



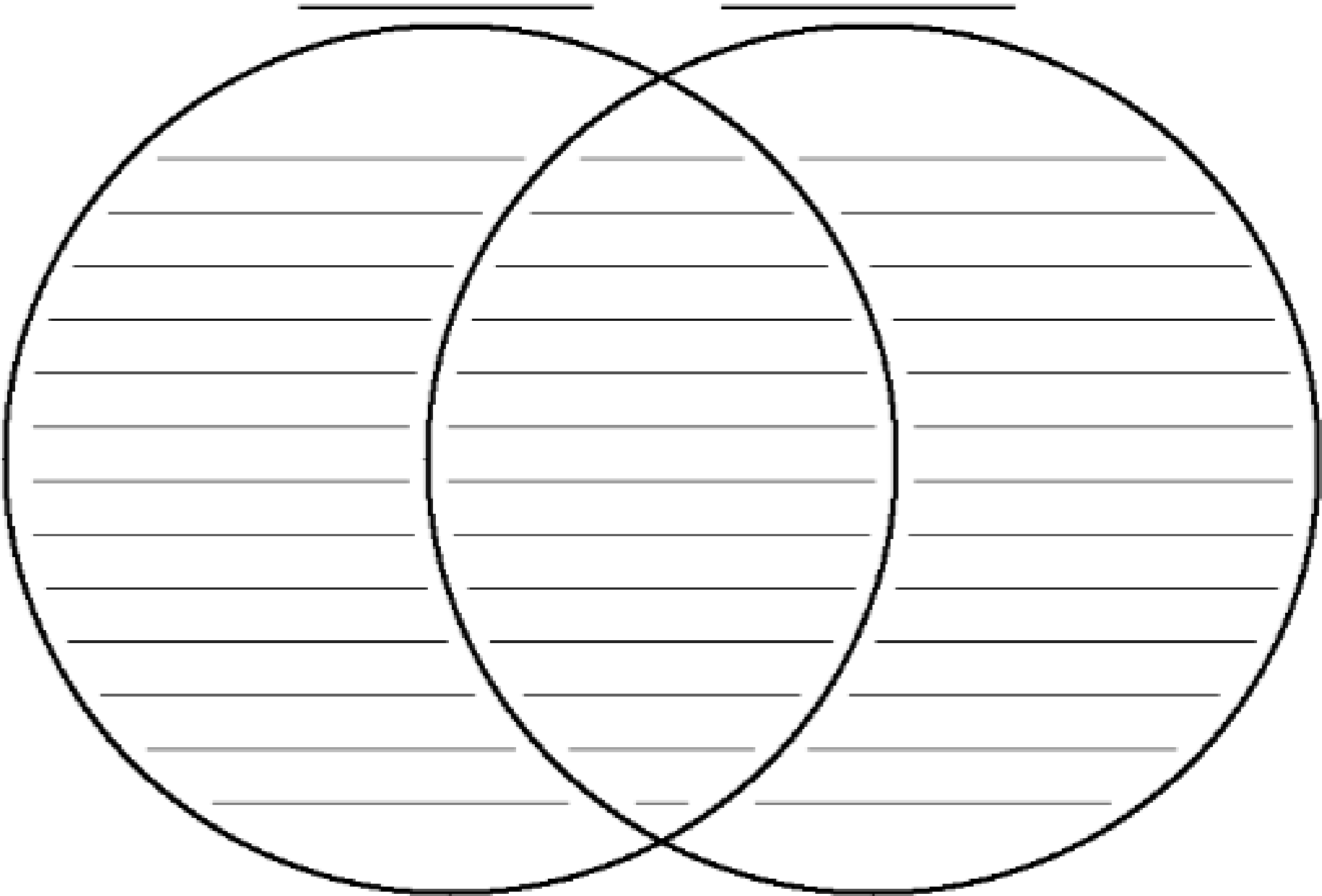
# 2016 Alaska School Leadership Institute

**Instructional Excellence – Jacqueline Edmond-Long & Shelby Skaanes**

# Quick Write

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Name : \_\_\_\_\_



# Video as the Centerpiece of Effective Professional Learning

“Video allows one to enter the world of the classroom without having to be in the position of teaching in-the-moment.”

