Lights, Camera, Action! The role of movies and video in classroom learning

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Increased technology support in classrooms allows for enhanced opportunities for faculty to make use of multimedia. This article focuses on how faculty can best utilize movies and video clips to enhance student learning. A review of the fundamentals from a technical perspective is provided, as well as techniques to incorporate movie clips in active learning instruction. Support for faculty in the use of technology in teaching is essential in today's classroom.

Current college students have grown up with a plethora of technology at their fingertips. As a result, they bring expectations to the classroom on what technology will be available to use and that indeed, faculty will use this technology to support learning inside and outside of the classroom. However, the availability of new technologies to enhance classroom learning presents challenges for faculty who may not have received training in this area (Baldwin, 1998).

Historically, movies and video clips were one form of technology used to enhance classroom teaching. Many of us recall the use of film strips and black-and-white movies in our youth, and now we have the ability to use more sophisticated visual media. The mere shift or upgrade of video materials, however, does not make their use for improved learning automatic. As we move from a focus on teaching to student learning (Barr & Tagg, 1995), the role of visual media also needs to shift from use for passive learning by students to active learning in classrooms.

A great deal of work has been done to better understand student learning. Kolb (1998) created a learning schematic that encompasses the wide spectrum of learning orientations. Kolb’s learning model builds on the concept that there are two dimensions to the learning process: on one continuum are concrete experiences of events and abstract conceptualizations and on the other continuum are active experimentation and reflective observation. Thus, when individuals acquire new learning, they are making choices regarding their level of active involvement and reflection in the learning process. Movies and videos can provide ways for learners to take the abstract and apply it to concrete experiences, especially if they have not had any personal exposure to the ideas at hand. Faculty can use visual media to reinforce theoretical concepts as applied to practical applications in their discipline. This feature is especially useful for undergraduate teaching in which students may not have as broad an array of lived experiences. Adult learners benefit from seeing some of their experiences played out on the screen, sometimes with different outcomes.

Movies have been used to help students acclimate to college (Seyforth & Golde, 2001), link theory to practice (Aiex, 1999; Harper & Rogers, 1999), orient pre-service education students (Pedras & Horton, 1996), and review teaching in films (Dalton, 2004). Popular films can provide a means for students to identify something with which they are familiar and apply it to learning new concepts (Gregg, 1995; Hinck, 1995). Using movie clips can enhance classroom experiences via active learning (Bonwell & Sutherland, 1996) and aid students in seeing the world in a different way, with humor in films providing an additional site for teachable moments.

Attendant with faculty using movies and video clips to improve student learning are technical issues of how to show the clips, consideration of the appropriate pedagogical applications to enhance student learning, and specifics on how to use media as a springboard for active learning. Faculty members must consider how to critically choose film clips or create video clips that best serve their intended purposes and mesh most closely with their preferred way of teaching. Following is a review of the roles faculty and students take in classroom learning, the technical aspects of using video clips, and suggestions for faculty developers for encouraging the use of movies in the classroom.

Faculty and Student Roles

Faculty members are beginning to shift their approach to teaching from an instruction paradigm to a learning para-
digm (Barr & Tagg, 1995) to help promote student outcomes. In keeping with this learning paradigm, faculty should consider creating an environment conducive to student learning, have particular learning outcomes in mind, acknowledge students’ experiences, and create a collaborative learning environment. Key to the creation of a successful classroom experience is acknowledgement of the variety of learning perspectives students, both adult learners and traditionally aged students, bring to the classroom, and the different teaching perspectives from which faculty operate. We will begin this section with a brief overview of applicable student learning theory and conclude with an integration of these theories with various teaching perspectives.

**Student Learning Theory**

A number of learning theories exist that highlight the variety of ways in which students learn. Kolb (1998) posited an experiential learning theory based on a four-stage cycle. Contained in the model are concrete experience abilities, reflective observation abilities, abstract conceptualization abilities, and active experimentation abilities (p. 129). Learners possessing all four abilities are the most effective in the classroom. The model’s continuum of concrete and abstract conceptualization intersects with the continuum involving active experimentation and reflective observation. Ultimately, classroom learning should encompass various points on both these continuums. Cooperative learning (Nilson, 2003) and student reflections (Morgan, 2003) provide a vehicle for better understanding of the concrete applications and abstract thinking of various disciplinary topics.

