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Technology Follows Technique: Refocusing the Observational Lens

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Chapter 8

Technology Follows Technique: Refocusing the Observational Lens

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INTRODUCTION

> Technological revolutions have several interesting properties. First, we tend to overestimate the immediate impact and underestimate the long-term impact. Second, we tend to place the emphasis on the technologies themselves, when it is really the social impact and cultural change that will be most dramatic. And, finally, we think revolutions are fast, with changes occurring in months or, at worst, a few years.
> Donald A. Norman (1998, p. 5), *The Invisible Computer*

Videotaping teachers or teachers in training as they teach is nothing new, and the application of digital video technology may do little more than render the process in some ways easier and the outcome more versatile. As Norman (1998) suggests above, however, it is the social and cultural dimensions of a technological revolution that impact us more than the devices themselves. Thus, it is not so much the mechanism of capturing, editing, and disseminating images of teaching performances that will foster dramatic change but rather a refocusing on the teacher education and professional development environment in which digital video will be brought to promote the health of the educational ecosystem. The project described in this chapter will eventually turn the lens of teacher observation toward just such a reorientation, enlisting the technology to create and support new, and hopefully more wholesome, models and feedback techniques.

The first section of this chapter, then, explores the problems inherent in teacher observation, particularly where video is introduced. It underscores the social di-

mension of power relationships that underpin observation for evaluation purposes. The second section describes traditional approaches to teacher observation using video. This section ends by pointing toward peer coaching as an alternative model for teacher training and professional development more in sync with the changing landscape of social structures today. In the third section, the circumstances and development of the current project are described, primarily as a model for the thinking processes and group communication dynamics that underlie it. It may serve to foster consortial work for readers interested in creating a similar project. Referring back to the epigraph, this section attempts to make visible the changing social scene of collaboration as it mutates away from hierarchical structures. The fourth section details the technical aspects of digital video production and distribution. The fifth part combines the concern for better social models of teacher observation and professional development with new technologies. It proposes adding digital videotaping to the peer-coaching model and utilizing computer-mediated communication (CMC) to support peer-learning communities. The conclusion returns to the social implications of the increasing ease and ubiquity of techniques and technologies of surveillance.

PROBLEMS IN TEACHER OBSERVATION AND VIDEOTAPING

Observing teachers teaching has obvious positive factors, especially for new teachers for whom appropriate and timely feedback on their incipient practices leads to a healthier overall professional development (Evertson & Holley, 1981; Beal, Bonaparte, Spring, & Tempenis, 2000). A broad range of skills and behaviors may be targeted: classroom management, teaching methods, language and cultural proficiency, and overall teaching style, among others. Still, current observational processes are stressful if not potentially counterproductive for many reasons.

The first and perhaps most basic is the imposition of a superior viewer. From Leibniz' *Palais des merveilles* (Crary, 1992) to Foucault's (1997) *Panopticon*, disciplinary surveillance and the threat of negative evaluation and its consequences are rarely encouraging, nurturing, or proactive. Regardless of any attempt on the supervisor's part to soften the threat of observation—from allowing the subject to choose the circumstances to the now pro-forma, preemptory list of positive observations (usually just before the shoe drops)—it is still most often the fact that the observer holds some form of power over the subject. The very term, 'super-visor,' makes clear the superior position of the observer. Even in the rare instances where no power differential is readily visible, the observer still stands in judgment with respect to the subject. When the observer comes from a different generation or approach from that of the subject, the mismatch of method and style may likely be to the detriment rather than benefit of the subject under observation.

Another culprit is the one shot nature of most observations: the teacher being observed too often has only one chance to shine. The very singularity of the observational moment incurs more stress, if not precipitates mishaps, during the session (Evertson & Holley, 1981). A sleepless night added to students' reaction

to their teacher's nervousness and the anomaly of the observer's presence rarely equate to a typical performance from which normative behavior can be determined and evaluated. When a camera starts rolling, one can be sure that 'those' students will really begin to act up, or at the very least not behave 'normally.'

When recording of any sort, from written notes to digital video, is brought to bear on the process, the stress of being judged multiplies for the subject. The factor of "seeing oneself as the other" (Beal et al., 2000) is discussed in greater detail below. Recording fixes that one performance as though it stands for the entirety of the subject's teaching abilities. The enduring nature of the recording in and of itself is threatening. Today, however, with digital reproduction—that one instance—once captured, can not only be easily modified but also distributed ad infinitum and far beyond school walls. What teacher has not heard of the clips of bad teaching available on YouTube and RateMyProfessor.com and feared a similar 'outing?'

Another stressful factor pertains specifically to language teachers. Some tend to be hyperconscious of their second language abilities. Coming face to face with how one looks and sounds in a second language can be an especially difficult confrontation, however much it may also be 'good for us' (Vattano, 2005). This, then, applies equally to native speakers when they lapse into the first language of their students.

What does good teaching look like over the long run? Teachers over the years assimilate the ways of their teachers and then follow their lead not so much because they are stellar models but more because they have never seen anything better in action (Oxford & Jung, this volume; PT3, 2007). Where preservice teachers have experienced good teaching and have witnessed good role models, often these are not of long duration. It would, indeed, be an anomaly to find a teacher who has had him- or herself observed or taped for an entire semester or year (except, of course, by the learners themselves, whose 'observation'—if counted at all—amounts to nothing more than a short standardized form that rarely gets to the heart of the teaching that has transpired).

