



OUTLOOK >

◦ Video Use In Education

Best Practices for Success in the Classroom

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According to market research recently completed by Rubicon Consulting, video editing currently represents the fastest growing category of software sold into Education. More and more schools are producing videos, with even middle schools often broadcasting live announcement shows via in-school cable systems. Most new school construction now includes dedicated video studios for use by students and faculty. Despite all of these signs of impending breakout, Rubicon estimates that only five percent of K-12 teachers currently use video creation in their classes, so the market remains a very early one at this point.

This white paper analyzes the current situation, some best practices for adoption and offers projections for what is next.

◦ The Current Situation

The market for video creation in Education is large by any measure. The surging popularity of consumer video means that ever greater numbers of teachers are familiar and at ease with video technology. At the same time, the initial noteworthy educational successes of video-based learning are already attracting the more innovative teachers. With over 4 million instructors in the US and a projected interest level of 20 percent, we expect 800,000 teachers to be using video in the classroom within the next few years.

Long hailed as the next "killer application," PC-based digital video has repeatedly disappointed its supporters. DV suffered historically from an inherent complexity in both the applications and the equipment and configuration requirements. Editing DV was both expensive and difficult for lay users.

As hardware and complexity barriers disappear and prices drop for the hardware and software needed, DV growth in the consumer market has accelerated rapidly. In a significant change from as recent as a couple of years ago, even moderately priced systems now include CPUs, memory and storage sufficient for DV editing. As DV editing spreads in the consumer market, more and more teachers and students are gaining a familiarity with DV editing.

Today in Higher Education, video creation and editing most often is part of a vocational or career-oriented curriculum, ranging from strictly vocational programs in video production or Radio/TV/Film programs to Cross-Media Communications majors at four-year universities. Outside of these programs, instructors rarely employ classroom use of video creation and editing.



K-12 teachers use video to support several different objectives, but use is extremely dependant on the drive and initiative of individual teachers. These teachers have a strong affinity for video creation and will invest considerable amounts of personal effort into its use.

Video production courses are the most widespread and best established use of video. Courses range from truly vocational offerings, such as those in higher education and some high schools, to high school electives that teach basic shooting and editing techniques. There are many middle schools producing daily or weekly announcement shows that fall into this category as well.

An emerging use of video in K-12, especially the elementary grades, is to support the core curriculum. Today, these types of uses are few and scattered, limited to the most innovative of teachers, but initial successes demonstrate tremendous potential in this area, and it is definitely a key area to watch.

Rapidly expanding use of video in the broader consumer market results in an increasing number of teachers and students who have video editing skills they acquired and use outside of the classroom. Video creation is fun and engaging for enthusiasts so there is some use of video as a vehicle for teaching and/or using technology in the classroom. This approach is most at risk from tightening budgets and increased focus on standardized curriculum and testing.

As with other types of technology, brand is much more important to the faculty in higher education than to traditional K-12 classroom teachers. For higher education, use of a particular application by potential employers of new graduates is the largest single factor in deciding what specific editing application to use.

◦ **Some Best Practices for Video Creation**

Non-vocational use of video is in the early market phase and current use nearly always is driven by an individual champion. For an early market application, this type of individual champion is absolutely critical for success. While individual initiatives are necessary at this stage, they are not sufficient to drive longer term success. The video initiative must be tied directly to the curriculum so that it can demonstrate academic results relevant to state-mandated testing.

Instructional programs wanting to initiate or increase the use of video face two major hurdles to success: funding and training. Established vocational programs mainly face just the first challenge.

Funding. Video programs are expensive programs relative to the number of students. This is true at all levels of education. In the elementary grades, many of those interviewed saw video (and other technology initiatives) in a losing battle for funding versus programs directly linked to statewide learning standards. However, this does not have to be the case, as a number of successful programs demonstrate. Successful programs address funding in one of the following ways:

- **Link the video-based curriculum** to state standards such as reading or math skills or otherwise addressing lower-performing or educationally at-risk children. By linking to government standards, schools can tap the much more ample funding from initiatives for teaching basic skills such as No Child Left Behind available at both the state and federal levels.