Students develop learning styles based on their cognitive orientation, life experiences, and demands encountered in their current context: “most of us develop learning styles that emphasize some learning abilities over others” (Kolb, 1998, p. 131). Kolb developed a Learning Style Inventory (LSI) to measure learning style based on the two-dimensional model of abstract-concrete and active-reflective. His research employing the LSI further refined the quadrants of his model to highlight the intersection of the dimensions and indicated connections with academic disciplines as outlined in Figure 1.

Faculty may note a particular student learning preference associated within a particular discipline, but equally may find themselves faced with students preferring different learning styles not easily placed in a predictable quadrant. Given this variety, faculty members will require variety as they present information to class. We argue that using movie clips provides this variety for students to learn in all orientations.

Student learning can also be viewed via a continuum. Perry (1985) outlined a range of student development theory. Perry's schemas include nine positions, ranging from a simple duality to more complex considerations in learning. The overarching areas outlined by Perry are duality, multiplicity, and commitment. As students progress through this continuum, they change from seeing the world as black and white to considering multiple perspectives to finally seeing knowledge as relative to positionality.

Mature learners, on the other hand, place value on linking what they are learning to their experiences and their

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**Figure 1. Kolb (1998) Dominant Learning Styles**

<table>
<thead>
<tr>
<th>Accommodators: Concrete Experience/Active Experimentation</th>
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<td>[Social Professions: e.g., Business; Education]</td>
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<th>Convergers: Abstract Conceptualization/Active Experimentation</th>
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<td>[Science Based Professions: e.g., Nursing; Engineering]</td>
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<tr>
<th>Divergers: Concrete Experience/Reflective Observation</th>
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<tr>
<td>[Humanities/Social Science: e.g., Psychology; History; English]</td>
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<tr>
<th>Assimilators: Abstract Conceptualization/Reflective Observation</th>
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<tr>
<td>[Natural Sciences/Mathematics: e.g., Economics; Math; Physics; Chemistry]</td>
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<th>Abstract</th>
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current positions in life. Knowles (1970) identified five key components for adult learners: they need to know why they are learning, they need self-direction, they use experience in learning, social roles impact learning, and adult motivation for learning is internal. Thus, adults are more self-directed learners who desire validation that there are a number of ways to solve problems. Given the fact that classrooms often contain both traditionally aged and adult learners, the use of a variety of learning activities centered on movie clips provides support to a broad range of student learning orientations. For instance, viewing a film like All the President’s Men, which showcases Watergate, may allow adult learners to tie into their past experiences of that time period and present traditional learners with a way to view the world more complexly.

**Teaching Perspectives**

Just as students come to the classroom with a variety of orientations, so too do faculty approach teaching from different perspectives. Pratt and associates (1998) proposed a model of teaching that considered the role of the teacher, learners, content, context, and ideals. Using these component elements, Pratt posits five alternative perspectives that faculty access during their teaching. The five styles include transmission, apprentice, developmental, nurturing, and social reform. Generally, faculty members favor a particular perspective in their teaching. Interested readers can go the following website and take the teaching perspectives inventory to determine their own orientation [http://www.teachingperspectives.com/]. Additional examples of links between the teaching perspectives and use of films are found in the section on creating active learning lessons.

The first perspective reviewed by Pratt (1998) is the transmission perspective. In this model, content delivered by the faculty is of utmost concern. “Teachers holding this as their dominant perspective often end up teaching well-defined content, that is material where there is clear agreement about right answers and where new content fits hierarchically into or upon prior knowledge” (p. 41). In these situations, faculty may find a use for videos to reinforce content material. Sociologist may find good examples of basic theories to highlight from a film. Likewise, a communication faculty may show clips of speeches or particular dialogues to showcase speech techniques.

Pratt’s (1998) second perspective is based on an apprentice orientation. A typical representation of this mode of teaching is found in the vocational technologies in which students are apprentice learners as they move from novice skill levels to expert. The apprentice perspective represents learning that historically occurs outside the classroom. Movie clips that illustrate actual practice are the most appropriate for this teaching orientation. Thus, films showcasing particular skills required in health professions may highlight clips showing techniques for patient interactions and patient data collection. Counseling faculty may find clips showing client interactions in sessions that best model approaches or point out the deficiencies within the viewing of other clips.

