How Digital Filmmaking Develops Higher-Order Thinking Skills

By Nikos Theodosakis

If you scan the Hollywood box office report (variety.com) you will find the names and rankings of the top grossing films in the United States. Monsters Inc., The Phantom Menace, Shrek, Harry Potter, and other multi-million dollar success stories.

But here's another list of important films produced this last year. My Family's Stories, Choices, My Dog Spot, Interview with a Civil War Soldier, My Family's History, Triangles, Friends.

Though these obscure cinematic experiments may never break box office records, sell buckets of popcorn, or spin off merchandising memorabilia, they are among the most important films being made today. In addition, the most influential thinkers of the future, our children, are creating them.

Classrooms are turning into studios, teachers into producers and students into filmmakers. Inexpensive and easy to use digital cameras and editing software have enabled educators to explore the use of digital video as a serious tool for teaching and learning.

While the benefits of filmmaking in the classroom encompass student awareness, creativity, engagement, technical learning, it also provides a beautiful bridge to life outside the classroom. This article looks at how digital video production and filmmaking projects in the classroom can help develop higher-order thinking skills. In particular, I would like to explore how filmmaking provides a framework for the development of higher-order thinking skills, from the students' creation of the original idea to their first presentation and beyond.

Visioning

Filmmaking is about turning the intangible into the tangible. Regardless of the size of the film, Ben Hur or My Science Experiment, movies start with that wonderful thing called "the idea." As the idea formulates, a vision of the final film begins to develop. The challenge for students is to hold a clear picture in their mind of what they want to communicate and then to guide their film towards that vision. The goal is to put that vision on the screen.

Technology in Education
Virginia Society for VSTE
www.vste.org

Digital Filmmaking, continued

It is also about learning the process of looking at where you want to be, looking at where you are now, and constructing a plan to connect the two. It is about exploring not only what the vision is, but also what the vision does. How it moves you into action, gets you up on your feet, and makes you advance in order to crystallize what you have in your mind. It is important that students develop visioning skills for both their present and future worlds. We need students to see how ideas can be transformed into action and how if they want to reach for something, if they can dream it, they can do it.

Research

When audiences go to see a film in the theatre, they seldom realize how much research goes into the making of the movie. In the formative stages, writers, directors and producers research story ideas that relate to the idea they are imagining. They interview people, read books, clip magazine articles, scan the Web, draw upon personal experiences and look to uncover information from anywhere they can, knowing that key secrets can be revealed in the least likely of places.

Once an idea is decided upon, the filmmakers research in order to get a better understanding of the context and content of the story. One of the characters in my wife Linda's latest screenplay works with autistic adults. Linda has been researching autism on the Web, interviewing caregivers working with autistic adults, and has arranged to work-shadow some of these caregivers and their clients. The more she researches, the more it informs her story.

As information exponentially explodes all around us, the ability to effectively mine that information also increases. If we are to prepare students to make sense of all that information, then familiarization with good research skills —knowing where to find things, how to find things, who to ask, how to collect it and how to organize it —becomes another important skill developed by filmmaking.

Problem Solving

Turning the vision into the finished movie on screen requires a seemingly endless journey into problem solving, not only in terms of what do we want to show, but also, how we will show it.

As students set out to create their films and discover obstacles of time, of equipment and of other resources, they learn to identify and solve their own problems, and to own the process for finding solutions. It is then that these multiple, real world filmmaking challenges have become a great opportunity to experience real world problem solving.

Logic

Sometimes when I am putting together a film, I feel like I'm in the middle of a giant algebraic equation. So many decisions in filmmaking are affected by so many other decisions. IF it is sunny we WILL shoot Scene 16 by the lake with all the actors and props required for that scene, BUT IF it rains THEN we will shoot the interior scene in the cabin living room. There are so many decisions that are interwoven into all of the other decisions that filmmaking requires the development and utilization of good logical thinking skills.

Technology in Education
Virginia Society for VSTE
www.vste.org

Digital Filmmaking, continued

In the classroom the process of filmmaking requires students to imagine what they will need to make their movie. As they are asked to develop a strategy of planning, production and editing, they start assembling a logical series of events and resources to make it all come together. Regardless of whether this process is articulated on paper, or simply considered in their minds, that process will occur.

Planning

A feature film is very rarely filmed in sequential order. This is because time, money and other resources can be better utilized if similar scenes are shot at the same time. Often these scenes are grouped by location, or by actors, or by equipment availability.

Filmmaking in the classroom enables students to explore their own planning and time management skills as they estimate, budget, schedule, analyze and revise their filmmaking projects.

The results of poor or proper time management can be examined and used as yet another learning tool in this process, so that there is a constant self-analysis of what works and what does needs a new approach.

Analytical

Another skill which is invisible to the movie audience, but which is essential to the filmmaker, is the ability to critically analyze information. As a director, when I am standing on a film set, my role is to take in all the information about the scene that I have researched and all the new information that I am receiving from the actors, the crew or the location. Then I analyze it against my vision for that particular scene. It is about looking at all the information and deciding what should be included and what should be left out. It is about filtering on your feet.

Later, during the editing process, I will look at multiple takes of the same shots, and multiple shots of the same scene, and decide, after I look at all of this information, which film footage best illustrates what I am trying to communicate and what I want to explore. As long as we continue to be overloaded with information and continual decision-making, the development of analytical processes will be an important survival skill for students.

Beyond the Classroom

Now more than ever, filmmaking in the classroom can play a strategic role in engaging student learning and in encompassing multiple educational objectives. The goal here is really to enable students to experience these skills in the classroom as part of the preparation for them using it in their own worlds beyond the classroom. When students have opportunities to solve problems, budget, schedule, analyze, research, plan, imagine and communicate their ideas to others, they are building real world skills. And although their films may never be up on the big screen, the experiences learned and the skills developed will make them much more than better filmmakers, they will become better thinkers, and it seems that ultimately, this is what this planet needs.

Digital Filmmaking, continued

About the Author

Nikos Theodosakis is a filmmaker, educator and author of the book *The Director In The Classroom: How Filmmaking Inspires Learning* *(Tech4Learning, Inc., www.tech4learning.com). You will find more information on filmmaking in the classroom as well as links to the resources mentioned in this article at his website www.thedirectorintheclassroom.com Contact him by e-mail: nikos@thedirectorintheclassroom.com*