(Miriam Sherin, 2004)

White paper of conference findings from:

“A Research Design Conference:  
How Can Digital Resources Increase  
Collaboration and Support Teachers  
Implementing Standards?”

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By Rachel Scott

## Introduction

Over the past 10-15 years, researchers have demonstrated an increasing interest in using video as a tool to improve teacher learning (Borko, 2004; Darling-Hammond, et al, 2009, National Board for Professional Teaching Standards). Teaching Channel (Tch) has spent the past three years exploring the uses and benefits of video and online learning environments through its work, and by consulting with eminent education researchers. We are a non-profit organization with the mission of helping students succeed by providing teachers with new technological tools and effective professional learning experiences focused on video. Our digital library of videos shot in classrooms across America demonstrates a wide range of strategies rooted in the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS). We also offer a collaborative platform, Teaching Channel Teams, which enables teachers to learn to from video together.

In November of 2013, funded by the National Science Foundation, we convened a small conference that gathered researchers and practitioners from across the nation in dialogue about teachers' digital learning practices. The questions we set out to answer were:

1. What does the research tell us about video as a tool to promote teacher learning?
2. To what extent can video-based professional learning help teachers meet the new demands of the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS)?
3. How do we best measure the learning that results from this new form of professional growth?

We also wished, by answering these questions, to challenge Tch's organizational theory of learning. This theory posits that to improve instruction, teachers need to see new practices in action, in real classrooms, and think deeply about these

practices before translating or adapting them for use in their own work. They also need multiple opportunities to practice new skills in ways that produce evidence of their progress, to reflect on the strategy attempted and to receive feedback on their efforts. Our collaborative platform is designed in accordance with these principles.



### Evidence of Teacher and Student Learning



This paper will present our findings. In the sections that follow, we will set forth one of the fundamental challenges of teaching and explain how video can be used to address it. We will explain how video can serve as the center of an online professional learning system, touch on some of the pitfalls of video-based learning, and explore how the impact of video-based professional learning might be measured. We conclude with explanation as to how we believe our investigation confirms Tch's theory of learning.

## The Challenge of Teaching

The classroom is an extremely complex environment, with multiple interactions taking place between teacher and students--and among students themselves—all at the same time. What's more, teaching strategies are often “learned implicitly,” and classroom interactions dictated by “cultural routines” that teachers might not have examined or even recognize (Stigler, 2013). These habits are hard to see, and therefore even harder to change.

The specific moments a teacher does notice, however, and the way he or she interprets those moments, can have a significant impact on the evolution of teaching practice (Horn, 2007; Levin, Hammer, & Coffey, 2009; Sherin, Jacobs, & Philipp, 2011; cited by Dyer, 2013). Dyer calls teacher responses to classroom interactions a “feedback system for supporting instructional growth” or simply a “feedback system.” This system consists of 1) collecting data, 2) analyzing data, and 3) determining the implications of these data. Because every teacher is naturally inclined to identify different pieces of data as relevant (based on his or her philosophy, assumptions, and beliefs), and to collect and interpret those data in different ways, individual feedback systems may actually promote or inhibit improvement in particular areas (Dyer, 2013). Making one's feedback system both transparent and intentional is therefore critical to growth and improvement. Video can play a central role in such a feedback system.

## The Case for Video

At the most basic level, video simply makes it possible for teachers to see what they might not otherwise while caught up in the demands of a busy classroom. Video can show them what particular students were doing or saying when their attention was called elsewhere. It can show them what they looked and sounded like when they were talking, and the way they carried out particular instructional strategies. For example, how much time did students *really* have to come up with an answer to a particular question? Dyer, Borko, and others

have talked about teachers (especially new ones) who have been surprised to discover that they looked or sounded very different from what they imagined (Borko et. al., 2006; Dyer, 2013). One of our Teaching Channel clients tells a story about a principal who was concerned about the peremptory manner a teacher used when addressing her students. The principal was uncertain how to bring up the issue—it seemed too personal to mention. But the very first time the teacher saw herself on video, she observed what was happening and asked for help monitoring her tone.

