Digital Video in Physical Education

By Jarrod Robinson

One of my favourite memories from my junior sporting years is a video of me running a 400m at the Victorian Championships. To this very day I still find myself watching it when I feel like taking a trip down memory lane. However the purpose of filming the race all those years ago wasn’t based on fuelling any future nostalgia, but giving me an avenue to see my race in a completely different light. Back then my understanding of technique and tactics were only limited, but the one thing that was certain was the incredibly motivating effect video has on sporting performance.

With this positive experience in mind it is an absolute must that I aim to incorporate the wonders of digital video within my Physical Education classes. For most sports coaches and educators, video is not a completely foreign tool. It has indeed been used and promoted for years by elite sporting teams and organisations like the Australian Institute of Sport. However in recent years the ability to mix digital video with other media and share it via the Internet has opened up a whole new area of possibilities.

Filming and Sharing Digital Video

1) Youtube.com - The digital age has brought about a host of new video sharing options with none of them easier than YouTube. As you would be aware there is really no greater catalogue of sporting videos than those that can be found on YouTube. Are you teaching a new sport in one of your classes? Then why not mix in a clip from YouTube to help you demonstrate a sporting action. In today’s day this is super simple to actually achieve. Simply access the video via a mobile phone or take a laptop and maybe even a projector to the sports hall and have people watch and re-watch videos over and over again to ensure they fully understand the sporting skill.

How about approaching it from the other side and rather than consuming content from YouTube, contribute content to the community by uploading your own videos. Have your students teach a sport or physical skill, upload it, then sit back and watch as people from around the world watch and comment on the video. You could even pair up with a school from overseas and seek to teach them some of the basic skills within one of our own Australian sports. If you are unable to access YouTube then try some of the other alternatives http://tinyurl.com/lpez4r

2) Tube Chop.com – With the absolute plethora of videos on YouTube it is a must for Physical Education teachers. The great thing about Tube chop is that it allows teachers to select a certain section from a YouTube video and share only that section. Great way to filter the nonsense in YouTube.
3) **Flip Video Camera** - The first and most essential tool for a Physical Education teacher. No other camera is as simple to record video footage, making it a snap to film and analyse sporting techniques and game play. With a few of these very low cost cameras in your classroom, you can easily review footage and begin to use it as a means of practical assessment.

4) **Posterous.com** – Want to store your digital video? Then try posterous, the simplest way to make an online digital portfolio of your sporting performance that can be reviewed and analysed over time. Simply film or record the desired skill and send the video file within an email to post@posterous.com. This will turn your email into its very own unique website where the video will be able to be watched online. Have a new video or document you would like to include? Simply send a new email to post@posterous.com. By far the easiest, no fuss way to put anything you like online.

**Video Analysis and Assessment**

The next step in using Digital Video in your sports classes is to incorporate some form of video analysis. This can be done as easily as reviewing content you have recorded with a Flip Video camera on the spot or more extensively with software packages.

1) By using a step-by-step technique checklist, students can actively review their sporting performance to determine what elements of a technique are still yet noticeable. This can then be coupled with a peer or teacher evaluation as a valuable assessment piece.

2) This can be taken the step further by introducing some simple to use Video Analysis Software such as Time Warp 4. Using the software and a camcorder connected to a laptop you are able to TimeWarp allows you to review your movement immediately after it has been performed. Once the required time delay is set, the operation is hands-free and provides instant visual feedback. As you can imagine the ability to instantly review your action after a set period of time is an incredibly powerful tool within any Physical Education class.

I have tried this on a number of occasions with excellent results found across all sports and activities it has been used. More recently I connected the laptop to a projector and had it running a 5 second delay within a Volleyball Match. The students were then able to glance over without leaving the court and observe any errors that were made. It also allowed for great discussion of team tactics and a variety of teachable moments that occurred throughout the session. One of the most pleasing aspects of the entire process has been the improved levels of student motivation as a result of the ability to review
any aspect of their performance especially the moments were they are successful. This motivation carried into all forms and I am asked almost weekly when our next instant replay session will be. For a video demonstration of the activity view the video at http://tinyurl.com/35aole8.

3) If you are after a more advanced video analysis then you can’t look past ‘The Zone’ by Silicon Coach. The Zone allows teachers and sports coaches the ability to analyse videos in a completely online web-based/no software required environment. From your first experience you will immediately be able to notice the benefits of being able to review your videos within ‘The Zone’. Coaches, referees, bio mechanists, mentors and athletes all benefit from being in The Zone. The Zone’s key benefit is that it improves performance by providing a set of tools for sharing knowledge and expertise about skilled movement. It also features an extensive library of lesson material that can be used to teach anything from Biomechanics to the perfect golf swing.

In a recent classroom activity a group of year 10 students recorded themselves completing a serve in badminton and then compared it to an elite performer to determine any gaps within their technique. The software, which was learnt within 5 minutes, allowed them to advance the video frame by frame. It also allowed them to draw on the video to determine their range of motion within the serve and also measure the angle of their elbow during contact.

One of the benefits of using online video analysis software such as the zone is that you will always have the most current and up to date versions of the software, as there is nothing to download and install. It also means that you can use it wherever there is an active Internet connection. Sounds good? Go ahead and try the zone in the demo site at http://thezone.siliconcoach.com/TryAsGuest.htm

Digital Video as Motivation

One of the simplest and most powerful ways you can use Digital Video within your classroom is to create a dedicated ‘VIDEO Team’. The job of the video team on a lesson-by-lesson rotation is to film and record physical activity within practical sessions. The video team are then responsible for editing and compiling the footage into a two-minute montage that can be played back in the following week. This simple idea has proven to be a real winner with the younger groups as they seek to produce something that everyone will be able to enjoy together. This footage can then be shared amongst the class as a way of remembering the fun that can be had within Physical Education classes.
Even though Video itself isn’t an entirely new concept in Physical Education, it has however taken a variety of new forms. Students are no longer bound to sharing their performances only within their own classroom, but can now also share them with the wider world. One thing is for sure, the use of video will motivate your students to want to improve and after all, isn’t that what it’s all about?