The third perspective outlined by Pratt (1998) is developmental. In this orientation, the teacher focuses most on learners. The teacher meets students where they are in their level of learning and works towards developing more complex cognitive approaches. The teacher starts where the student is and uses previous knowledge and experience to bridge to new learning and understanding. Given the fact that developmental instructors desire to meet their students where they are in the learning continuum, selection of films may vary by class allowing for the best match of how to aid students the most. A class with more traditionally based students may benefit from a film that shows the basic levels of the course concepts, whereas an upper level class or one with several adult learners may need a more complex selection. Basic organizational theory of bureaucracy may be evident in a clip from Charlie Chaplin’s Modern Times, whereas more complex forms of this might be evidenced in Wall Street.

A nurturing perspective, Pratt’s (1998) fourth perspective, also positions learners in a location of importance for the teacher and is most often associated with adult educators: “Learning is most affected by a learner’s self-concept and self-efficacy” (Pratt, p. 49). In this approach, the acquisition of a particular amount or level of content is not critical. Instead, learning is more individually oriented and success is measured by movement in learning on an individual basis, ultimately allowing for varying levels of comprehension in the end. Films that help create a supportive environment would be useful for faculty teaching from this orientation. For example, movies that show positive student—faculty relationships may model examples of a supportive classroom. Like the developmental approach, film selection will be driven by the composition of the class, the level of the students’ cognition of material, and the type of nurturing required.

As its name implies, the fifth perspective, the social reform perspective, finds its base in the empowerment of learners. “Learners and content are secondary to a broader agenda as the commitment and agenda shifts its focus from the individual to the collective” (Pratt, 1998, p. 51). The focus of instruction is to challenge the status quo and to question assumptions guiding current structures. Critical examples of films from this teaching perspective would reinforce the idea of students questioning power dynamics and understanding how visual examples might be deconstructed to show inequities or to question the reality as shown. Documentaries are particularly good options for this frame since they often highlight particular social issues. Popular films like Crash serve to provide a template for
showcasing power dynamics and do so in a current context.

Creating Active Learning Lessons: Combining Student Learning with Teaching Perspectives

Simply using videos in the class does not guarantee an active learning experience. It is important to consider how the clips will be incorporated into lessons to offer more engagement for students. Nilson (2003) argued that “the evidence is overwhelming that at the college level, student-active teaching methods ensure more effective, more enjoyable, and more memorable learning than do passive methods—the most passive being the lecture” (p. 87). Active learning offers an opportunity to engage learners directly with classroom content, irrespective of teaching orientation. By considering teaching perspective and student learning theories such as those above, students and teachers will have a more integrated, active, and successful learning experience.

Bonwell and Sutherland (1996) present an active learning continuum framework. In this model, tasks range from simple to complex, course objectives range from an interest in the acquisition of knowledge to an acquisition of skills/attitudes, interaction ranges from limited to extensive, and student experience ranges from inexperienced to experienced. These continuums provide a useful way to think of individual faculty comfort levels for implementing active learning into the classroom. Thus, an individual drawn to individual faculty comfort levels for implementing active learning into the classroom. Rather, Section 107 of the Copyright Act states:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section [sic], for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include —

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
(2) the nature of the copyrighted work;
(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
(4) the effect of the use upon the potential market for or value of the copyrighted work. (p. 18)

In the 1990s, The Consortium of College and University Media Centers (CCUMC) formed the Educational Multimedia Working Group. CCUMC was comprised of various copyright owners and educational institutions. The working group formulated a set of guidelines presented to the 1997 Conference on Fair Use (CONFU). Despite the fact that there was no absolute consensus on these guidelines, they have become the de-facto standard embraced by most of academe. They do not hold the weight of law, but rather offer a practical commentary on the concept of fair use.

With respect to commercial video use, CONFU guidelines allow for ten percent, or three minutes, whichever is lesser, of a copyrighted video to be incorporated into a curricular multimedia presentation. The Digital Millennium Copyright Act, The Teach Act, and other legislation suggest further interpretation of the law, but the CONFU Guidelines are typically followed for using video in classroom and online presentations in many higher education settings.