Finally, when the teacher-training classes and evaluations are over, once new teachers have passed the probationary period, most sigh relief rather than set up a schedule for ongoing observations. Teachers obviously engage in professional development, but rarely does such development include deliberately setting up a continuing visitation schedule. Especially, teachers adhere to what Barth (2000, p. xiii) calls teachers' "debilitating taboo against making their work mutually visible" because "to invite scrutiny of our work is to invite discovery. To reveal oneself is to reveal one's flaws. In such an isolated, fearful and vulnerable world, how can the performance of adults improve so that the performance of youngsters will improve?"

LITERATURE REVIEW ON VIDEO FOR TEACHER TRAINING, OBSERVATION, AND EVALUATION

With the increasing ease of capturing and disseminating moving images—first

film then video—the application of these technologies to professional development has long been commonplace. Instructional and training motion pictures are almost as old as the technology itself. Recording for performance improvement is nothing new either, from sports to professions like law, medicine, and teaching. It goes back to the early days of film but has grown in currency with the advent of video and increasingly user-friendly cameras. Teacher education in general and foreign language teacher training in particular have long used motion picture technologies in a variety of ways to improve learning and teaching.

There are two main types of observers: self and other. Dr. Frank Vattano (the professor who introduced one of the authors to videotaping at the very onset of her teaching career in the early 1970s) has taught, published, and spoken about its practice quite widely for more than 30 years (Vattano & Titley, 1977). Vattano (2005) wrote recently,

> A few years into my career as an assistant professor, my department chair asked me if I would be interested in teaching Introductory Psychology on television. Our university had decided to experiment with the medium and looked to a large enrollment course for obvious reasons—economy of scale. Having worked my way through college playing in a jazz combo, I was not intimidated by the camera. However, let me tell you, seeing yourself teach is no ego trip. After the shock wore off, I realized that self-confrontation through video tape has to be one of the best ways to sharpen some of the rough edges and to gain insight into your own persona. To this day, I use the medium, along with my graduate teaching fellows as a means for improving our class presentations. I believe it is essential for anyone who teaches to tape a class periodically for the purposes of self-analysis and critique. (It is not a bad idea to hide all sharp objects prior to reviewing your initial tape). (n. p.)

Before the ubiquity of camcorders and the current comfort level with seeing oneself televised, Vattano's and other researchers' great concern was expressed about the impact of seeing oneself on tape. Perhaps it was the negative impact of an additional five (black and white) or ten (color) pounds on an already weight conscious viewership. More likely, as voiced by psychologists, it is the shock of "seeing ourselves as the other"—the title of a later article on the subject (Beal et al., 2000). The implications of the psychological impact of this kind of visual representation on the observed individual cannot be underscored enough. Yet, as Vattano has opined, self-analysis and critique are key factors for improvement.

Carroll (1981) has written of self-evaluation, noting that self-rating often varied significantly from student and peer evaluations. His research into effective self-evaluation has led him to call for self-study materials (like those he cites from San Jose State University in modules on syllabus creation, lesson planning, testing, etc.), observing fellow teachers, and videotaping one's one teaching using three techniques: microteaching, interpersonal process recall, and interaction analysis.

Before hand-held camcorders for videotaping, the technical side was left to an institution's television studio, which meant back then that only major universities and well endowed colleges had such facilities. A faculty member would have to

reserve the studio and the film crew well in advance of filming an observation session. It was generally a one-shot affair due to the elaborate nature of the studio setting, equipment-handling difficulties, and class logistics. The class was displaced from its usual surroundings to the studio setting, where already the strangeness of the situation would not only feed into the anxiety and self-consciousness of the person being taped but also lead to distortion in the 'normal' behavior of the class. Interestingly, Fuller and Manning (as cited in Carroll, 1981) set as their first guideline for a self-confrontational model for teacher videotaping that the setting should be "typical rather than unusual," which at the time was barely possible.

Nonetheless, the importance of Fuller and Manning's work is found in the notion that for there to be positive change in teacher practice, the teacher in question needs both facilitative conditions and confrontation, "i.e., identification of a discrepancy between the person's view of reality and those of some observer." (as cited in Carroll, 1981, p. 493) Without guidance or focus, the self-evaluating teacher tends toward the superficial rather than substantive aspects according to Carroll. He then lists a summary of the research-based guidelines from Fuller and Manning for videotape playback (p. 195):

1. The recording setting should be typical rather than unusual.
2. The playback setting should be psychologically safe (e.g., confidential).
3. There should be prior agreement on the goals and behaviors to be focused on.
4. Optimum results are most likely with instructors who
   a. are genuinely interested in participating,
   b. have personal concerns or goals related to teaching,
   c. are young and intelligent,
   d. have relatively good self-esteem,
   e. are open to change and have the capacity for it,
   f. are able to describe some deficiencies before playback, and
   g. are able to identify discrepancies between observed and expected performance.
5. The feedback provided should be
   a. clearly focused on discrepancies that are moderate, rather than large or small;
   b. unambiguous, trustworthy, informative;
   c. accepted by the instructor as accurate;
   d. balanced in terms of identifying strengths and weaknesses; and
   e. presented in a context in which treatments are available for establishing new behaviors.
6. The persons serving as focusers should
   a. have previously been videotaped themselves;
   b. communicate authenticity, positive regard, and empathy;
   c. negotiate the goals of the video playback;
   d. confront the instructor with moderate discrepancies; and
   e. be nonjudgmental toward the instructor.

