You Can Learn a Lot by Watching: Using Video to Accelerate Professional Learning

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New technologies can dramatically change the way people do their work. Jet engines transformed travel. Television revolutionized news and entertainment. Computers and the Internet have transformed just about everything else.

We believe micro cameras can be like jet engines for professional learning. The invention of Go-Pro, iPhone, iPad, and Flip cameras has the potential to dramatically transform the way we do professional learning. Educating educators may never be the same, as a result.

Video has been available to teachers for decades. Microteaching, whereby a teacher is videotaped conducting a lesson and then reviews it afterwards to identify which elements were successful and which ones were not (McKnight, 1980), has often been employed as an effective methodology for improving practice. However, until recently, cameras were complicated to use and so large and cumbersome that they interrupted the learning taking place in the classroom. Now, cameras are tiny, half the size of a deck of cards, and easy to use, often controlled by the push of a single button without regard to focusing, light, or other issues.

Recognizing the potential of this new technology, researchers at the Kansas Coaching Project at the University of Kansas Center for Research on Learning have spent three years carefully watching and analyzing what happens when coaches watch video recordings of themselves coaching and when teachers watch video of themselves teaching. This paper summarizes the highlights of what we have learned in that and other studies and, in particular, why micro cameras are important and how they can be used by (a) instructional coaches, (b) individual learners, (c) teachers in the classroom, and (d) teachers in study groups.

WHY CAMERAS ARE IMPORTANT

Cameras serve at least four important functions within professional learning. First, they help educators (teachers, coaches, administrators, and others) obtain an objective, accurate view of themselves working. This is important. In analyzing teachers watching themselves on tape, we have found that they are often completely surprised by what they see. For many, watching themselves teach is as disconcerting as it is to listen to recordings of their voice--only multiplied to the power of 10.

Research conducted by change expert Prochaska and his colleagues (Prochaska, Norcross, & DiClemente, 1994) clarifies that we are often unaware of the true nature of our professional practice. According to these researchers, who have studied more than 1,000 individuals experiencing major life changes, people are often precontemplative about change; that is, they are unaware of their need to improve. In describing this state, Prochaska et al. cite the author G.K. Chesterton, who wrote, "It isn't that they can't see the solution. It is that they can't see the problem" (p. 40). Video, then, gives educators something of vital importance: an honest picture of their professional practice.

Second, video recordings propel educators forward into change, shifting them out of precontemplation into action. When they watch themselves on video, many teachers feel compelled to do something to improve learning in their classrooms almost immediately. Stacy Cohen, an instructional coach for a Kansas Coaching Project study, reported that the night one of her collaborating teachers first saw a video of her lesson, the teacher stayed up until two o'clock in the morning reworking her lesson plans because "she couldn't stand to see how bored her students looked."

Third, video recordings are important for goal setting within coaching. Since the information recorded on video provides a rich picture of reality, educators who review video of their lessons are more inclined to write learning goals that matter to them. According to Collins and Porras (1994), if a goal is going to motivate you, it should "hit you in the gut." In addition, coaching, as Hargrove (1997) explained, is often more successful when it is pulled forward by the coachee's goals (what he calls "pull coaching") as opposed to when it is pushed forward by the coach's goals ("push coaching").

Fourth, video recorded on micro cameras, because it is easy to gather and of high quality, provides a picture of reality that can be used to measure progress toward a goal. Real improvement requires what Colvin (2008) referred to as "deliberate practice" and precise feedback. Video is an easy and effective way for teachers working with coaches, on their own, or in teams, to get the feedback they need to move forward as learners. As one coach commented, "I am thankful to have the video that documented all of our conversations so I can see the progress that we made. I know that you have to go out of your comfort zone in order for good learning to happen and this has been my experience."

HOW MICRO CAMERAS CAN BE USED Instructional Coaches

Our study of instructional coaching involved careful analysis of hundreds of hours of video recordings of coaches and three-day focus groups with our coaches, three times during each year of the three-year study. Although a great deal of analysis remains to be completed, one conclusion is certain: All the coaches in our study believe that cameras are essential tools for instructional coaches.

Instructional coach Susan Leyden is typical of the participating coaches when she comments, "The video is key to everything." For Susan, video is "essential:" "to help identify an instructional challenge ... or to set a goal," "to watch the students," and to have "an objective record." Additionally, Susan notes that because a video is objective, it makes coaching less personal. "The video is huge," Susan said, "because it takes me out of it."

