maryland University College, 2003, Faculty guidelines section, Para. 1).

The copyright laws can be complex and confusing. Taking time to read and understand the laws and guidelines will assist in producing multimedia for the classroom.
less stressful. Every teacher and school administrators should familiarize themselves with the copyright laws. Research in the beginning may prevent a lawsuit in the end.

The Future of Technology

Three things should happen for technology to improve student learning and to assist them to achieve a higher order of thinking. Gormly (1996) stated “there needs to be development of testing of learning models that work effectively for a given discipline. The next stage must involve the development of technology and/or technological approaches that effectively support that discipline and the learning model being used. Finally educators must work together to develop teaching strategies and training to put the technology in the hands of the teachers, where it will do the most good” (p. 273). A classroom full of technology does not mean student success, just as a room full of textbooks does not mean success. Teachers need to know how the technology addresses objectives and if it increases student achievement.

New technologies will continue to developed and introduced into our schools. Virtual reality technologies are already being uses and interactive distant learning is in full swing. Virtual reality can be something as simple as a video tour on the computer of Mount Rushmore, or it could be as complex as a student wearing virtual 3D goggles and a body suit to operate the arm on the space shuttle, to conduct experiments in virtual space. There is no single vision of what schools will look like in the future. Each institution may have a different vision and purpose when it comes to technology. A technical training school will probably rely much more on technology than a school of dance. Institutions must be willing to change and accept new learning and teaching techniques. (Oberling, 1998)
Students of today will be the workers of tomorrow, and most of them will have jobs that require knowledge of technology and complex thinking skills. Technology will not go to the extreme that Warren Bennis, a professor of business administration at the University of Southern California, describes “the factory of the future will have only two employees, a man and a dog. The man will be there to feed the dog. The dog will be there to keep the man from touching the equipment.” (Pritchett, 1994 p. 8)

The Project

The project is an interactive multimedia DVD. The purpose of the interactive DVD is to show students digital image file formats, and give them tips on proper shot composition, so they can take “good” photos. All backgrounds, images and photos were original. The photos were taken on a Nikon Coolpix 4300 digital camera. The software used to create the backgrounds and information pages was Adobe Photoshop, iPhoto and iDVD. Photos were manipulated and placed on the information pages. Text was also written in Adobe Photoshop and placed beside the photos. There were samples of “good” photos and “bad” photos. Students are able to see these samples and visualize good composition.

The DVD can be viewed on computers with a DVD player and most set top DVD players. Students will be viewing the DVD on iMac computers with superdrives. A superdrive allows the user to view DVDs and record onto blank DVDs. Another advantage to using a DVD, instead of a CD-ROM, is if a student missed a day he or she will be able to check out the DVD and play it at home, if they have a DVD player at home, or after school at the library.
The main focus of the DVD is the shot composition tips section. There are fifteen tips to creating better photos. The original goal was to have thirty to fifty tips, but limited production reduced the tips to fifteen. Students will be given a quiz on the fifteen shot composition tips. They will also be asked to take photos using the fifteen tips addressed on the DVD.

Design

The project design started with an analysis of the intended instruction. Decisions were made as to what and how it was to be learned. The message design for the project was an interactive multimedia DVD that students will access through the computer. They will also have a packet with assignments and information. The interactive DVD will be used as an instructional tool. The instructional strategy used in the project was the incorporation of visual examples. Students will access samples of digital photos to help them visualize the shot composition tips being described. The learning characteristics of the students also needed to be addressed when designing the project. Students have prerequisites that they must complete before entering the Electronic Media classes. As part of the class, students have basic computer knowledge and have been taught basic shot composition prior to doing the digital imaging unit.

Development

The development of the interactive multimedia DVD was the most difficult stage of the project. Numerous software and hardware combinations were studied and it was decide to use Nikon Coolpix cameras, Macintosh iMac computers, and iDVD software. Given the short amount of time allowed for production this combination of hardware and software was the most effective and reliable. The literature review was very helpful in
the development stage of the project. The history section of the review describes many of the mistakes made in the past when implementing new technology in to the classroom.

Utilization

The planning and production section of the literature review provided tips on producing the actual interactive multimedia DVD. The copyright laws section explained exactly what can be used and what cannot be used in an educational multimedia presentation. The copyright laws can be confusing to the uninformed. The literature review section on copyright provided to be a valuable source for development of the project.

The students will be able to use the interactive DVD in a computer with a DVD drive or a "consumer set top" DVD player. The developer of the interactive DVD used the DVD format instead of the CD-ROM for two reasons. First, the DVD will hold up to eight times more information than a CD-ROM. Second, a student can view the multimedia presentation on a DVD player and watch it on a large television screen. The diffusion of innovations is the ultimate goal of this digital imaging unit. Students will become aware of shot composition strategies, take an interest, experiment when taking photos and eventually use what they have learned to take professional quality photos. The digital format allows students to take hundreds of photos to help improve and hone their skills. This is what Seels and Richey (1994) would call implementation and institutionalization. Students will not be simulating the creation of photos, but actually taking photos, manipulating them, and using them in various projects.

