Literature Review: Benefits of Integrating Camcorders into the Classroom.

University of British Columbia

Dominic Smith

ETEC 532

July, 2007
Introduction

I have regularly used camcorders in my classrooms for the past five years to record various demonstrations. Currently I have been teaching Media Arts and filmmaking to students for students in Grade 9-12. With this experience I have realized that there is much more to making a video following the completion of filming including: audio capture, editing and the making of a DVD, tape or digital file for presentation purposes. Basically, you do not simply shoot video, which can then be used in a classroom environment. Could this be a barrier for teachers who wish to use camcorder technology in their classrooms? This literature review will examine the information regarding the uses of camcorder technology in the classroom as well as determine whether there is a gap in the detail and availability of technical information regarding the entire process of creating an edited video.

Many of the papers and articles regarding the promotion of camcorder technology in the classroom are anecdotal (Buckleitner, 2001; Hall, 1990; Sprankle, 2008; Theodosakis, 2001). Heath’s (1996) research provides statistical data as to the effectiveness of the video project. Johnson (2005) reviews the need for a Media Centre, which includes camcorder technology. Lastly, Abdelraheem (2005) discusses the need to consider instructional technology and information technology when considering the integration of technology.

Literature Review

Today’s world is filled with visual media devices, from cell phones to desktop computers. Young people today are growing up in this environment are being referred to as the Net Generation (Johnson, 2005). Johnson also argues that we should cater to this Net Generation
and provide them with the technology tools which they are familiar with, leading to increased engagement of students. The question arises how do these technologies coincide with the learning process? Theodosakis suggests that students be given the opportunity to experiment with visual communication tools. He also cautions that all too often technologies are being taught in a manner focusing on how the technology works and not how it can be used to empower students and permit them to be better communicators of their ideas. In fact in trying to meet curricular standards in British Columbia, I have often found myself teaching student how technology functions and not how it can be used.

The literature all indicated a level of improved engagement by students when using camcorder technology (Abdelraheem, 2005, Buckleitner, 2001, Heath, 1996, Theodosakis, 2001, Hall, 1990, and Sprakle, 2008). By being able to express their ideas in their own creative way leads to a sense of empowerment. Student collaboration and communication also improve as they work as a team to complete their projects. A variety of other skill sets are also developed including: research skills and social skills. Heath (1996) also reports that students also appreciate watching other students work versus lessons taught by teachers or video produced by professionals. My experience supports the observations made by Heath (1996), as students will continue to pester me for time to watch each other’s videos in my Media Arts class.

Teambuilding and communication are vital to the production of a video project. In order to plan, implement and edit a production students must engage with each other to meet deadlines. Heath (1996) provides evidence that this engagement assisted ESL students with their English language. Hall (1990) also promotes the idea of video assisting with language development. In many cases teambuilding and communication development for students will ultimately assist
them when they become members of a team in their work environments (Theodosakis, 2001). Personally, I have found that video projects can also assist in the establishment of communication between cultural groups. Students of a similar cultural background tend to work together, in particular those who are ESL; however a movie project provides a comfortable environment encouraging students with varying cultural backgrounds and language levels to collaborate on project.

The potential for cross-curricular learning using camcorders is evident as well. Heath (1996) and Hall (1990) provide examples the use of camcorders in social studies and linguistics. Had they been in the same school, students learning Spanish could have assisted with Heath’s “This is my Flag” project, with regards to either Mexico or Spain. Theodosakis (2001) also indicates that the filmmaking assists with the awareness of social issues. A project dealing with the topic of AIDS would cover curricular areas such as science, math/statistics, English language and social studies to name a few. I assisted with a project similar to Heath’s between humanities and science this past school year. Students wrote scripts in their English classes for videos they created in their Biology classes. Not only do the students collaborate on such a project, but teachers are also drawn together, sharing ideas and experiences with camcorder and video production technology.

The myriad of uses for a camcorder is also evident in the literature. Both Buckleitner (2001) and Sprankle (2008) provide a number of ways a camcorder can be used in the classroom, from video year books to capturing the processes students use to complete math problems to teacher professional development. Sprankle also suggests that the use of video can be used as a link between parents, student and teacher providing a tool used to discuss student development.
Literature Review: Camcorders in the Classroom. 5

Having taped my own lessons, I can relate to video as a teacher professional development tool. Although tough to watch this video footage, it has assisted with my improved engagement and inclusion of ESL students in my classroom. The ideas which are presented in these articles provide a good reference and starting point for teachers who wish to consider using this camcorder technology.