Technical Issues

Following is a review of the three central issues germane in contemplating the technical issues surrounding the incorporation of video clips into classroom teaching. First, a short review of copyright law covers the main tenets faculty members need to know when copying sections of commercial movies. Second, we include a how-to approach that reviews the actual transfer of VHS or DVD formats to digital form that allows for easier use in classroom teaching. Finally, we discuss contingency plans for technical difficulties.

Copyright Law

The area of copyright law is constantly changing, often seeming like a moving target as legislative and judicial systems struggle to keep up with technology and practice. What we offer here is a specific use and interpretation based on “Fair Use” as it applies to the practical case presented by this paper, namely the inclusion of a popular film clip in an educational multimedia presentation. Copyright law does not explicitly state the quantity allowable under fair use.

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Although the CONFU Guidelines allow for the use of copyrighted video segments in educational settings, Universities should demonstrate a proactive approach toward copyright compliance. Whenever practical, permission should be obtained from copyright holders. Obtaining copyright permission is often difficult and time-consuming, but written policies and University Web pages offering guidelines concerning Fair Use can be valuable tools. A Google search will reveal many excellent University sites on the subject of copyright law. Two examples include: http://www.cmich.edu/copyright and: http://fairuse.stanford.edu/. It is also advisable to confer with your institution’s non-print Librarian to see if any blanket rights covering use of media have been negotiated or purchased.

Video Selection and Transfer Issues

The tools needed to make use of movies in the classroom range from rudimentary to very sophisticated. We present several options, but focus on a typical scenario in a university setting. The ideal situation is to be able to select and isolate the desired clips as an alternative to inserting and having to cue up the original media in the classroom. This narrative focuses on converting content to a format easily integrated into a PowerPoint™ presentation.

The first question for users to answer concerns whether to “do it yourself” or have the content prepared for you. If your environment does not have media production resources, this question may be a moot point. However, where support exists, there should be a careful analysis of whether there is

Table 1. Teacher Perspectives/Student Learning Orientations/Active Learning Exercises

<table>
<thead>
<tr>
<th>Teaching Perspective*</th>
<th>Active Learning Strategies</th>
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<tbody>
<tr>
<td>Transmission</td>
<td>• Teaching Pause: Stop a lecture and show a film clip; students compare notes on understanding of content topic as it relates to the scene.</td>
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<td></td>
<td>• Students view a series of clips that highlight specific content examples. A handout is designed to accompany the exercise that requires students to fill in answers regarding the theory.</td>
</tr>
<tr>
<td>Apprentice</td>
<td>• Film clip shows an example of a practice the instructor is reviewing.</td>
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<td></td>
<td>• Students use the model presented in the movie and role play/put the example to practice.</td>
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<tr>
<td>Developmental</td>
<td>• The movie clip provides a case example for students to bridge their current knowledge to the new learning concepts.</td>
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<td></td>
<td>• Students create their own case studies and trade them with one another for analysis.</td>
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<tr>
<td>Nurturing</td>
<td>• Film clips reinforce concepts for students, starting simplistically for reinforcement and advancing in complexity.</td>
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<td></td>
<td>• Mixed level groups are formed to allow students to aid one another’s learning; students reform groups to jigsaw information.</td>
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<tr>
<td>Social Reform</td>
<td>• Examples are shown that highlight critical examples of power differentials and how knowledge is created.</td>
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<td>• After viewing the clip, students work in small groups using different perspectives to highlight how the selected group was impacted—power differences are explored.</td>
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<th>Student Learning Orientations**</th>
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<tbody>
<tr>
<td>Accommodators Concrete/Active</td>
<td>• Clip shows a concept enacted; students than use the example as the basis of an exercise of practice.</td>
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<td></td>
<td>• Example: Stand and Deliver—students create a lesson plan based on classroom examples highlighted in the film.</td>
</tr>
<tr>
<td>Diversers Concrete/Reflective</td>
<td>• Clip highlights a concept connected to class lesson. Students respond in reflective journal to set of questions; reflect on an example using their own experience.</td>
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<td></td>
<td>• Example: Saving Private Ryan—reflective questions on political impact.</td>
</tr>
<tr>
<td>Assimilators Abstract/Reflective</td>
<td>• Abstract theories are highlighted in a film clip. Often these are scientific or math based. Reflective exercise.</td>
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<td></td>
<td>• Example: It’s a Wonderful Life—reflection on banking theory and the Great Depression.</td>
</tr>
<tr>
<td>Convergers Abstract/Active</td>
<td>• The clip highlights an abstract theory—often science based. Students then do an experiment to apply the theory.</td>
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<td></td>
<td>• Example: Bridge on the River Kwai—students analyze the engineering behind the bridge building and recreate as a model bridge.</td>
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</table>