The guidelines do not call for the observed teacher first to view and engage in self-analysis. Rather the confrontation is the focus of the exercise, and it is the focuser who underscores the truth of the taped 'evidence.' It is perhaps humorous that 4c above states that optimal results will come from "*young* and intelligent" instructors (emphasis added).

Carroll (1981) then describes videotaping microteaching based on Allen and Ryan's work from 1969. For this, a snippet of a lesson, some 10 to 20 minutes, is prepared and taped. It may even be taped without a real class. The recorded instructor and a colleague or a group (e.g., other graduate teaching assistants) immediately critique it. Carroll notes the artificiality of the situation as a negative but underscores how targeting a specific teaching area and the short time frame allow for goal setting and focus on behavior.

Interpersonal process recall is more appropriate to counseling and clinical arenas. Still, the fact that a highly trained facilitator elicits from the instructor being taped and students (clients) what is being attempted and how it is being received could be a wonderful source of information for novice teachers. It would, for the language classroom, open a lens on student learning along with fleshing out the preservice teacher's thinking process, making that thinking visible to the other interns and a rich source for discussion. The downside, should classroom time be used, would be the need to use English and the fact that the students would not be engaged in language acquisition activities.

The third approach, interaction analysis, provides a list of typical classroom interactions to be analyzed. Using the 10 Flanders interaction analysis categories (as cited in Carroll, 1981), the amount of time spent on each category is easily calculated. The categories include: lecturing, criticizing, giving directions (direct modes of teaching); asking questions, giving encouragement, accepting feelings, using student ideas (indirect modes of teaching); and instructor's comments, students' comments, and silence. One can also investigate the connections between interactions to seek patterns. Taping is repeated over several class periods to gain a thorough picture of interactions.

A final note in Carroll is that self-evaluation is best done with others, which at first blush appears to be paradoxical. What he underscores, however, is that the focus and perspective that an outsider brings to the critiquing session(s) allows the teacher being observed better to confront "how others see him/her" as part and parcel of the self-analysis.

Despite the evidence of positive effects of videotaping teacher observation and of video models of good teaching in action—the original focus of the authors' project—changes in technologies and the concomitant shifts in social dynamics of the 21st century warrant a rethinking of the entire scene of teacher observation (Miyata, 2003). The Center for Teaching Excellence (CTE) at Virginia Commonwealth University (VCU) offered a workshop in spring 2006 on teacher observation and performance enhancement through peer coaching led by Barbara Gottesman. Her approach, were it linked with digital technologies, may well create an observational process more appropriate for preparing and developing today's teachers. Peer coaching reduces the stress of observation by equalizing the posi-

tion and power of the observer and the observed. The guiding principle of privacy between peers and the ownership of all observational materials by the person being observed fosters greater risk taking in confronting one's teaching self (Gottesman, 2000).

THE VCU-UR PROJECT

The current project includes Antón (Tony) Brinckwirth, Elizabeth Kissling, Kathryn Murphy-Judy, and Carlos Valencia. It arose in part from the overlap of Kathryn's mentoring duties with Elizabeth and their respective responsibilities as coordinators of basic language instruction for the second-year French (Kathryn) and basic Spanish (Elizabeth) programs at VCU. Kathryn was required to observe Elizabeth teaching twice as part of her duties in the CTE mentoring program for new faculty. At much the same time, Kathryn was conducting official observations of new faculty and some veteran professors, filming those who agreed to being videotaped as part of their yearly evaluation. In discussions of their university teaching, mutual responsibilities for teacher observations, overall best foreign language education practices, and issues in videotaping teachers and students, Elizabeth and Kathryn noted that 'catching good teaching' would be a positive addition to the more traditional observation process too often associated solely with negatively critiquing feedback and potentially dire consequences (Blanchard & Johnson, 1981; see also Calandra & Lai, 2005, as well as Blanchard & Johnson on the idea of video capturing good teaching in motion for student teachers). As the idea grew into that of an electronic database of good foreign language teaching clips, Kathryn and Elizabeth invited Tony, the Director of the School of World Studies Media Center, and a colleague from a neighboring university, Carlos Valencia, to join them. Tony adds a wealth of technology expertise on sound and video recording, streaming video technicalities, and databasing. He, too, has been a language instructor and is certified in instructional technology. Carlos teaches at the University of Richmond (UR), which offers a long-established and effective undergraduate teaching program. He is currently the Director of Technology and Teaching for the newly formed Department of Latin American and Iberian Studies.[1]

The overarching goal of the project is to foster better teaching and learning through well targeted digital videotaping applications, which has led the team to explore better application of readily accessible media for improved communicational functioning all the way around. One important facet regards the structuring of the project itself and how the team avails itself of various technologies to promote its own collaboration and growth. This aspect, outside the strictly digital video arena, provides another optic on the social dimensions facilitated by new technologies. It is important to note that the group has endeavored not to set up power differentials based on institutional positions but rather regard each member's input equally, somewhat in the lines of what has been called an adhocracy.[2] Another facet of the project is its outreach activities designed to share the group successes and learning so that others may replicate them for their own communities of teaching and learning improvement. The fundamental operative concept

is that of a 'healthy viral' application for teacher trainers and other teaching and learning communities.