Review of these resources, as mentioned, provides the reader with a number of good resources. However, these resources are limited in that they do not encompass all factors when considering implementing camcorder technology for the purpose of creating video projects in the classroom. Ideas for the use of camcorders for teaching purposes, investigation and professional development for teachers are a good start (Buckleitner, 2001 and Sprinkle, 2008). Others take the next step and discuss how projects were designed or provide blackline masters to assist with project planning (Heath, 1996, and Theodosakis, 2001). Very little is mentioned regarding the other hardware and software needs required to complete video projects, in some cases links to video camera vendors is provided (Theodosakis, 2001 and Sprinkle, 2008). In other cases assumptions are made regarding the knowledge regarding camcorder technology of the reader, discussing terms such as Firewire without any details as to its function (Buckleitner, 2001). Johnson (2005) essentially suggests that technology, including camcorders and editing software be placed in central space with comfy chairs. This “Build it and they will come” attitude does not address how this media centre should be created or skills required by student and teachers to ensure this resource is utilized to its full potential. In many cases the teachers, I have found, teachers have little knowledge of the resources required to complete editing and post-production process. If teachers are not aware of the equipment required, how will they be able to design, implement and assess a project using camcorders, getting true value from this technology? In
fact, Abdelraheem (2005), argues that “There has been far too much spending on equipment and too little on program design and development” p. 129. He also develops a model to assist with the understanding of the integration of instructional and informational technologies (IIT). The question then evolves: who will provide initial training and ongoing tech support for the teachers? In my case, I have been appointed the position of Technology Coordinator, whereby I will assist teaching staff with the process of creating video projects in their classes. Unfortunately this type of resource is not available to all teachers. With this in mind perhaps a comprehensive resource regarding the use of camcorders from a technical perspective is warranted.

Conclusion

It is evident that camcorders will engage students of the Net Generation. With this technology students find a sense of ownership of their learning. Teachers can use this technology in a number of ways to create a variety of different video projects. However, despite the variety of use and benefits to students there is insufficient information and support for teachers with regard to other hardware and software that must be used to supplement the camcorder to complete video projects. Based on personal experience these factors can be a barrier to teaching staff when considering the use of camcorders in the classroom. This leads to the need for the development of resources which provide a set of examples, technical information and training, providing teachers with a solid foundation regarding video project design and integration into their teaching.
Work Cited


ANOTATED BIBLIOGRAPHY


This text is a complete resource regarding the process of filmmaking. Theodosakis uses his years of experience training young people as well as teachers to provide evidence for the usefulness of video production in the classroom. He explains why filmmaking belongs in the classroom, filming process, barriers to getting the film process started and finally the role of the teacher in the movie making process.

Theodosakis promotes active learning for the student which results in research skills, problem solving, planning and analytical skills, creativity, confidence and self-esteem, empowerment and team building skills. He uses these skills as well as personal and social skills as the backbone for the use of filmmaking in education in a learner centred environment, which is promoted by Palloff and Pratt, 1999 and Tapscott, 2004.

The resources available in the text are an excellent starting point for any teacher who wishes to use filmmaking in their classrooms. Handouts, checklists and rubrics make preparation of a filmmaking activity handy and can be used in a cross curricular fashion without any changes. Despite the positive evidence for use of filmmaking in the classroom as well as the aforementioned resources the book is lacking in project ideas for core curricular areas. Teachers are still left to design the filmmaking activity. Examples of projects for each core curricular area would assist a teacher, who is many cases, is starting with little or no experience when developing filmmaking projects. Although this is an excellent starting point it is not comprehensive enough to overcome the barriers, such as lack of knowledge regarding the use of technology, which a teacher may face when thinking about using such technology.


Although this article does not directly deal with the use of camcorders in education it is significant in that it discusses the need to consider the need for design or use of technology in the classroom. The author describes the necessity and the method for integrating instructional technology with information technology.

The author reviews current literature and clarifies the definition of instructional technology and information technology in relation to a current shift from instruction to an increasing constructivist approach, which emphasizes the learner. The author then makes a point of the need to integrate the two technologies as well as provide two models to explain the implication of such integration. Unlike the
model provided by Palloff and Pratt (1999) for an electronic learning system, the author does not include the community at the centre of the model. In this case the community is considered one of eight components that make up the central e-learning system. However, the author does discuss the subcomponents, which in this case for the community he is specific to the number of different groups responsible for developing the e-learning system. This suggests that if camcorders are to become more widely used in the classroom and to promote e-learning it is imperative that the teacher not be the only one developing filmmaking projects. My personal experience with the integration of technology, such as computers and film equipment supports the fact that consideration is primarily given to the “…wires and cables, laptops and desktops” (p.129) or information technology and not on strategies which will assist with the design and evaluation of programs using information technology. Thus, it is important to consider the design strategies for teachers if filmmaking is going to be incorporated into the classroom.


Published by Heldref Publications

Heath describes the use of camcorders to a complete a video project in the humanities setting, which enabled ESL students to develop their oral and written skills. Projects were created as a primary source of information by the students and were shared with other age groups also promoting awareness and understanding of various cultural groups. Statistics revealed that 89% of the students preferred to watch student develop video versus listening to teachers or others.