**Kolb (1998)
justification to invest both the time and money to develop the capabilities on a local or personal level. The learning curve and expense for doing multimedia content has dramatically reduced in recent years, but it is still substantial. There are three phases of developing clips extracted from movies, namely acquisition, editing, and delivery.

Disciplinary orientations will influence the type and use of video clips in teaching. For instance, faculty in the health professions may use videos to showcase different medical techniques or treatments, whereas those in math and science may use films focused on scientific method or application (e.g., Good Will Hunting, A Beautiful Mind, Twister, etc.). A general caveat for using movie clips is the need for faculty to preview movies for bias, discrimination, and the perpetuation of stereotypes. The exception would be using the clip to showcase an example of inappropriate behavior. The preview process also confirms for faculty the length of time required for the exercise that incorporates the movie clip.

Selection of clips can occur in a variety of manners. The choice of a clip may occur from a personal awareness of a movie or scene or from the use of movie lists such as one compiled in Dalton’s (2004) Hollywood Curriculum. The internet can also be a very productive source for locating film clips with sites such as the archived listserv on the Professional and Organizational Development Network (POD), the Hartwick Classic Film Leadership Series, or the Internet Movie Database which can be used to search for movies by title, director, or subject. Ratings for films can be found on the Film Ratings internet site. Popular sites such as YouTube or Netflix can provide a source of a variety of clips. Additionally, many college libraries and community public libraries have a collection of movies available for use. (See Appendix B for a list of teaching movie resources and web site links.)

Acquisition

Most commercial video content is available in either VHS or DVD formats. DVD is preferable for several reasons. VHS is inherently lower fidelity than DVD. Rented films on VHS are often well worn and susceptible to “dropout” or loss of signal. Any noise or “randomness,” in a video signal makes the eventual processing and compression of the content much more demanding and lower in quality. DVDs, being more non-linear in nature, also make identifying and accessing content a much quicker process. This section focuses on acquisition via analog sources, but DVDs can also be “transcoded” (that is, translated from one digital format to another) in the digital domain, skipping the analog step altogether. There are numerous software tools for accomplishing this. (See Appendix A for a resource list.)

The second part of acquisition is identifying the content or scenes from the film. An “edit decision list” can be as simple as a sticky-note with the location times and duration times, to a spreadsheet with much greater detail. Again, DVDs have the advantage of absolute time for every frame of video, whereas VHS tapes require much more guesswork and written description of scenes. Issues of precision on what to copy are particularly important if someone else will be responsible for the actual capture process. Once the content is identified, it needs to be transferred to a computer for editing and conversion to an efficient format for classroom playback.

Audio and video signals may be fed to an Analog to Digital (A to D) media converter and then into a computer’s “FireWire” port where it can be captured to a hard drive using affordable software. There are several options for A to D converters starting under $200. (See Appendix A) The converter combines the analog video and audio into a single digital stream known as “DV.” This is a format common to most current camcorders using “mini-dv” tapes. It compresses the video quickly into an editable format that is easily processed by most computers of recent vintage.

Editing

The final step in editing your captured video is to compress it for delivery. Commonly available non-linear editing software includes the ability to capture and then divide and trim the length of the desired movie segments. Titles can be added and adjustments can be made on items like brightness and contrast, color balance and audio levels. (See Appendix A for suggested software.)