When coaches use cameras with teachers, the video recordings they produce become central to the coaching process. Thus, instructional coaches on our project embedded video into the entire instructional coaching process (Knight, 2007), using video recordings with teachers to gather data on class-room reality, set goals, identify the coaching focus, and monitor progress. To get the most out of using

video recordings, the coaches learned to employ the following practices:

- 1. Since many people feel a bit awkward watching themselves on video, we suggest the coach and teacher play with the camera a bit prior to actually recording a lesson.
- 2. Prior to the video recording, coach and teacher should decide whether it is more important to see students or the teacher, and then position the camera appropriately.
- 3. After the recording, coach and teacher should first watch the video recording separately. This allows the teacher to experience the video in his or her own way, and it allows the coach time to prepare questions for an exploratory coaching conversation.
- 4. Coaches should prepare teachers carefully for watching the video. Coaches on our project gave teachers a document explaining how to get the most out of watching the video and surveys that teachers could use to focus their attention on either their own practice or their students' performance or behavior.
- 5. Prior to the coaching conversation, and while watching the video separately, teachers and coaches should identify two or three video clips where they think learning is proceeding well, and two or three other clips where the learning was not proceeding as well and that they would like to discuss further.
- During discussion of the video, coaches should either watch the video recording or talk about it. We found that when coaches and teachers tried to watch and talk simultaneously, the conversations were ineffective.

What is good for teachers is also good for instructional coaches. The coaches participating in the Kansas Coaching Project study found that watching themselves on tape was incredibly valuable. In fact, when the coaches in our study were asked what they thought would be the best form of professional learning for coaching, they unanimously said, "watching yourself on tape." One coach's com-

HOW TO GET THE MOST OUT OF WATCHING YOUR VIDEO

Goal:

Identify: two sections of the video that you like and one or two sections of video you'd like to further explore

Getting Ready:

Watching yourself on video is one of the most powerful strategies professionals can use to improve. However, it can be a challenge. It takes a little time to get used to seeing yourself on screen, so be prepared for a bit of a shock. After a little time you will become more comfortable with the process.

Find a place to watch where you won't be distracted

You may find it helpful to read through the teacher and student surveys and/or the big ticket items to remind yourself of things to keep in mind while watching

Set aside a block of time so you can watch the video uninterrupted

Make sure you've got a pen and paper ready to take notes

Watching the Video:

Plan to watch the entire video at one sitting Take notes on anything that is interesting

Be certain to write the time from the video beside any note you make so that you can return to it should you wish to

People have a tendency to be too hard on themselves, so be sure to really watch for things you like

After watching the video, review your notes, and circle the items you will discuss with your coach (2 you like, and 1 or 2 you would like to further explore)

Sit back, relax, and enjoy the experience

| Watch Yo | u | r S | St | U(| de | er | nts | Watch Yourself |
|---|-----------|-----|----|----|----|----|---------|---|
| DATE | | | | - | | | | DATE |
| After watching the video of today's class, please rate how close the behavior of your students is to your | | | | | | | | After watching the video of today's class, please rate how close your instruction is to your ideal in the following areas: |
| goal for an ideal class in the following areas: | | | | | | | | Not close Right on |
| , | Not close | | | | | R | ight on | My praise to correction ratio is at least a 3 to 1 1 2 3 4 5 6 7 ratio |
| Students were engaged in learning (90% engagement is recommended) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Students interacted respectfully | 1 | 2 | 3 | 4 | 5 | 6 | 7 | I clearly explained expectations prior to each 1 2 3 4 5 6 7 activity |
| Students clearly understand how they are supposed to behave | 1 | 2 | 3 | 4 | 5 | 6 | 7 | My corrections are calm, consistent, immediate, 1 2 3 4 5 6 7 and planned in advance |
| Students rarely interrupted each other | 1 | 2 | 3 | 4 | 5 | 6 | 7 | My questions at the appropriate level (know, 1 2 3 4 5 6 7 understand, do) |
| Students engaged in high-level conversation | 1 | 2 | 3 | 4 | 5 | 6 | 7 | My learning structures (stories, cooperative 1 2 3 4 5 6 7 learning, tinking devices, experiential learning) were effective |
| Students clearly understand how well they are progressing (or not) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| | | | | | | | | I used a variety of learning structures effectively 1 2 3 4 5 6 7 |
| Students are interested in learning activities in the class | 1 | 2 | 3 | 4 | 5 | 6 | 7 | I clearly understand what my students know and 1 2 3 4 5 6 7 don't know. |
| Comments | | | | | | | | |
| | | | | | | | | |

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ments are typical: "I am probably learning more than they are. I think everyone so far [at least] from the feedback I have gotten, can see this on the video. The device is really an awesome tool."

Individual Learning

In 2009, one of us conducted an informal study that asked more than 300 people from around the world to coach themselves on important communication skills, such as listening, finding common ground, and building emotional connections. In most cases, the participants coached themselves by video recording selected conversations with colleagues, friends, students, and family and then watching to see what they could learn from the video.

Those who watched video of their conversations reported that they gained true insight into such aspects of their communication skills as (a) their facial expressions ("I thought I was attentive, but my facial expressions showed other wise"): (b) areas where they could improve ("In watching myself on video, I confirmed to myself that I monopolize conversations"): and (c) areas where they improved ("I know this time I gave more eye contact ... and tried to make sure my conversation partner really saw I was interested. I leaned in and nodded as well as gave some comments that showed my interest in the conversation").