Heath also describes the project’s design and observations regarding the development of the student’s social skills. In this case teams of students were created mixing ESL and native speaking English students. Students then took on a variety of roles in the production of the video. These varying roles permitted the students to communicate on an ongoing basis. Heath indicated that students tended to take on increasing responsibility and were increasingly engaged in the project. He also noted, following the project, that it provided an insight into the student’s thinking skills and how they articulated their ideas.

There was no mention of the equipment used in the study to create the video projects. The author does not mention how and when the students were trained to use the video equipment.

Published by American Association of Teachers of Spanish and Portuguese.

Examples are provided in this article with regards to a language classroom. The author indicates that watching movies no longer is engaging enough for students, but a movie created by the students for the students is a valuable asset for both students and teacher.

The author points out these video projects can be completed outside of classroom hours. By using the camcorder a traditional classroom activity becomes richer as students can better prepare themselves and they have access to greater resources at home. It also provides the students greater control over the project; they can truly make it their own. These video projects may also permit students to incorporate their own cultural experiences and signification into a project (Fiske, 1990).

Assessment of the video, as the author points out, is also valuable as the teacher can review the tape multiple times. If the experience of Stacy Friedman is an indication, the teacher may also find other meaning in the video that he/she may not have noticed on the first viewing. In fact this could become a powerful tool enable awareness for teacher and student as to the student’s acquired knowledge. In my case I was able to assist an English teacher video tape performances focused on Shakespeare by a set of ESL students. By creating the video the students were increasingly engaged and were better able to interpret Shakespeare’s writings and provide evidence of their learning using the camcorder technology.


Published by Scholastic Inc.

This article provides information regarding the startup and use of camcorders in the classroom. The author considers styles of camcorders and connections to the key computer platforms (PC and Macintosh) high tech and low tech editing solutions giving thought to the variations in budgets that occur in various educational systems. Unlike The Director in the Classroom, the author provides examples of how the camcorder can be used in the classroom: classroom historian to teacher self-improvement.

The author makes an assumption in the article regarding camera types: that people know about Firewire connections. He mentions the Digital Video or DV nature of today’s camcorders and their ability to download via Firewire connection “These cameras can be plugged directly into a computer for editing, which makes them worth the extra money.” Unfortunately not all computers have Firewire connections for this type of download. I have frequently seen teachers who have used DV cameras and then come to me for assistance because they cannot “…find the place to plug in the cable.”
This article mentions equipment required for filmmaking in passing. The lack of detail would confuse someone who is not technologically literate. With this in mind, once again thought should be given to the community of individuals that will be necessary to integrate such technology into the classroom, such as a Technology Coordinator and/or a member of the school’s IT team. The question must also be asked: who will provide initial training and ongoing tech support for the teachers?


Published by International Society for Technology in Education.

The author of this article provides evidence and reviews a text, which endorse the need for change when providing educational support for the Net Generation. The author summarizes the definition of the Net Generation and the style of learning “Our current crop of students with their hypertext minds like inductive discovery rather than being told what they should know” (p. 25). A general description of what a media centre might look like is also provided.

The author provides evidence for the need to provide digital environments for students due to the fact that they grow up exposed to digital media. Again this article provides little or no thought to the teachers who will be responsible for creating the media centre or the training these teachers may require for the use of such a facility. As Dr. Abdelraheem points out there is too much emphasis put on the information technology and not the instructional technology. The author does mention the students require tools which will assist with the production of information not just the acquisition of information buy the student, emphasizing the student centred learning that should take place mentioned by Palloff and Pratt (1999) and Tapscott (2004). This author’s article resonates with me, as while reading this article I feel like I am listening to administrators I have had in the past. They read papers and make decision regarding the implementation of technology without thinking about the long-term evaluation and maintenance of such a system.

Published by United Business Media

Uses for camcorders in the classroom are the focus of this article. The author pulls from personal experience to provide a list of uses for a camcorder in the class, which include: video yearbooks, capturing demonstrations of student learning, to having students create online videos summarizing key taught or learned in class. A list of websites outlining bargain camcorders in also provided. Little or no details are provided regarding the other equipment required to complete the suggested projects.

In this case the author provides excellent ideas that link the classroom, the students home (parents) environment and the online environment, which the students have created for themselves. Pure online environments as argued by Pallof and Pratt (1999) disembodied the student from the teacher. In this case the projects proposed better link the student to the teacher in a connected fashion the was not possible without camcorder technology, this being the ability to capture learning as it happens and have the student reflect on what occurred or be able to share their learning with peers or parents. The author argues that video can do much more for assessment than pure marks. This concept is supported by personal experience whereby I was able to capture a number of student lead activities and provide students with digital video copies which the shared online with family and friends in places like China, Korea, Japan, Taiwan, and Germany. These activities would have been missed by parents and friends without this technology.

The author does provide a brief list of online resources for teachers to consider when purchasing a camcorder, however he does not delve into the other resources that will be required to complete the various video projects he is suggesting. It is apparent from this article and the others annotated here that there is a need to summarize this information into one resource and to also further investigate examples of project design using camcorders for classroom projects.