All four team members are extremely busy, and only two have offices in the same building. With Carlos at UR, it became imperative to facilitate communication and access to materials. Tony set up both a Blackboard site and a website connected to the VCU World Studies web pages (http://www.has.vcu.edu/wld/teck/teaching.html). The Blackboard site was set it up as though it were a class in which the team members were all instructors (rather than the standard Blackboard organization, which might have been a better option).

The Blackboard site allowed postings of announcements of upcoming meetings and deadlines and facilitated emailing. There were few face-to-face meetings because of workloads and distance. Tony announced when hardware came in for the project and when files were ready, for example. Elizabeth took over as our 'logistics officer' and secretary. The course documents allowed the team to share the creation and use of forms, PowerPoint presentation ideas (for upcoming workshops), and releases. Until Tony set up the streaming server, it also housed some of our first trial videos.

The discussion board was the most useful feature for hammering out new ideas and discussing clips. Members kept each other informed about grant opportunities and shared proposals. The group managed to bring in some small funding to help with hardware and travel expenses. It also discussed which conferences and workshops to submit proposal to, ending up with five workshops and presentations at three conferences and a seminar series in 2006. Of considerable importance, the team discussed software and learning curves, as in this January 2006 messge from Elizabeth.

> Tony edits video clips using Adobe Premier. It's a fantastic application with lots of possibilities, but might be difficult for a beginner to video editing like me. There are several other easier options, and I'm going to try two of them out, with my STEP helper (student technology expertise program, I think ...):

> If you guys have any comments/suggestions as you edit clips, post them!

> Windows Movie Maker (Free in latest version of XP, under Accessories - Entertainment)
> Pinnacle Studio (costs around $100)

> I'll probably do editing on my office PC, but the language lab has a workstation that's great, too. Tony ... use[s] it for ... projects, so it needs to be scheduled ahead of time.

Before the streaming video server was set up, videos were archived in the Blackboard content management system. Team members simply opened individual folders housing the sclips to the other team members within the system (part of the content management system options). Eventually, Tony uploaded all the clips on the streaming server which was linked to the Blackboard site (see Figure 1 below).

Without access yet to Live Classroom (a Wimba Horizon product that connects to Blackboard and WebCT and is much like Elluminate for distance teaching and learning), the team had to learn either individually, by chats or short meetings. Had Tony been able to demonstrate software there, the team members might have been able to speed up their learning curves with hands-on learning at home or in the office. The Blackboard site facilitated emailing each other in bulk and kept track of work and discussions. In collaborative work and later for implementing peer coaching that exploits digital technologies, the communicational facilities of the sort discussed here serve as a model. Sometimes when teachers use a course management system, they can easily forget that it also can serve organizations and collaborations outside the classroom.

Since Blackboard limits user access, Tony created a website for the project. The web pages, designed in part for workshops at 2006 CALICO conference, form the general site from which the project will be expanding (see Figure 1).

Figure 1
Project Website

This page still serves as the welcome page to the project. The workshop I button accesses the first CALICO workshop designed to train teachers how to conceptualize a similar project and carry it out rudimentarily, if not join this project. In addition to a link to a PowerPoint presentation, it offers work instructions from the workshop as a sort of training manual in digital clipping that may well be of use to teachers and teacher trainers alike. Under the Workshop 1 link is the link for the second, more technical workshop on the various formats for displaying clips and making CDs and DVDs, with the major emphasis on streaming video. The purpose link affirms the following:

The purpose of this project is to produce a self-generating site for the capturing, databasing and streaming clips of good teaching and learning to promote even better teaching and learning in the foreign language classroom. This site provides not only clips that serve as role models for effective lessons and

stimuli for creating new approaches to lesson design, it will soon store them in a searchable database optimized for a host of retrieval needs.

The site also provides information for adding to the VCU-UR compendium and its clips and/or for replicating this project elsewhere. Given the strong VCU-UR connections to the entire K-16 FL teaching community of central Virginia through the Foreign Language Exchange of Greater Richmond (FLEX), we expect to add other colleges, universities, and schools to our digital 'clippership' and thus to share the wealth even more broadly.

The history button links to a synopsis of the genesis of the project much as it is outlined in this chapter. The final button contains a link to contact information for all four team members. This information is repeated in the window to the right, where each is listed in email links. The site does not yet include the new direction toward peer coaching but soon will.

Across the top of the page lies the menu bar with links to the streaming video archives and a resource list for production software and information. Under Teaching Clips, one finds the links that open a number of streaming video clips. Some general information on how to use digital video, which will soon be amplified, is also included.

Figure 2
Teaching Clips

Clciking on one of the Teaching Clip links opens the right-hand window and plays the video clip (see Figure 3).

Figure 3
Video Clip

Student clips contain students doing presentations and role plays, and the Varied Clips contains a bit of a hodgepodge. The Resources page provides links to sources of digital video software and practices. Clicking on the Links link displays the content shown in Figure 4.