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- **Expand video's constituency.** Cross-curricular video projects make video production a widely valued campus resource. Whether the project is taping football games for the Athletic Director, creating a video of the school theatrical production, or supporting a language arts teacher's projects forms alliances among departments that otherwise would be vying for the same funds. This approach also works in a non-curricular setting, especially in higher Education, if student videographers are able to support administrative goals such as public relations or advertising.
- **Grants** are widely used to fund everything from small seed programs in elementary grades to vocational programs. While most grants range from a few hundred to a few thousand dollars, one high school teacher generated nearly \$1 million in grants and vendor in-kind donations over the past seven years.
- **Paid work** is used by some vocational programs as a way of generating supplemental funding.

Training. Video creation and editing is widely perceived as being very difficult and complex, especially for those without prior experience. Experience with some widely used prosumer-level applications only reinforces this perception. For highly advanced courses, sophisticated, professional-level applications are appropriate, but many Educators do not benefit from this level of capability.

Finding a way to quickly give teachers the required shooting and editing skills is critical if video is to expand beyond the current core of video enthusiasts. Successful programs adopt editing applications and projects that are appropriate for the students and learning objectives. Some districts or regions organize video peer groups for mutual support and dissemination of ideas.

To reach the curricular potential of video in K-12, teacher training needs to do more than simply teach the teacher to shoot and edit video, but must also communicate the educational value of using video in the classroom and guide the teacher in integrating video-based lessons and projects.

◦ **The Outlook for Video in Education**

The outlook for video in Education is excellent in both the short- and longer-terms. Both Microsoft and Apple are devoting significant resources to visual learning in the Education market and seeing excellent returns on their efforts. Apple continues to push forward at all levels of Education, but is hampered by decreasing share in K-12. Microsoft bundles its second generation DV editing software with all copies of Windows XP.

In the short-term, video use will be driven by teacher enthusiasm for both innovation and technology. In the longer-term, the unique teaching benefits of video as well as the pervasiveness of video in our culture will push video into broad acceptance within Education. Video-capable computer hardware, once a great barrier to video adoption, is now widely available and will become prevalent in the next few years.

In Higher Education, the fastest growing programs we interviewed were cross-media communications programs that combine elements of print, web and video communications. This is a hot field that is likely to change the way that video production is taught at all levels. Film and video purists may scoff, but cross-media skills are well-tuned to the emerging needs of the market and graduates

with these skills are in high demand. Even print journalism students are being trained to shoot and edit video to give them the skills flexibility demanded in today's market.

Video use in K-12 must overcome two major challenges to gain broader acceptance:

- Time requirements in K-12. For all its benefits in reaching and teaching students, the promise of video creation and editing is better and wider-reaching results, not more efficient teaching. Teachers using video will see more demands on their time, not less. In the near-term at least, this will tend to limit video use to the most innovative and dedicated teachers.
- Learning curve. Some students learn video editing applications much quicker than their teachers, something some teachers find intimidating. The success and spread of easy-to-use video editing applications will whittle away at this issue by making teachers more confidence in their use. Better training and curriculum tools will also allow teachers to focus on the learning objectives rather than getting bogged down mastering a new technology.

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As a more mature market, career-oriented uses of video in Higher Education face fewer challenges to adoption. However, the transition to High Definition TV raises significant investment issues, especially since the transition to High Definition TV scheduled for 2006 is likely to be pushed out. This creates uncertainty around long-term standards especially when the expected lifespan of new equipment and software may be only two to three years rather than the historical norm of 10 to 15 years. More frequent upgrades raise the investment cost to programs and necessitate larger budgets or cut-backs in other areas.

◦ Looking Forward

While career-oriented video programs will be occupied in the near-term with investment and budgetary decisions surrounding migration to High Definition TV, K-12 teachers and technology specialists will see a wealth of new teaching opportunities.

