As Barry Sponder and others who submitted papers for this section indicate, one of the more vexing issues in teacher education is the difficulty of bridging the gap between the theories of teaching and learning that credential candidates are exposed to while preparing to teach, and the complex realities these teachers encounter when they are employed and engaged in their teaching practice. Among the many techniques frequently used to address this issue is the use of text-based case studies. Shulman's research clearly indicates that these text-based cases, when used by instructors who are skilled in facilitating reflective dialogue, can improve teaching practice by helping credential candidates develop reflective skills. But Wasserman also points out that learning to teach is difficult when credential candidates have little time to observe teachers handling daily problems in their classrooms. Miriam Sherin points out in her paper in this section that learning to notice key components of a teaching situation and “connecting those components to broader concepts and principle of teaching and learning” is critical. The papers in this section indicate some ways that video, combined with newer CD-ROM technology and/or the World Wide Web, is helping to provide credential candidates not only with more opportunities to observe teaching practice but to observe practice in ways that may be more effective than classroom observations alone.

Benefits of Video

Several of the papers in this section point to similar benefits found in using video cases as part of preservice education. One of these benefits of the use of video is that it allows the credential candidates the ability to review a classroom teaching situation many times. This is substantially different than the normally limited ability of a candidate to do observations in the classroom itself. This is pointed to both by Sherin and myself in our papers. This is also implied by the nature of the video databases created by InTime at the University of Northern Iowa and the video database at Arizona State University. These databases can be accessed by different instructors for different purposes as needed.

Many researchers have pointed to the complexity of the classroom and the failure of schools of education to prepare candidates to deal with this complexity. The affordances of digital video, in particular, allow candidates to observe a single video through many different lenses. Haydek, from the InTime project, emphasizes that their video databases can be searched through the lenses of the Technology as Facilitator of Quality Education Model. This model includes the following elements: a) technology, b) students at the center of their own learning, c) content standards, d) teacher knowledge and behavior, e) information processing, f) principles of learning, and g) tenets of democracy. Thompson from the University of Houston indicates “much more can be learned from these video segments than how to teach a single skill.”

Using video cases also gives candidates a common forum for discussion. As Lynda Ginsburg says about the Captured Wisdom videotapes, they are “useful for stimulating teachers to think about and question the approaches of other teachers and the ways that they might adapt what they see and hear for their own local education contexts…. “ This observation, reflection, and dialogue process, just as with text-based cases, appears to be a key component of the video cases. Sherin, in particular, describes this dialogue and how continuation of this cycle over time changes the teacher’s reflective practice.

Another benefit of digital video, especially when used in combination with the web or a CD technology, is the ability to add teacher and expert commentary. This enables the candidate to “see” the video through the eyes of other, more expert, viewers. Savenye at ASU includes these commentaries as do we at Pepperdine. Yusko describes the process of having the mentor teacher watch the tape and comment on his own teaching. As Yusko says, “We found that the ‘stimulated recall’ nature of this interview allowed [the mentor teacher] to speak in rich detail about his thinking…."

PT3 Convergence

As a PT3 Project Director I was intrigued by the common elements being included by many of the PT3 projects that are creating video case studies. One of these elements is the Pre / Post Teacher Interview portion of the video case study. This is included in the InTime cases, the Pepperdine cases, the ASU cases, and in Yusko’s work. As discussed above, this commentary appears to guide the candidate to focus on critical elements in the video.