Management
The management of this project was fairly simple. The whole production team consisted of one person. The project management dealt with scheduling time to shoot photos, edit photos, make images for the presentation, and the actual development of the project. Scheduling was the most difficult aspect of the management domain. Creating a timeline and sticking to that timeline was a vital part to the success of the project. Setting goals and trying to achieve those goals and following the timeline was very difficult, but it was accomplished. The project was done on a very limited budget. All of the hardware and software used to produce the project was already available. No new resources were needed. The cost of producing the interactive DVD was much less than purchasing multiple copies of a similar product. The ease of use to the user addresses the information management. Thousands of images and thousands of pages of information can be stored on a DVD, making it easy to store and access. User friendliness was a major factor in the decision making process, when choosing the hardware and software. The goal was to have the students spend little on no time having to go through the tutorial. Spending valuable time learning how to access information would defeat one of the objectives of the whole project: allowing the students to access information on a DVD that was originally taught by classroom face-to-face instruction.

Evaluation

Problem analysis is the basic reason for developing instruction. The challenges addressed in this project were how to effectively increase student achievement and student productivity. In the past there was too much idol time waiting for the teacher to answer questions. Introducing an interactive DVD would address both student productivity and increase student achievement.
Criterion-referenced measurement use in this project. There will be a pre-test and a post-test assessment tool. Students will take photos of predetermined objects and situations before they are taught proper shot composition. After viewing the interactive DVD and reading articles, students will take photos of the same objects and situations. Photos will be compared to see if any improvements are made.

The formative evaluation of the project was an ongoing endeavor. The final project looked nothing like the original draft. Teachers and students were included in the evaluation of the project. Suggestions from both the teachers and students were taken into account when the final product was completed. When all of the preliminary work was done and the DVD was completed, it was subjected to a summative evaluation.

Students were asked to view the DVD and asked if it would have helped them with any questions that they might have had when they did the digital imaging module. The overwhelming answer was yes. Most of the questions students had during the introduction of the module are addressed in the DVD

Conclusions and Recommendations

The project was much more time consuming than originally thought. To the average person viewing the project, they might think it was put together in a couple of days, but to someone who had worked with digital images and edited them, they know it is a very time consuming and tedious job. The project is not meant to be a stand-alone instructional unit. It is meant to present supplemental information on digital imaging to the students. The project will eventually be expanded from fifteen tips to forty or fifty.

The digital imaging module is a new unit that is being in the electronic media classes. There will be information added to and taken away from the DVD as time and
student feedback determines what works and what does not. Hopefully students will learn valuable tips that will help them take good photos their whole life and will increase student achievement and productivity.

The literature review was a valuable resource when creating the project. The texts, journal articles and web sites contributed valuable information that had a close connection with the five domains of instructional technology. Information gained from the literature review discussed strategies, visual tips, setting objectives and time management. The review of the copyright laws proved to be very valuable in the production of the DVD. Knowing the legal amount of audio and video you can use is good to know. Even though all material (images and music) used in the DVD is original, knowledge of the copyright laws is important.

A formative evaluation during the development of the project helped to shape the final project. The input from teachers and students was very valuable. Creating a summative evaluation involves a pre-test and a post-test assessment strategy. The pre-tests and post-tests involved comparing photos that the students took before viewing the DVD and after viewing the DVD.

As for the future of this project, it is possible for the digital imaging module to be developed on DVD, eliminating the need for an instructor. The class could be offered online or as a distance education class. The DVD could also have links to web sites that would be helpful to students. The web sites could contain samples, instruction and information. This process would take hundreds of hours to produce. This project opens new doors for the instructor of the electronic media studies class to produce more interactive DVDs for his classroom.
My suggestion to anyone wanting to do a similar project, would be to allow plenty of time to complete the project, have your objective and goals obtainable, and pay close attention to the copyright laws. It is a good idea to contact curriculum developers and get sample interactive CD-ROMs and DVDs to review. The more you can view the more ideas you will come up with for your own project. Any new technology that has the possibility to increase student knowledge, achieve higher-order thinking skills, and increase classroom management is worth exploring.

Studies have shown that multimedia can improve student achievement. The use of multimedia is a creative way of presenting material to students. When radio and television were introduced into the classroom there were initial gains in achievement. When that technology became commonplace to the students, the effectiveness wore off and new technologies needed to be introduced to motivate the students. The use of technology is not new to educators, it has a part of education for almost one hundred years. The author of this paper has been teaching for fifteen years and has seen firsthand how new and creative ways of presenting material to students can be effective. Students want to be challenged and motivated, and the use of interactive multimedia presentations in the classroom will increase student achievement. Instead of students sitting in a classroom taking notes, they will be in charge of their own learning, and the teacher will become the facilitator. Students will be able to be active and at the center of their own learning. The students will be the engaged learners and at the center of their own learning. With the use of advanced multimedia resources, students will be the ones using a higher order thinking skills today to learn new material and developing the skills to make tomorrow's important decisions.
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