Delivery

Most of the editing software has an export (or “Share”) option allowing the DV format to be further compressed to a format for the desired delivery medium. The key question to be answered for determining how best to format and export the individual clips is: On what device and where will the content be played back? If a faculty member is using their own laptop they can ensure more control over the delivery and optimize the degree of compression (and therefore quality) for that particular device. If you need to be flexible and are taking a presentation to classrooms or conferences with a computer of unknown vintage, speed and software, it is best to process to a lowest common denominator. “Know Thine Equipment” is an excellent adage for anyone presenting computer-based material.

Common media viewing formats include QuickTime, Windows Media, Real, and Flash. Additionally, there are “open standards” formats including several variations of MPEG (Motion Pictures Experts Group). The lowest common denominator format recommended is MPEG 1. Almost any computer made in the past decade is capable of playing back this format. It is also compatible with most
versions of PowerPoint on both Mac and Windows platforms. It encodes and decodes quickly on most computers and can be easily resized without a significant loss of quality. The downside is that it has a lower quality to size ratio than most of the newer generation formats. Since we’re talking about relatively short clips in this context (remember, no more than 3 minutes or 10% of total length of the video) that is not likely to present a major problem. A CD-R can usually hold about an hour’s worth of standard MPEG 1 video.

While CD and flash drives are great for portability, it is usually advisable to copy presentation files to a local hard drive for best performance. Streaming and on-demand video require server access and an accurate knowledge of what the lowest common denominator format is for your audience. It is best not to rely on video over the network for in-class lectures or presentations unless your infrastructure is very reliable and expressly supported for such applications. Asynchronous learning opportunities via the web or course management systems are better applications for network delivered video.

Beyond the classroom, there are many exciting technologies emerging that are already changing the face of learning. Video enabled iPods, cell phones, and laptops are making media content portable and ubiquitous. Basic literacy in the means producing this rich content is becoming a vital skill for educators in the new millennium.

**Contingency Plans**

Prior to the scheduled class showing, test the system you have in place before the arrival of students to trouble shoot any difficulties in advance. As with the use of all technology in classroom teaching, contingency plans are required when using movie clips for classroom teaching. Let’s assume you have digitized your clip and have inserted it on the computer located in the classroom, but the system does not work. Having multiple copies of the video clip helps avert problems if one form of technology does not work. For instance, if you are unable to access a clip you have on your course management system due to network failure, you will want to have an additional copy on a memory stick or on the classroom computer’s hard drive. One contingency plan is to have the original media source with you and marked for the appropriate section, allowing you to show the clip on a cart system with a television set and DVD/VHS player. This plan will only work for small classroom settings in which all students can see the media displayed in this manner. You will also want to have an alternative lesson prepared in the event that all media outlet forms are inoperable at the time. Here, you might use a case study example that outlines the scenario you wanted to show or you might have visuals that can be shown on an overhead projector.

**Faculty Development to Support Use of Visual Media**

Beyond the classroom, there are many exciting technologies emerging that are already changing the face of learning. Video enabled iPods, cell phones and laptops are making media content portable and ubiquitous. Basic literacy in the means to produce this rich content is becoming a vital skill for educators in the new millennium. To this end, faculty members face a number of challenges, not the least of which is the ability to digitize clips for multiple media formats. To address this need, training for faculty may involve faculty members learning how to do the technical processes themselves or having a university resource center established that faculty may use. Faculty developers can gauge the needs of their campuses based on available resources and faculty expertise and needs.

Another manner in which faculty might need support to incorporate video into their classroom is in using course management systems to take full advantage of the use of video clips. Training for faculty in this instance might mean highlighting how to post the clips to the course management system or how to incorporate the videos into a strictly on line course. The use of the technology here involves identification by faculty of their needs on the continuum of these technologies.

The final aspect of training support for faculty is providing a forum or teaching circle in which interested faculty might share best practices and serve as mentors to others just starting out experimenting with using movie clips in their teaching. In this instance, faculty developers may create sessions that highlight a variety of active learning strategies and help faculty determine which technique works best with any chosen film clip. Practice in developing lessons based on active learning transcends the use of movie clips in the classroom and can incorporate all forms of classroom learning. Faculty brainstorming on selecting appropriate movie clips might involve an exercise in which a number of films are reviewed with faculty from a variety of disciplines. This activity can spur idea generation on how the same scene might be used from different disciplinary perspectives. For instance, a scene from *Twister* could be used to show the science behind wind effects, communication patterns, human relations interactions, theory from sociology, and explore the economics of natural disasters. In institutions without a teaching or faculty development center, interested faculty might form a network to share ideas that includes a listserv or a binder with resources.