Yet video allows teachers to do more than simply see anew, or identify discrepancies between what they picture in their heads and what they see on camera. At its best, it gives them a chance to spend extended time *looking* at their practice in depth, away from the classroom. They can examine teaching moves and strategies closely and identify those they want to refine. They can mull over complex interactions with and among students, developing knowledge not just about “what to do next,” according to Sherin (2004), but “how to interpret and reflect on classroom practices.” And their assessments of classroom interactions become increasingly accurate over time, as they practice noticing and interpreting what students say and do (Sherin and Dyer, 2013).

A teacher's ability to elicit and respond effectively to student ideas makes a “substantive difference in student learning” (Thompson, 2013). And studies like Sherin's suggest that careful attention to video can help teachers learn to perceive student thinking and reasoning more effectively (Sherin & Dyer, 2013). In 2002, Sherin and Han found that teachers who met regularly to analyze video shifted the focus of their conversations from teacher moves to student ideas. Their conversations about student thinking also shifted—from simply restating student comments to analyzing student thinking in depth. Sherin's research further suggests that teachers who hone their ability to notice actually begin to pay closer attention to student ideas while teaching. They work harder to understand what students are saying and



respond accordingly (Sherin & Dyer, 2013). This kind of careful attention from a teacher can show students that what they think is important, and demonstrate the kinds of questions *they* might ask to try to understand other people's reasoning (Hammer, 2013). In addition, Kersting's research suggests that teachers who improve their video analysis skills may also improve their teaching practice and bring about student learning gains (Kersting et. al., 2010). She and her team found that the quality of teachers' analyses of video clips actually corresponded to rates of student learning in their classrooms. Those teachers who were better able to assess clips and make suggestions for improvement saw higher student gains than other teachers.

Video enables teachers to reflect on practice in multiple ways, viewing it through a series of different "lenses" (Rozelle et. al., 2013; Dyer, 2013). The first time a teacher watches a particular video, for example, she might look carefully at herself—what did she say and do? How did she sound? The next time, she could focus on her students. What did they say and do? How do her actions seem related to their responses? By asking questions like these, teachers can try to tease out the cause-effect relationship between teacher actions and student learning. "Video supports a different kind of analysis than does live observation," says Jim Stigler. "Most rubrics for observing teaching focus on the features of teaching. In my view, this kind of analysis is not adequate for improving teaching. Instead, what is needed is a cause-effect analysis of classroom events as they relate to student learning. Video, as a persistent medium for capturing events, makes it possible to engage in a more fine-grained cause-effect analysis" (Stigler, 2013).

Dyer (2013) suggests that simply deciding to use video to answer a particular question (i.e. How long are our transitions taking? How many students are truly engaged in this lesson? How many voices do I hear in discussions?) may prompt a teacher to think about her practice in a whole new light.

Of course, video can also present teachers with new images of what might be possible, including ideas for lessons, teaching strategies to try out, and new ways of understanding the strategies they are already using. Access to video exemplars allows teachers a chance to build a broad repertoire of techniques related to curriculum, instruction, and assessment. A robust repertoire is critical to keep learning lively and engaging, and reduces students' chances of losing interest because they are performing the same tasks over and over (Wasley et. al., 1997). As a source of content, video offers an engaging alternative to text. Video archives can provide teachers with access to best practice exemplars from which they may choose and customize strategies to meet their own needs. Watching such videos many times can help teachers look closely at particular moves, examining them from multiple angles, and observing how they are carried out from moment to moment. This opportunity is important because there are so many dimensions of teaching to attend to at once—teachers must not only concern themselves with student comprehension, but also social-emotional connections (Erickson, 2013). Watching a video more than once gives teachers, in effect, a chance to stop time and dissect a single moment under the microscope.

