



REPLAY, REFLECT, REFINE



VIDEO-BASED COACHING ACCELERATES TEACHER GROWTH

BY DAVID BAKER, CATHERINE CARTER, PATRICIA HAGAN, TEMPLE HAYLES, RYCHIE RHODES, AND KAREN SMITH

he cognitive load that a teacher experiences is mind-numbing. To improve, a teacher must begin by reflecting on his or her work, but with the mountain of decisions, where does a teacher find time or have the capacity to notice the way in which students are interacting with lessons?

Kauchak & Eggen (2005)

discovered that a teacher makes 800 to 1,500 educational decisions every day (p. 55). How is it possible for a teacher to remember mental notes and decide which decisions are having the biggest impact on student achievement, and which ones are impeding student learning? How does a teacher attend to student needs? How does an individual shift instruction based on these needs, and how can data be collected to

analyze and evaluate for effectiveness?

Jim Knight discusses "the busyness of teaching" — and, he adds, "all while keeping an eye on the clock" (Knight, 2014, p. 6). The answer in the St. Vrain Valley School District, 30 miles northwest of Denver, Colorado, and educational home to more than 32,000 students, is the use of video. We have learned that video helps teachers reflect on the impact of their decisions by



Photos by KERRI MCDERMID

Above left: Karen Smith, left, a St. Vrain Valley School District teaching and learning coach, and Kayce Johnson, a first-year teacher at Timberline PK-8 in Longmont, Colorado, review video of Johnson's class together. Above: Johnson, left, counts and identifies behaviors from the video while Smith records the data.

freeing them of the burden of teaching and reflecting simultaneously.

In 2014, the St. Vrain Valley School District Office of Professional Development began using video for professional learning. We purchased licenses for a video platform that allows teachers, coaches, and administrators to upload video and pause at specific points to add comments, questions, and notes. Here's what we have learned about how to use video effectively and efficiently to accelerate the growth of the teachers in our district.

VIDEO AS ACCELERATOR:

Teachers seeing their practice through their own eyes

The traditional coaching cycle begins with the teacher and coach meeting to plan an observation. Teacher and coach identify goals and what to look for during the lesson: What are students saying? What are students doing in response to a question? How well are they transitioning?

During the observation, the coach collects data based on the goal. Shortly

after the observation, teacher and coach reflect on what the data reveal about the impact of the teacher's decisions, and set new goals.

One challenge the traditional coaching cycle presents is that the data collection and reflection are driven by the coach's memory. A teacher has trouble remembering details of the lesson due to focusing on teaching rather than reflecting. At this point, the coach's job is to help the teacher recall these details in a way that helps her process, reflect, and set goals to improve.

FOCUS REFLECTING ON PRACTICE

This presents two problems: First, the details are perceptionbased, meaning that a coach may not remember events as they actually happened; second, the data that were collected are the only data that can be collected because that day's lesson can never be replayed.

Contrast this with a videobased coaching cycle. Teacher and coach begin the process in the same way — having a planning conversation to start the cycle and set goals as usual — but the shift happens from this point forward.

The observation is done via video, meaning that the lesson can be replayed as many times as desired and the lesson is grounded, not by perception and memory, but in reality so the teacher can see the lesson through her own eyes. Because the video can be replayed an infinite number of times, different data may be collected each time the teacher or coach views the video.

The teacher no longer has to retain lesson details in her memory, freeing her cognitive load. As such, the reflecting conversation has the potential to focus on many things rather than a single thing. This accelerates the coaching cycle.

Video offers an unedited opportunity to see classroom practices through the eyes of the teacher, capturing visual and auditory occurrences without a filter. Teachers notice things on the video that they may not have noticed in the moment.

Initially, the noticing is trivial, as new teachers don't possess the depth of knowledge to notice much else. For example, in the beginning of the year, Krista Thoren, a 6th-grade teacher, noticed that one of her students got up from his seat multiple times in a 10-minute period. Later in the year, the noticing becomes more complex.



Photo by KERRI MCDERMID

Patricia Hagan, foreground, a St. Vrain Valley School District teaching and learning coach, leads a community-building activity for first-year teachers during the Novice 1 Induction Academy at the Learning Services Center in Longmont, Colorado.

Kendra Hamblin, a 7th-grade teacher, said, "After watching our videos, we all noticed that we talk too much! We all thought we were giving students the opportunity to talk, but after watching the video, we realize that we talk a lot more than we thought we did."