High schools and middle schools will see a huge growth in the availability of video production equipment and facilities. Not only is wider awareness of video driving more schools to include video studios in new and renovated construction, but rapidly falling costs of equipment and software make it easier to set up very capable facilities. A setup that would have cost \$100,000 five years ago can now be assembled for under \$10,000. A basic setup on a cart that includes a DV camera, wireless microphones, computer, editing software and DVD burner now costs less than \$3000, putting it within reach of almost any school.

In Elementary schools, video will emerge as an engine for innovation as initial successes become known and are replicated. Older, less technologically inclined teachers may resist, but younger, technologically savvy teachers will embrace video-based projects tied directly to the core curriculum such as those currently being developed in isolated pockets of innovation.

For a while, video creation will remain the domain of the enthusiast, but the ranks of enthusiasts will swell as video creation and editing becomes a mainstream technology in the consumer market. Con-

tinuing and expanding examples of educational success in the classroom will add fuel to the growth of video.

◦ Examples of Best Practices at Work in K-12 Education

Goal: Develop Reading Strategies

Approach

A unified school district has a lot of success with video in the elementary grades. With an estimated ten percent of the teachers using video in the classroom, video use is as widespread as anywhere. A key to their success is using video in areas that are not easily addressed in other ways. Video is relatively expensive, so by focusing on the biggest educational problems, success generates the highest returns.

Example

A 1st grade teacher selected the six lowest performing readers as stars in a video about reading strategies. The lowest-performing students were chosen because it gave them a confidence building, high profile success in front of their classmates. Working on the video also made reading cool and fun. In the end, the students not only learned the important reading strategies that were the core objective, but via the video, their parents also learned how to support the reading development of their children. Surprises included seeing that students were able to recognize a much greater range of reading errors during the editing process than they were able to recognize when spoken. Lastly, by the end of the project, even kids that had trouble spelling “was” and “when” had no trouble spelling “cinematographer.”

Goal: Build Support for Video Production Program

Approach

The video teacher at a large high school has expanded support for the video production class he teaches by encouraging real world, cross-curricular projects with other departments. The mainstream video production course has grown to six sessions totaling 180 students over the past two and a half years, and enjoys strong support from other departments in the school as well as the district administration. The key is to link projects to real ideas that tie into the curriculum rather than doing video for the sake of using video. Giving everyone at the school a stake in the success of video makes the program stronger.

Examples

Real world projects with other departments, such as the district administration or outside groups like the State Parks Department. Some recent projects include:

- Tape science experiments
- Create video of Spanish language soap operas written and performed by students
- Tape Drama department productions
- Create an instructional video about the school’s counseling process
- Tape football games and create a highlight film
- Create a documentary on historic site for the State Parks Department

- Create an informational video for local cable TV following passage of School Bond measure.

As a result, every time the teacher talks to someone new about his program, interest in video grows stronger and wider, and he is now a district-wide resource spreading news about how video can be successful.

Key Lessons for K-12

1. Video is not just for the top students. Even students with learning impediments or behavior problems often are attentive when given responsibility for creating a class video and handling expensive equipment.
2. Lower performing students offer greater potential upside for learning improvements and, thus, targeting these groups may offer more opportunities for project funding.
3. Children are culturally more attuned to moving images than static images and text. Video is a natural medium for them.
4. Video offers a great vehicle for cross-curricular collaboration between teachers, departments and students.
5. Be attentive to unexpected benefits. Video is still new in Education, so many benefits remain unknown

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Rubicon Consulting partners with leaders who want to grow their high-technology businesses with strategic marketing services. Specializing in go-to-market strategies allows Rubicon to develop marketing programs, channel plans, product positioning, and customer targets. We help clients to design, develop, and implement custom, practical solutions that work.

Rubicon Consulting is the brainchild of Nilofer Merchant, a 15-year veteran of delivering marketing strategies for world-class companies including Apple, Autodesk, Adobe, VALinux, and others. The garnered experiences led to the acquisition of knowledge, models and practices. In time, with sufficient insight, we've developed the ability to predict the outcome of actions accurately. We bring an unbiased, wise, practical, and fresh perspective to your business. Call us if you could use this.

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