## The Evolution of Professional Learning

Educators today have begun to distinguish traditional "professional development" from what they call "professional learning." The National Comprehensive Center for Teaching Quality (NCCTQ) defines the former as "the varied programs and activities teachers participate in to obtain knowledge, skills, and qualifications" (Coggshall et. al., 2012). Such programs can serve a variety of purposes and be structured in different ways, but teachers usually experience "little follow-up" to these activities, which do not tend to take into account their individual needs or prior knowledge—nor do they often help teachers with pressing problems of practice. "Most professional

development today is ineffective,” stated a report issued by the Center for Public Education (CPE) in 2013. “It neither changes teacher practice nor improves student learning” (Gulamhussein, 2013).

Professional learning, by contrast, “actively engage[s] educators in cycles of continuous improvement guided by the use of data and active inquiry around authentic problems and instructional practices” (Lemke, 2013). NCCTQ also describes professional learning as collaborative, job-embedded, aligned with teacher, school, and district goals, and “learner-centered” (Coggshall et. al., 2012). Lemke (2013) furthers this distinction by calling professional learning “something that teachers engage in” rather than “something that is prescribed and delivered to them.”

With the adoption of the Common Core standards and aligned assessments, the need for teachers to participate in ongoing cycles of professional learning is perhaps more apparent than ever. Teachers are required to make enormous shifts in the way they teach math, science, and language arts. Within each discipline, students are expected to develop and demonstrate critical thinking skills: analyzing and making sense of nonfiction text, carrying out scientific investigations rather than just remembering science facts, and constructing viable mathematical arguments. “There are as few as 28 standards for math for some grade levels,” says Timothy Kanold, past president of the National Council of Supervisors of Mathematics (NCSM) “Which is fewer standards than ever before, but you now have to teach them and drill much deeper into them. Students are expected to conjecture and reason and problem-solve. That’s a new day in math.” (Kanold, 2011, cited by Ash 2011) Kanold believes online learning lends itself to addressing the challenges we face with the Common Core because it is so easy to access and can be used to connect learning opportunities with daily challenges. Dede cites some of the other advantages of online learning: “The need for professional development that can fit with teachers’ busy schedules, that draws on powerful resources often not available locally, and that can

create an evolutionary path toward providing real-time, ongoing, work-embedded support has stimulated the creation of online teacher professional development programs” (Dede et. al., 2006).

Online learning in general has already acquired legitimacy, thanks in part to studies like the 2010 meta-analysis conducted by Means and colleagues at SRI (2010). The U.S. Department of Education commissioned this study to assess the efficacy of online learning for K-12 students as well as adults. Researchers concluded that students who participated solely in online learning experiences performed as well as students who took part only in face-to-face learning.

The tools of online learning can be deployed to meet design standards that may be more difficult to realize in traditional professional development settings. Both NCCTQ and CPE have identified research-based criteria for effective professional learning. NCCTQ calls for learning experiences to be:

- Job-embedded and differentiated
- Collaborative, with a focus on student learning
- Content centered
- Engaging, requiring teachers’ active participation and reflection
- Ongoing, with multiple opportunities for feedback
- Aligned with district and school improvement efforts and goals
- Supported by enabling cultural and structural conditions, such as norms of trust and regular time to meet

CPE says professional learning must offer:

1. **Sufficient duration.** Professional learning must be ongoing, and allow time for teachers to be introduced to new practices and to wrestle with implementation challenges.
2. **Support for implementation.** Professional learning must be customized to address



specific problems teachers are facing as they adopt new practices.

3. **Engagement.** Learning experiences should require active participation and provide multiple avenues into new concepts or practices.
4. **Modeling.** Modeling should be used to introduce new concepts and help teachers understand specific strategies.
5. **Grounding in specific disciplines.** The content presented in a learning experience shouldn't be "generic." For middle and high school teachers, this means it must be directly related in their disciplines. For elementary school teachers, it should be connected with their grade levels.

All of the above principles can be enacted online. Online platforms allow people to discuss and problem-solve everyday challenges in an ongoing way. They can be set up to require active participation (through discussions as well as the submission of teaching artifacts), and to provide participants with feedback on real work. Online professional learning also enables participants to take part in learning activities on their own time and at their own pace—a huge advantage in an environment in which face-to-face meetings (such as professional development sessions and classroom observations) are often difficult to schedule. It allows teachers to have “more and briefer interactions around practice” (Stigler, 2013). It also creates relationships across great distances, allowing educators to compare notes and share feedback with colleagues around the world, thereby enabling them to benefit from additional insights and perspectives (Rozelle et. al., 2013).