Faculty support units can provide needed assistance for faculty through programming, as noted above, as well as by promoting the sharing of clips throughout the faculty. Some clips may be used for other classes by the individual faculty members.
faculty and with different emphasis, making the time invested in the development process more beneficial to the faculty member. For example, a clip from the movie Office Space might be used to highlight an example of a bureaucratic work environment for a course in organizational theory, but could also be used to showcase forms of organizational communication or leadership. The same clip could be shared with a faculty across campus to highlight interpersonal communication and relationships or the ergonomics for optimal work settings. Creativity can be generated by faculty within a discipline or department brainstorming session regarding potential films and use of clips in lessons. Also, faculty within and across departments may share or trade video clips, providing another way to divide the work effort. A shared space or database to store already digitized clips would also promote use of video for those faculty members willing to incorporate video, but anxious of the technical knowledge needed to create their own clips.

Conclusion

Using video clips in teaching can provide a means to better connect students to class content, especially when the film is incorporated with active learning. Key to getting the most learning out of a class session is planning by faculty. Advanced planning involves the choice of movie clips, incorporation of the film contents into an active learning segment, and consideration of direct links to learning outcomes.

Support for faculty using technology to develop a collection of video clips for classroom use may be housed in a faculty development center or may be provided by individual colleges or departments. The costs are relatively low for basic equipment to digitize video clips. Certainly, low technology is applicable as well in which faculty members simply cue up a VHS tape or a DVD to the desired location for showing. Faculty development sessions can be devised on campus to serve as a workshop in which faculty can develop a lesson based on a clip and have an opportunity to test it with peers in the group prior to using it in class or simply to understand the transfer processes.

Faculty may ease into using this teaching technique by simply starting with one video clip in a lesson and assessing students to determine what they learned when using this method. Another approach is to assign students the task of finding a video clip to highlight a class topic. For instance, in a class on small group interaction students may be charged with finding good examples of small group interactions. At the conclusion of the course, the faculty member would now have the start of a video clip collection on the topic. Ultimately, when this tactic is repeated a number of times for different topics, faculty will have a large number of clips to use for a variety of purposes. A library of clips can be created by individuals and shared institutionally to allow for novices to the process to acquire the confidence to apply this teaching method quickly.

In summary, video clips can be incorporated into teaching to improve student learning. The process can range from low technology approaches to ones using more developed technology. A key to success is to use the video as a mechanism to promote active learning and to reach a broader range of student learners. Research indicates that engaged learners retain more content information (Nilson, 2003) and using movies can provide a hook to gain student attention.

References


**Appendix A**

*Resource List*

**Video Editing Software:**

*Basic:*
- iMovie (included w/ Macs)
- Windows Movie Maker (included with Windows XP SP2 or Vista)

*Mid-Level:*
- Sony Vegas Movie Studio (Win)
- Apple Final Cut Express (Mac)
- Avid Express DV (Mac/Win)

*Higher Level:*
- Apple Final Cut, Studio (Mac)
- Media 100 (Mac)
- Sony Vegas (Win)

**Transcoding Software** (to convert DVD content in the digital domain):
- MPEG Streamclip (Mac/Win)
- Visual Hub (Mac)
- Nero Digital (Win)
- DVDx (Win)
- Cinematize (Mac/Win)

**Hardware Suggestions:**
- Apple iMac (Intel Based)
- Windows PC – (Current generation Pentium)
- Canopus ADVC55 Analog to Digital converter
- Canopus ADV110 Analog to Digital converter (bi-directional)
- DVD player with s-video out (most consumer units)
- VHS Deck with s-video
- Mini-DV Camcorder - Most current Sony and Canon models
- JVC VS30U Dual DV/VHS Deck (with FireWire port)

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Appendix B

Teaching Movie Resources

- Film Ratings
  http://www.filmratings.com/
- Internet Movie Database
  http://imdb.com/
- Netflix
  http://www.netflix.com/Register
- POD Listserv
  http://tinyurl.com/ybv4fa
- YouTube
  http://www.youtube.com