One participant spoke for many in the study when she wrote, "The video and listening tapes made a huge difference. Thinking about how you listen is not enough – when you see yourself and/ or listen to yourself – it makes the process real. It made me focus and really pay attention to what I was doing."

Teachers in the Classroom

Video recording also provides a way for teachers to review and reflect on their teaching practices. Teachers can get a rich record of how their students are performing or how they are teaching by setting up a micro camera in the classroom. For example, teachers can use video to record such aspects of teaching as the level, type, or kind of questions they ask, how frequently they praise students compared to how frequently they criticize them, clarity of instruction, pacing, animation, and so forth. Teachers can also watch the video to assess their facial expressions and other nonverbal communication, to see if they are ignoring some parts of the room, or to note if bias toward particular students or groups of students has crept into their practice.

In addition to their classroom practices, video can also help teachers get a second look at their students. By watching video, teachers can assess whether their students are authentically engaged or which activities or teaching practices seem to most effectively increase student engagement. Video can also provide insight into each class's unique culture, providing teachers with a window into what students' actions suggest about their assumptions about the purpose of learning, the boundaries of respectful communication, and the connection between effort and success.

Finally, video helps us see the simple things we do that foster or inhibit emotional connections. Video allows us to see whether we act in ways that destroy connection, such as rolling our eyes, making sarcastic comments, talking down to students, power tripping, cutting students off, looking uninterested in them, and such on. Just as important, video allows us to see the simple actions we do that encourage connection, such as simple praise, smiles, words of encouragement, simple signs of respect. Then, with a clear picture of what works and what doesn't, we can work to more often act in a way that fosters learning and positive emotion.

Learning Teams

Teachers can also learn a great deal about their practice when using video recordings during collaborative learning. Jean Clark, an educational leader from Cecil County, Maryland, created a process that brought teachers together so they could watch and discuss video recordings of themselves teaching. The video study groups (VSG) Jean developed were one of several options for professional learning offered to teachers on late-arrival days once a month in the school year. Only teachers who had chosen this learning experience participated. All the teachers were implementing the same teaching practice (a teaching routine to ensure students master concepts), and the video study group was a way for everyone to deepen their understanding of how to teach it.

Prior to each meeting of the VSG, one teacher volunteered to prepare and share a video for the next session. To prepare the video, the volunteer recorded him/herself using the teaching routine in the classroom. Sometimes Jean helped by recording the class, but often the volunteer teacher simply set up the camera so that it would catch him or her teaching.

After recording the class, the teacher loaded the videos into iMovie and started the process of editing the film, with the goal of identifying aspects of the lesson that went well and a section of the lesson that he or she wanted to improve. The teacher watched the film multiple times and edited it into a little movie. Editing the film forced teachers to watch their lessons many times, and those repeated viewings led them to see many fine details of their lessons that wouldn't have been obvious after watching the lessons just once.

At the next video study group, after editing the film, the volunteer shared her video with the group, showing each section and asking for comments. At the very first group meeting, Jean guided her team to collaborate and identify values they would work from while discussing each other's video. Thus, comments about lessons were positive, honest, constructive, and useful.

Usually, the volunteer shared two positive clips first. After showing each one, she commented on what she saw and asked her colleagues for feedback. During the final video, teachers asked questions as much as they commented. Each teacher in the VSG eventually went through this process.

Jean reported that the VSGs are valuable for at least four important reasons. First, teachers, as noted through out this paper, learn a great deal by watching themselves teach, especially after they have watched themselves several times. Second, VSGs serve as good follow-up to professional learning by increasing the likelihood and quality of implementation after training. That is, members of a VSG commit to implementing a practice and then have multiple opportunities to explore different ways to do so. Third, the dialogue that occurs during VSGs deepens group members' understanding of how to teach the targeted practice and often introduces them to other powerful, and often subtle, teaching practices while watching others teach and listening to team members' comments. Finally, when teachers come together for such conversation, they often form a meaningful bond simply because the structure of a VSG compels everyone to stand vulnerably in front of their peers and engage in constructive, supportive, and appreciative conversations with colleagues. Those bonds may ultimately be more important that all of the other learning that occurs since they create supportive, positive relationships among peers.

CONCLUSION

Enormous effort and expense are expended in the effort to improve teaching. The work and cost are justified, since there is little doubt that improved instruction is one way we can better serve our students. Better teaching equals better learning. However, improvement of any sort is usually fleeting at best, unless we have a clear picture of our current performance and an accurate and powerful way of measuring progress. As discussed here, the micro camera is only one part of any effective approach to professional learning. However, we, believe it can be a very useful part and that all of us could benefit from turning the camera towards ourselves to truly see how well we are performing.

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