This progression in noticing is critical when helping new teachers navigate the teaching profession and is accelerated by continued video use and the concurrent noticing from the coach, who often notices more complex features of the lesson due to increased experience.

VIDEO AS OBSERVATION: The transformation starts

When introducing video, first we conquer potential negative connotations. Historically, teaching is an isolated and autonomous profession where the magic happens behind closed doors. In St. Vrain, we provide opportunities for a teacher to feel successful with her first experience with video by focusing on her students rather than on her. Once this barrier is broken down, the magic begins.

When a teacher has her own and her students' actions and words on video, she can begin the observation process without having to remember every moment of the lesson. Her practice comes to life and illuminates the hundreds of decisions that may or may not have been remembered, and, more importantly, the impact that her decisions have on the ways in which students are interacting with the lesson.

Consider one elementary teacher who watched his lesson on video alongside his coach. In the debrief, the coach asked, "Why did you make the decision you did, and what outcome were you hoping for?" Initially, the teacher didn't remember making a decision in the moment, but after watching the video, was

able to step back to the moment and give the rationale behind the decision.

This powerful interaction would not have been possible without the use of video, accelerating thinking about the impact of the decision. Video and coaching helped deeper metacognition about the instance as well as similar decisions.

VIDEO AS INCREASED NOTICING: Subtlety and nuance emerge

Once teachers begin to feel safe with this process, they begin to notice more about the impact of their decisions on student engagement, learning, and understanding. The power of this stage in the process is the collaboration between coach and teacher as they engage in healthy, productive, and powerful discussion on what they are seeing in the video.

Consider the snippet of the conversation between Patricia Hagan (coach) and Sam Goering, a first-year teacher (see p. 43). In this example, it is clear that the video conversation is accelerating Goering's ability to notice and immediately act on his noticing. In addition, it is evident that Goering is becoming more able to be metacognitive on his own by asking questions that typically the coach would ask. In this way, Goering is creating the habit of reflecting, noticing, and

Viewing video together: A sample interaction between teacher and coach

TIME ON VIDEO: 00:42

Teacher: I am going over the purpose and offering a guiding question to think about during reading.

Coach: Yes! Students are more likely to comprehend and be accountable when they read with a purpose.

TIME ON VIDEO: 01:35

Teacher: Whenever I make a joke or say something provocative or exciting, students seems to chat more. Perhaps I should wait longer, have an attention signal, or do a turn and talk when these comments come up.

Coach: These are all effective ways to manage the chattiness and increase processing. Also, I know they are working in groups at times during this unit. When they are not working in groups, flipping to a different seating pattern that is more conducive to individual work will help decrease chattiness.

TIME ON VIDEO: 03:07

Coach: You are moving around the room. This proximity increases the likeliness that students will stay on task.

TIME ON VIDEO: 03:48

Coach: This might be a good time to have students do some individual processing or adding on to their note catchers.

Teacher: That was my intention — that they would add to it after the story and this conversation would help. I suppose I could have had them pull out their note catchers before we started reading and said to add to it.

TIME ON VIDEO: 06:22

Teacher: Each of these questions took the other classes about 30 to 60 seconds longer to figure out.

Coach: What are some scaffolding questions you might ask those kids to help them arrive at the answer?

Teacher: I did a little more prompting, like: "Think about a roller coaster and the plot diagram. Is this the most exciting part of her grandpa's story?"

TIME ON VIDEO: 06:28

Coach: Do you want the whole class to respond or individual students?

Teacher: I can't make up my mind over getting in the routine of hands up for responses or no hands. As long as everyone is paying attention and thinking about

the questions, I don't mind people calling out for quick responses.

Coach: What are some additional ways to help make their thinking visible so that you can increase the likelihood that all kids are processing the questions?

TIME ON VIDEO: 09:16

Teacher: Annotation linked to activity later. How do you annotate when some have e-book and some have textbook?

Coach: Why are some kids not on the Collections EBook? You could have them use sticky notes or take pictures and put into Notability to highlight?

Teacher: These are good ideas for annotating. Some students like the old-fashioned print books just like some like doing activities on paper. The print books are also handy if someone is fooling around on their iPad — I can take it away and hand them a book.

TIME ON VIDEO: 11:30

Coach: A student answers this question. Did you want someone to answer? This was a question that came up later on the Nearpod to check for understanding.