Figure 4
Resources Page Showing Links Information
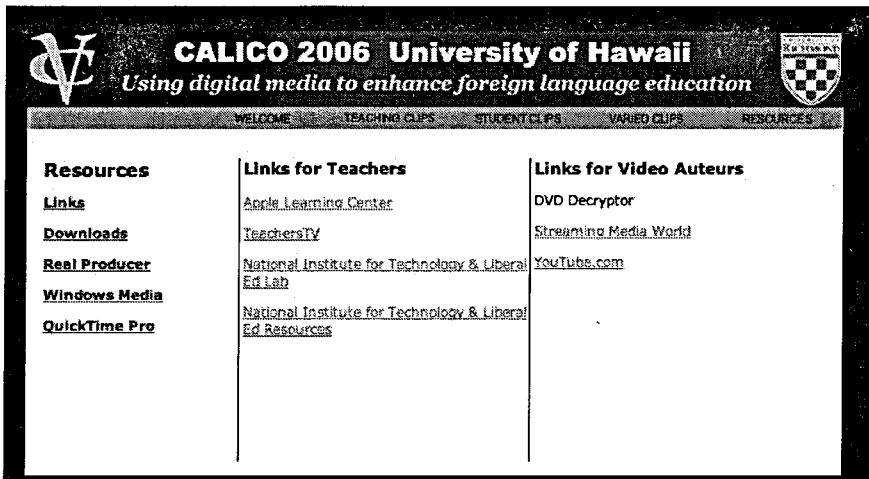
Clicking on the Downloads link displays the information shown in Figure 5.

Figure 5
Resources Page Showing Download Information

CALICO 2006 University of Hawaii		
Using digital media to enhance foreign language education		
WELCOME TEACHING CLIPS STUDENT CLIPS VARIED CLIPS RESOURCES		
Resources	**Downloads**	
Links	Real Producer Basic	DVD Decrypter
Downloads	QuickTime 7	VLC media player
Real Producer	Make Ref Movie	DIVX
Windows Media	Windows Media Encoder	
QuickTime Pro	MPEGX Multimedia	

TECHNICAL ASPECTS OF THE PROJECT

The production of teaching clips can be simple or complex. What is described here is perhaps the more basic approach with affordable equipment, easy learning curves, and time-saving production techniques. It does not pretend to be of studio quality, still it results in respectable, useful clips with decent aural and visual quality.

First, one selects a video camera. Now almost 10 years after their first public commercial introduction, digital video camcorders are readily affordable and quite performative. Analog camcorders can be used, but they entail extra hardware and software for digital conversion, which is not covered in the present chapter. One can learn rather quickly to record, zoom in and out, and playback on any of these devices. The important concept is framing, knowing where to focus the lens so that important information is fully captured. Elizabeth has found it more convenient and time efficient to tape the teacher, immediately burn a DVD for her and the teacher to watch, and from the DVD select which portion(s) to 'clip,' noting the frame numbers from the time stamp. Some clips are selected as models of good teaching. Problematic areas are noted by time stamp and discussed but are not clipped, unless the teacher would be willing to showcase a counterexample (this happens only with the rarest and most self-confident of teachers). Lists of specific features to look for in teaching performances might be prepared based on the goal of the observation and the tenets of the program (most school systems will have rather specific criteria for observations; see the appendix to this chapter for an example drawn from one of our workshops). Some may want to learn how to edit on the camcorder, but, based on Elizabeth's protocol, our team prefers to copy selected clips to a computer after burning the DVD and then use software to import and edit them.

Without going into the differences between digital videotape and other storage media, after a clip has been recorded, the images or clips are captured and stored

on the computer's hard drive. The IEEE 1394 Firewire or the USB 2 cable is the most common cable to facilitate high-speed data transfer.

Once the camera is connected to the computer via Firewire or USB 2, video can then be brought in directly from the camera. Multiple clips are imported into the editing application and assembled sequentially on a timeline. On the Apple computer, the OSX-bundled iMovie is very efficient for simple editing. Final Cut Pro is Apple's high-end nonlinear editor. For the PC user, Windows Media Maker, which comes installed with Windows, is an effective starter application for simple video editing. There are a myriad of editors available for the PC ranging in quality and price. Adobe Premier Pro is the PC equivalent of Final Cut Pro. The interfaces of these two programs are so similar that switching between the two is virtually seamless. Avid Media Composer, Sony Vegas, and Pinnacle Studio are also very powerful video editors. Simplified versions of these products provide the same power and functionality as their professional counterparts without the professional tools and filters commonly used in broadcast and postproduction facilities. For ease of use and affordability, iMovie and Windows Media Maker are sufficient for most educational needs. The high-end editors are better suited for intensive postproduction projects; using Final Cut Pro and Adobe Premiere to assemble a simple sequence of clips is not really necessary.

For encoding web video, the team used QuickTime Pro, Windows Movie Maker, and Real Producer. Of these three, Real Producer seemed the most reliable and best looking video encoder across PC and Apple platforms. Uncompressed video files are extremely large. In addition to capturing the original clips, video editors generate new uncompressed preview clips each time video is rendered. It does not take long to consume 400 GB of storage, especially when working on multiple projects. Once the original video is captured, clips can be selected for the final cut. When the video is edited on the timeline, a final cut can be exported in a bewildering array of codecs and formats. There are many issues to consider when exporting the final cut, such as the many compression/decompression schemes that can be used to minimize file size and maintain high-quality media. Streaming is best for web video. Storing video on a web server is possible, but accessing video on a web server is not true streaming. Video can be accessed from a web server, but only through download or progressive download.

Emailing videos is as simple as emailing a link to the streaming server, which is far more efficient than trying to email a postage stamp-sized video. All of the videos in this project were encoded for streaming and stored on the main VCU streaming media server.

The description above is obviously a quick rendition of how to produce digital video. There is no substitute for experiential learning in this arena. Managing a camera, capturing good audio, and shooting in good light are all skills acquired through trial and error. Learning to edit video is like learning how to play chess; it does not take long to learn the moves, but it takes years to master the art of skillful maneuvering. Unlike the game, however, serious questions arise from the social uses and implications of videotaping. They are the crux of the application of the technology in the foreign language education community.