## Video as the Centerpiece of Online Learning

If online learning can serve as the delivery system for effective professional learning, video lies at its center. Videos can be used to introduce new concepts and techniques clearly and vividly. If participants have ongoing access to them, they can

take the time to study and deconstruct teaching moves. Teachers can also use video to examine their own efforts to master new teaching strategies—an opportunity not usually afforded by traditional professional development. Teachers need a lot of time and practice to acquire new strategies. When they begin, they may struggle with technique and lose sight of the content (Wasley et al., 1997). Without ongoing support, they may not persist in implementing what they have learned. Video can provide teachers with rich data about the effectiveness of their instruction, and offer an opportunity for them to collect feedback and insights from colleagues who live near or far. Video also offers advantages over traditional classroom observation. Stigler (2013) comments that: “It can be watched and discussed in a group, something that is not possible in the context of live observations.” Online learning around video can therefore reduce isolation, providing teachers with many more opportunities for collaboration and deep inquiry than might be available during the course of a typical workweek.

Online tools can also make it easier to design targeted face-to-face professional development sessions. Borko (2013) suggests that district leaders planning a workshop could view classroom videos that had been uploaded by teachers to a collaborative platform. They could use these videos to set goals for the session, select clips to present and discuss, and develop discussion prompts. They could also post video clips and questions before the day of the event, allowing participants a chance to consider important concepts in advance. All these steps could improve the quality of the workshop.

By providing educators with pictures of practice, video enhances dialogue about learning. It enables educators to come to a common understanding of tools and frameworks, and to develop shared definitions for the words they use to describe teaching (Thompson, 2013). It also removes the element of memory (which varies from person to person) from conversations about practice. Jim Knight, author of *Focus on*

*Teaching: Using Video for High Impact Instruction*, comments that this shift can turn “top-down interactions” into “partnership coaching.” He quotes Kegan and Lahey (2001) as explaining why top-down interactions are based on “problematic assumptions”:

“The first [assumption] is that the perspective of the feedback giver...is right, is correct. An accompanying assumption is that there is only one correct answer. When you put these two assumptions together, they amount to this: the supervisor has the one and only correct view of the situation.”

Assumptions like these prevent instructional coaches from taking in and acting on what teachers know; therefore, it limits their ability to arrive at the best solutions to teaching challenges. In addition, Knight says, “top-down feedback” may create resistance, adding: “A more effective model positions teachers as equal partners in the coaching process.” (Knight, 2014). Video therefore levels the playing field, providing a neutral source of data that teachers and evaluators can make sense of together.

Finally, as Williams (2013) points out, video provides teachers with a “documentary record” of their instructional practice. It lasts over time, so they can review it again and again, observing the evolution of their instructional practice. Elham Kazemi notes that such a record “[makes] it possible to follow a classroom community as they develop norms for disciplinary engagement, as students’ ideas change and transform over time... teachers could study student learning and have examples of canonical ways that students engage with content as they learn a topic” (Kazemi, 2013). She adds that videos can be annotated to draw attention to key points, online dialogue among educators can be saved, and facilitation guides can be linked to videos. These “repositories” or “archives” of learning, as she calls them, can be made available to other teachers as well as to researchers who wish to study how online professional learning communities develop.

## A Few Caveats

The value of any professional learning effort depends on whether or not it is designed to meet specific learning goals effectively (Moon, 2013). Educators will always have to assess when, and to what extent, video can help them meet their goals, or whether face-to-face meetings would serve them better (Moon, 2013). And video-based learning, like all professional development, requires thoughtful planning—simply making videos available to groups of teachers will not improve practice on its own (Thompson, 2013). Professional learning opportunities must be designed in accordance with quality criteria like those offered by CPE and NCCTQ. And, like other educational tools, video is most useful when offered under conditions that promote learning. Participants must have established norms for working together, be able focus on students and their academic needs, have access to learning resources, and share accountability for student growth (Thompson, 2013).