Some of the projects have commentaries by others as well. Both ASU and Pepperdine include commentaries by content experts and by a technology expert. As Sherin and van Es point out, teachers “need to find ways to focus their attention on new aspects of classroom interactions.” It appears that these commentaries, along with the commentaries of the teacher, might scaffold this “noticing” process.
Sponder points out that lesson planning and classroom management are classic conundrums for the new teacher. Many of the video cases include elements designed to address this. The ASU cases include a portfolio of the lesson plan, materials developed by the teacher, and links or resources for the technology used. The InTime cases include a lesson overview and information about the content standards covered. In the Pepperdine cases, a resources section includes links to related research, state frameworks or standards, additional reading, as well as samples of student work. Classroom Management is specifically addressed in the video cases developed by the University of Houston and as I point out, Pepperdine's experience is that viewing case studies from different perspectives leads to use in new areas: “For example, [video cases] can be used in an Instructional Strategies class where preservice educators may be discussing possible classroom management strategies. They might also be used in an Educational Psychology course where preservice teachers might develop their observation and reflection skills.”

Analysis and Reflection

Sherin and van Es discuss in their paper how the use of video seems to change the course of discussion over time from a focus on the “how of teaching” to the “why of student learning”. They raise a very important concept for all involved with the use of video cases about the need to scaffold to ability to “learn to notice” and then to link this noticing to key theories and prior knowledge.

Yusko points out that there is a great value in the process of editing the videos because that process itself is a key analytical tool. In fact, that realization is what led Jim Stigler to create the LessonLab software used by Pepperdine. Stigler came to this realization after his experiences with analyzing the videotape captured during the TIMSS project. The analysis gained through thinking about what is important in the video is key. Following this with reflection and dialogue leads to a much richer experience, according to the preliminary results of the work of many who submitted papers in this section.

This concept that editing a video leads to greater analysis has led some creating video cases to have teachers and students create their own digital videos that they then edit and on which they reflect and comment. This concept is highlighted in the TLC – Teachers as Students Project from the Department of Defense Dependents' Schools. David Georgi from Californai State University at Bakersfied has also been experimenting with this concept. We have begun work with this at Pepperdine as part of our work on electronic portfolios.

Video Production: Lights, Camera, Action

Yusko, while candidly sharing his journey into creating video cases, describes the experience of many of us as we entered this world. He says, “We quickly began to realize the complexity of capturing high quality classroom video footage. Even when we carried the camera around the classroom, we realized that we needed guidelines to accommodate different classroom formats, such as whole group discussions, small group work or individual work. We needed to know where to focus the camera, on who, and for how long. To make sure that we had high-quality sound, we experimented using two remote transmitters with different types of microphones.” During our panel discussion, Redmond, Georgi, and I also propose to answer questions about what we have encountered in this area.

One of the key elements that no one specifically refers to in their papers but that I am sure will be quite obvious in the demonstrations is the fact that this newer technology makes it much easier to scan the video and to jump backwards or forwards to places where the analysis, reflection or discussion might be focused.

Unique Purposes

Several of the video projects included in this section had purposes very different than the typical case study used in preservice education. For example, Eastern Washington University and Cheney School District created a 17 minute video to “tell” teachers of the value of participating in the partnership between these two institutions as part of their PT3 grant. Stephen Ransom from Ball State University uses video cases to help teachers better understand how to evaluate software. After learning the limitations of checklist evaluations, he experimented with showing the software being used in a classroom, thus situating its use. His paper highlights the reactions of the teachers to this use of video and this new form of software evaluation. His ending note is particularly interesting because, as others here noted, the use of the video can frequently extend well beyond its original purpose. The University of Minnesota uses case studies to document how technology integration is successfully sustained. Finally, swinging full circle back to Sponder's comments about the difficulty of bridging theory and teaching experience, Sponder created a CD-ROM that includes not only video cases designed to help preservice teacher prepare for student teaching, but also includes answers to Frequently Asked Questions, and interviews with key personnel. This CD-ROM is designed to be given to every candidate prior to their student teaching experience.

Conclusion

Miriam Sherin and Elizabeth van Es summarize best much of what is written in the papers in the Video Cases section. Research indicates that video can help us to help teachers to learn what to do in the classroom. The newer video cases, using newer technology, extend this to helping teachers to notice what is happening in a classroom. With guidance, this ability to notice can lead to improved teaching practice and the ability to adopt new teaching interactions and processes as well as to integrate new content or materials.