For more on the technical aspects of digital video recording, editing, and streaming, readers can consult the following resources:

1. Merlot (merlot.org) (http://vid.vinu.edu/; http://vid.vinu.edu/laap-vid/vid/mt/multimedia/av/video.html)
2. WebMonkey (http://www.webmonkey.com/webmonkey/02/15/index4a_page6.html?tw=multimedia)
3. About.com (http://desktopvideo.about.com)
4. Teaching PreK-8 (http://www.teachingk-8.com/archives/how_to/how_to-create_a_digital_movie.html)
5. Apple iMovie (www.apple.com/imovie)
6. EEJIT (http://www.exposure.co.uk/eejit)
7. VCU streaming information (http://www.ts.vcu.edu/faq/streaming)

MOVE TOWARD PEER COACHING

The project began with a need to supervise and observe teachers. The very application of a new technology within a system often brings about systemic change. The creation of a storehouse of good teaching and learning clips has already moved the coordinators beyond the confines of their supervisory task. At the same time, it has brought to light social aspects of the process, which has prompted seeking innovations in teacher observation techniques as a next phase of this project. What follows is a blueprint for applying digital video technology to an existing, but currently untechnologized, technique with specifics for the teacher training and professional development in world language education.

Gottesman (2000) offers a rather radical departure from traditional observation techniques in peer coaching. As Barth (2000, p. xiii) notes in the introduction to Gottesman's book, *Peer Coaching for Educators*, peer coaching "offers a remarkable vehicle for us to join with students as learners and together build a community of learners."

Unlike the current, one-shot supervisory observation and evaluation, peer coaching brings about a change of culture in which peer-coaching teams learn to teach better interactively in an ongoing, supportive fashion. The efficacy of peer coaching for staff development comes from the fact that, unlike a workshop that may contain some theory and a demonstration, it includes practice, feedback, and more practice and more feedback, until such time as both teacher and coach are satisfied that better teaching and learning is taking place (Gottesman, 2000).

Albeit at first glance quite simple, the following five steps of the process listed by Gottesman (2000) are in reality relatively difficult to follow due to the established culture of performance evaluation:

1. The teacher requests a visit from the peer coach.
2. The visit takes place.
3. The coach reviews the notes and lists possibilities.
4. The talk after the visit takes place.
5. The coach and teacher review the process.

First, two teachers have to identify themselves as a dyad based on professional and personal factors: in a school culture that supports peer coaching, this will be relatively easy. Nonetheless, individuals can opt for their own sakes to develop their own team without institutional support. It is critical that the teacher select his/her own coach, not have one imposed.

The teacher decides on the time, place, length of visit, and a clearly defined behavior or interaction to be observed, giving enough lead time for the coach to make arrangements.[3] Where the coach is to sit in the classroom is also decided ahead of time. At this same time, the teacher requests a meeting time for the talk after the visit, within a week of the visit itself. The coach is responsible for asking probing questions and paraphrasing the teacher's request to make sure that he or she fully understands what the teacher wants observed during the upcoming visit. This could, of course, all transpire over email or using a course management system like Blackboard. In schools with integrated email and scheduling facilities such as Lotus Notes or a content management system, this might be readily executed. (As an example, refer back to the VCU-UR section on the e-community the authors formed for this very project.) A few examples of observable activities in second language acquisition environments are: time spent on directions, time spent in target language (teacher or students or both), use of students' names, teaching to the right or to the left (or to males, females, or both), giving homework directions, amount of teacher talk, student behavior in groups (with or without teacher intervention), and even target language performance or cultural knowledge. The final two examples would best be undertaken once the pair has had time to establish a strong relationship since the risk-taking fears of the nonnative language teacher are most easily activated in this realm (for teachers who are native speakers, the opposite holds true with respect to the community language). The coach needs to know what feedback the teacher is specifically seeking and whether data for that feedback can be attained from peer observation.

If the class is to be videotaped, establishing a date, time, and length of visit may be replaced by agreement between the teacher and the coach for a week during which to engage in the taping and viewing. It is still important that a schedule be made and followed. With regard to the specificity of the behavior to be observed, the teacher might decide to film him/herself, view the video, and then choose a behavior from that taping about which to seek coaching. Still, if a teacher goes into the taping session with a clear idea of a behavior in the classroom to investigate, it is easier to focus the camera to capture that activity. Having the peer coach operate the camera most probably improves the chances of getting the whole picture but will likely disrupt the normalcy of the classroom atmosphere. Ongoing peer coaching, however, erases the strangeness of the coach's periodic appearances in the teacher's classroom. Having more than one camera decidedly provides more and better information but may also become too laborious a process for viewing. Should digital editing be involved, it may quickly become far too onerous unless the taping is limited to 5-10 minutes at most.[4]

Indeed, the introduction of videotaping alters the simple dynamics of Gottesman's peer coaching but adds compensatory functionalities that enhance the pro-

cess. The teacher-coach team will have to decide how the taping is to handled: the number of taped sessions and their length; the camera operator; the number and positioning of cameras; the selection of behaviors (prior to taping or postviewing by the teacher); if digitizing is preferred, the amount and the responsible party in light of the time frames and storage issues. Furthermore, the coach and teacher need to decide which one will view the tape first (see after the visit below). Obviously, having clips over time for comparative purposes would be the most informative type of data collection. Eventually, the visual evidence of progress in teaching skills could serve a teacher in the larger field of institutional evaluation (e.g., teaching portfolio, award nominations, preparation for national board certification).