TIME ON VIDEO: 12:59

Teacher: Did I approach this subject correctly and give enough space?

Coach: You handled gently but with purpose. "Stranger danger is real."

TIME ON VIDEO: 13:51

Coach: Lots of kids saying "Shhhhh!"

Teacher: Is this good or bad?

Coach: Most likely an indication that they are getting annoyed by the noise in the room.

TIME ON VIDEO: 14:43

Coach: What did you want students to know and be able to do by the end of this lesson? How did this impact the questions you asked in the Nearpod?

TIME ON VIDEO: 15:24

Coach: Another great opportunity to ask kids a question: How would you describe the characters' personalities? Why?

Teacher: This would be an effective way to get at tone referenced earlier.

improving — a habit of master teachers that usually takes years to realize.

Using video helps accelerate this habit. According to Sherin and van Es (2005, p. 478), a goal of video is to "provide teachers with a kind of access to classroom interactions that is not possible during the act of teaching itself. Specifically, video offers a permanent record of classroom interactions. Thus, teachers do not have to rely on their memory of what occurred. ... [T]he goal is reflection rather than action. By allowing teachers to remove themselves from the demands of the classroom, viewing video may prompt teachers to develop new ways to examine what happens in their classrooms."

Video has also propelled cohorts of St. Vrain teachers to accelerate their noticing, increasing their mindfulness and curiosity in their practice and accelerating their learning. Video supports this growth by allowing teachers to have multiple views of a lesson or series of lessons to analyze data, set purposeful goals, and see changes over time.

Having a cohort of teachers watching each other teach has encouraged conversations about expectations and student achievement. Teachers are watching their own and each other's videos. Teachers rapidly move over the course of two months from thinking about "What am I doing?" to "What evidence of learning do I see in my students?"

A corresponding shift occurs in the timeliness of the data these teachers use to monitor instruction and make instructional change. Initially, teachers primarily used assessment grades. They transitioned to detailed formative student observation of skills and behaviors. They moved from watching themselves to watching students as a primary data point.

One of the strongest connections teachers are finding through video is the

idea of the pivotal teaching moment. This is the point in a teacher's instruction where she can accelerate or deepen student thinking and propel student learning by her responses. By watching the video, teachers can see how they respond when students are confused.

VIDEO AS IMPROVEMENT IN PRACTICE

The habit of reflection that master teachers have, almost automatically and without thought, leads to improved practice. Research shows that novice teachers tend to notice trivial things (Blomberg, Renkl, Sherin, Borko, & Seidel, 2013). After experiencing coaching with video, a new teacher learns to take ownership of the impact of her decisions.

Eventually, the teacher is empowered to change the current state of his decisions to more closely match his desired state. Take Stephen Krupansky, a 6th-grade mathematics teacher, for example. In February, Krupansky's students took nine minutes to come into the classroom and get settled. They were walking across chairs and yelling across the room to each other while Krupansky was moving desks and performing other tasks students could be doing.

After watching the video of his classroom, Krupansky reduced the time it took for students to enter the room and get started to only 30 seconds over the course of two to three weeks. His classroom became a model of rapid, engaged teaching.

Reflecting on the transformation in his classroom, Krupansky said, "Video coaching gave me a view into my teaching/classroom that would have never been possible before. It gave me the ability to see my students, and myself, in a whole new light, which made it possible to quickly adapt and learn from every interaction inside of my classroom."

PROGRESS AND SUPPORT

In three years of using video, St. Vrain's teachers have experienced progress and support during their first year of teaching. We have witnessed the transformation from new and veteran teachers as they begin to break down the virtual walls of their classrooms and invite others into their practice.

Rather than viewing video as a way to highlight all of the things that go wrong in a day, teachers in St. Vrain see the value of video as a tool for observing, data collecting, reflecting, refining, and improving their practice. The power of video has accelerated the learning curve for new and veteran teachers alike.

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David Baker (baker_david@svvsd. org) and Rychie Rhodes (rhodes_ rychie@svvsd.org) are clinical professors and Catherine Carter (carter_catherine@svvsd.org), Patricia Hagan (hagan_patricia@svvsd. org), Temple Hayles (hayles_leila@ svvsd.org), and Karen Smith (smith_ karen@svvsd.org) are professional learning coaches at St. Vrain Valley Schools in Longmont, Colorado.