During the visit, if the visit is live (as opposed to a taped session without the coach's presence), the coach uses a form upon which the date, time, teacher's name, and the specific behavior to be observed are listed. When taped, this information can be either recorded (the date-time stamp already activated) or affixed to the electronic file to be created. If teacher-to-student (or group) interactions are under scrutiny, the teacher should provide the coach with a seating chart or at least the layout of the room with seating arrangements. The coach notes only that behavior which has been preselected. The coach's notes are purely descriptive with absolutely no judgment about quality involved. Gottesman's mantra is: no praise, no blame.

After the visit, the coach reviews the notes and prepares them for the teacher to see. There must be no evaluative comments; nor smiley (frowny) faces or the like. The notes should provide straight data or descriptions of the performance; for example, how many times the teacher used students' names and were those students male or female, based on the prearranged teaching behavior to be observed. The coach prepares two to three leading questions, but never about how the teacher 'felt' about the performance. The questions are more of the order: What do the data tell you about your use of student names? What do you see in your coverage of the entire classroom? What decisions might you make about your teaching based on what you see annotated here? The coach does not ask questions about why the teacher did or did not do something, nor does the coach ask how the teacher felt about the lesson. The questioning is all data driven. In video form, being able to roll clips back and forth clearly visualizes interactions and their impact on students. The date- and time-stamping function particularly allows for precision in data collection on such aspects as amount of time spent in target language. The coach also prepares some suggestions. By and large, the suggestions should come from pedagogical and second language acquisition research or sound foreign language education community-wide consensus. Occasionally, the coach may proffer a personal anecdote or suggest brainstorming for a solution. Although the coach may have many suggestions, it is important to limit them to two or three so as not to overwhelm the teacher and give the impression that the session was abominable. The coach does not give these suggestions unless asked by the teacher. The time to prepare this information is some 5-10 minutes without videotaping; with videotaping, the time required will double at the very least.

The teacher, too, after the visit should reflect on the session, writing down salient aspects related to the initial request for the visit. He or she should also describe the lesson, its context, any follow-up activities on subsequent days or testing results, and its success during the session in question. Other noteworthy facets might be marked for the next request for a visit. This is facilitated if the session was taped and the viewing of the tape prompts the teacher to think about aspects of his or her teaching other than the one specified in the request for a visit.

For the talk after the visit, both coach and teacher come prepared. The amount of time is predefined to last 5-10 minutes. This time limit will minimize going outside the parameters of the original request for a visit. It is suggested that the place be either the teacher's classroom, office, or some neutral place. All power differentials should be removed as much as possible. The two sit together facing the notes, with the notes squarely between them. The emphasis on seating derives from the importance of the peer relationship and its collegiality and the undermining of traditional roles of the observer (in power) and the observed (powerless). The coach does not hold a pen or pencil; in fact, all body language is important and should underscore the equality and collaborative relationship of the two individuals. The coach engages in active listening: what is important is that the teacher see and articulate his or her own behaviors and then draw conclusions from the evidence. These sessions might also be taped so that the coach can become a better coach. Such simple movement as head nodding is approbatory and has no place in this session. At no time will the coach answer a question like, "How do you think I did?" With time and experience, the time for the talk might be extended.

The final stage is the process review. If this, too, is taped, there will be evidence that should be viewed, best viewed by both simultaneously. Otherwise, in 2-3 minutes, the team goes over the entire process to make sure that both did what was necessary, following the guidelines and rules (Gottesman [2000, pp. 131-136] spells these out). This is usually a good time to set up the next session, either a return by the coach to the teacher's classroom (or new viewing of an already taped session) or changing roles. The notes and any video clips are the sole property of the teacher. Anything seen or discussed with regard to this coaching session does not leave the dyad: it has the sanctity of lawyer-client privilege. This last aspect is crucial for creating a secure, trusting, and ongoing professional relationship. In the final analysis, the dyad questions who got the most from the session. In many instances, the coach will gain as many new insights and teaching improvements as the teacher. Peer coaching is not a one-shot observation/evaluation. If done properly and continued, it truly becomes as Barth (2000) notes, a means to developing a community of learning teachers.

CONCLUSION

Bringing digital video technology to bear on teacher observation and professional development provides a host of benefits, whether the outcome be models of good teaching, visible and repeatable evidence of what one is doing well, discovery of elements that need work (that later on serve as proof of development), or a

compendium of one's professional profile. Pairing the technology with a healthy technique like peer coaching optimizes the benefits for teacher preparation and professional development in world languages. Coupled with electronic communication, it opens into a much broader field of e-communities of teaching and learning (see Arnold, Ducate, & Lomicka, this volume, on virtual communities of practice). In addition to all the positive factors of the process, it allows preservice and in-service teachers a means to become comfortable with being observed and taped. This smoothes the way for evaluatory observations and taping for current teaching positions and e-portfolios (see Cummins, Van Olphen, Terry, and Tochon & Black, this volume), local and national awards, and national board certification. It is to be hoped that teachers will find snippets and clips to share as good teaching models with a larger circle of peers, new teachers, preservice student teachers, and/or teaching assistants. Peer coaching is envisioned by Barth (2000) and Gottesman (2000) as a cultural change agent for education. The new media extend the reach of the potential for positive social change. Engaging in a digital project such as the one described here can allow educators to share the wealth in their schools, their districts, and even beyond. Our compilation will soon be available to the entire central Virginia K-16 Foreign Language Exchange (FLEX). Finally, and as always, learning to use new technologies such as digital video is yet another good step in the direction of technology training and professional development for language educators.

While putting the finishing touches on this chapter, Kathryn attended a workshop on Anystream Apreso Classroom at the VCU Technology Fair (April 11-12, 2007). It is a "fully automated lecture capture and web publishing system for higher education" according to the marketing brochure. It allows for video, audio, document camera, DVD player, smart board, and tablet PC screen captures to be automatically posted to a course management system or other services (like iTunes U). Although designed for student learning, it also offers another technological apparatus for teachers and coaches to daily gather with a single keystroke a historiography of teaching in action from which all the better to recognize and share the good points and to improve teaching and learning performance. It appears that Camtasia 4 will have similar functionality (http://www.techsmith. com/camtasia/whatsnew.asp). Still, as she watched the Apreso sample math class (http://www.anystream.com), she was simultaneously struck by its residual power to intimidate and be abused on the one hand and, on the other hand, by the imposing evidence of whole letter grade improvement for learners. Much remains to ponder some 23 years after 1984 (and 57 years since Orwell's publication of *1984*). Elaborating on the epigraph by Norman, then, it is the the broader social aspects of the technological revolutions that have the most enduring impact and for which ultimately we are all ethically and professionally responsible.

NOTES

[1] Originally, there was also a student member of the team. She had been an Honors Research Assistant during the summer of 2005, but, unfortunately, health problems eventually precluded her participation in videotaping students studying and learning effectively. We still plan to incorporate this dimension into our project in the future.

[2] Maybe one day we will get as far in our social thinking as acting as the Bakhtinian Circle at the unfettering time of the Russian Revolution in the disregard for attribution and authorial authority. For the moment, we still labor under a "publish or perish" institution. According to Jenkins (2007, p. B9), the term, "adhocracy" arises from the work of "the science-fiction writer and Internet activist, Cory Doctorow .... An adhocracy is a form of social and political organization with few fixed structures or established relationships between players and with minimum hierarchy and maximum diversity." The fact of a rapidly changing economy of production, authority, and attribution of intellectual work is most visible in the Wikipedia phenomenon.

[3] Gottesman (2000) indicates in the three phases of implementing peer coaching in an institution that there should be a 2-month period of peer watching during which there are four visits to another classroom (which are noted but have no feedback) and four lessons taped and watched with all four tapes being subsequently erased. This peer watching of others teaching and of oneself prepare the teacher to target specific areas of his/her own teaching for coaching.

[4] The whole procedural issue of securing student and/or parental consent forms is not addressed here. When our team presents for K-12 groups, we discuss the kinds of forms needed through school systems. For postsecondary groups and in our university, we have had to look into the protocols for human subject research, seeking institutional research board approval. Although not detailed in this chapter, these issues are extremely important in light of digital video work. If the clips are never viewed outside the teacher-coach dyad, release forms may not be necessary, although one should always check the school and/or district policies. If the teacher will eventually use a tape or part of it for any other purpose, for example, in a broader distribution and viewership, he or she must most likely secure release forms if the students in the classroom are visible.

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APPENDIX

Video Self-observation Sheet for High School Teachers

My Video Teaching Review

Name: _____   Target Language: _____
Date of videotaping: _____   Level of Course: _____
Location of taping: _____   Number of students present: _____
Date of review: _____   Releases signed: Yes No
Videographer's name: _____   Stipulation of releases: (details)
Reviewer's name: _____

Unit/Lesson: (from pacing guide/textbook) _____
Attach lesson plan: YES NO
Unit goal(s): _____
Daily lesson objectives: _____
Objective(s) in this clip: _____

Lesson type: Warm-up, advance-organizer, announcements, classroom manage-
ment issue, lecture-presentation, presentation-technology, homework review,
learning task/activity, drill, student presentation, listening, reading, writing,
speaking, culture, grammar, vocabulary, review, guidelines for an activity, other.
Specify:

For this lesson, how much time did (%)

	Should	Did
the teacher talk?		
the students talk with the teacher?		
the students talk with each other?		
the students perform alone?		

(in target language?   In English? --if yes, why?)

What should my language level be for optimal student learning given their level
+ this lesson:
    Novice   Intermediate   Advanced   Superior   Special/Jargon?
Was it? YES NO
Comments:

Did I engage in instructional conversations? YES NO
Were they IRE (Input-Response-Evaluation) or IRF (Input-Response-Feed-
back)?
Comments:

Which mode were learners engaged in?

Interpersonal   Presentational   Interpretive

Before viewing, my thoughts	Data from viewing (self or other)
% time target language	% time target language
% time teacher talk	% time teacher talk
Do I engage whole class?	Do I engage whole class?
Do I give enough time to respond?	Do I give enough time to respond?
Best aspect:	Best aspect:
Needs improvement:	Needs improvement:

Notice:
Gestures: effectiveness, use, need?
Tone: strength, volume, control
Body language: inviting, calming, authoritative
Eye contact: whole class, parts, gender/other based?
Rapport with all/each student(s):
Humor?
Enthusiasm?
Annoying tics?
Use of blackboard/other a/v?
Other?

What should I work on?
How should I work on it?
What should I share?

Mark where this lesson is in the 5C's.