Videos sources are important too. Williams suggests that teachers may be less receptive to so-called “best practice” videos than to videos they are asked to view in order to assess practice and make suggestions for improvement. They may also prefer videos of their colleagues to anonymous “best practice” videos (Williams, 2013).

In addition, web-based videos must be easy to find and review, and of the right length. Hall and Wright (1997) indicated that videos appear to be most effective if they are somewhere between 3 and 15 minutes long (cited by Williams, 2013). Erickson (2013) cautions that watching a video superficially may lead to serious misunderstandings of practice, especially if that video is minimally edited. He does not advocate heavily edited documentary-style video conventions, however, as they are too leading, but suggests teachers be taught how to analyze video effectively and how to recognize critical moments in teaching and learning. Brophy (2004) suggests that teachers should have

a clear purpose and agenda for viewing video or they may have a tendency to watch passively, perhaps as if they were watching television. And without guidance and support, their attention may be guided by preconceptions (Borko, 2013)—or what Dyer might call their unexamined personal feedback systems. Teachers often need help focusing on the content of videos, too, without being distracted by production issues (Williams, 2013). Professional learning experiences are most effective if clips are chosen expressly to help participants meet specific goals and woven into activities that are “carefully planned to scaffold progress toward...goals” (Brophy, 2004; Seidel, 2005; cited by Borko et. al., 2006). Finally, skillful facilitation is an enormous help to groups of teachers engaging with video. Borko suggests that a good facilitator must possess deep knowledge of content and be able to draw upon it in the moment to build on group ideas and guide conversations. He or she must be able to answer questions like: “What are the goals for discussion, what are the clips we will use, which features of the clip will help us meet goals, what are the questions?” (Borko, 2013).

## Measuring Online Learning

Measuring what teachers learn from professional development (not to mention the impact of this learning on students) has never been easy, and the challenges persist in online settings. Data collection always constitutes one of the most daunting of researchers’ tasks, as it may include interviewing teachers, administering surveys and assessments, observing classrooms, and collecting student work. Naturally, data collection often places a substantial burden on teachers as well. However, online learning offers an advantage over traditional professional development in that a lot of data is generated naturally, as part of the learning experience itself. These data are not perfect; they have strengths and weaknesses in comparison with other data. Nevertheless, we believe teachers’ online contributions provide a valuable window into their thinking.

Any research effort must begin with the clear identification of what teachers are expected to learn, whether it involves acquiring pedagogical content knowledge or refining instructional skills (Kersting, 2013; O’Dwyer, 2013). Designers of professional learning must also lay out an “intellectual framework” (or a theory of change) that explains how they expect participation in a learning experience to lead to particular outcomes for both teachers and students (O’Dwyer, 2013).

Kersting and O’Dwyer recommend defining what constitutes both “participation” and “learning” as a first step to identifying the data that would indicate change in either area. These definitions would also help evaluators begin to assess program “dosage”—i.e., the amount of learning a teacher would need before he or she reached a particular outcome (Kersting, 2013; O’Dwyer, 2013). In addition, Kersting recommends that evaluators identify and track “use cases”—for example, teachers who use the Tch site in unstructured ways vs. those who use it as part of formal professional learning activities. If we were to classify teachers by use case, we might determine how participation and learning looked different for each one. We could also watch teacher status change over time and glean insights into participation patterns and the development of an online learning community.

Evaluators would need to determine whether to measure learning for individual teachers or for entire groups. They would also need to gather data about both context (school, district, and department support and culture) and teacher characteristics (teachers’ beliefs and assumptions about their own practice). These factors would certainly affect participation rates as well as the dosage required for learning to take place. In addition, O’Dwyer emphasizes the importance of using rigorous research designs and analyses, including randomized, controlled trials, and quasi-experimental designs. A well-designed study should meet the What Works Clearinghouse evidence standards (O’Dwyer, 2013).

Evidence of broad change in teacher practice is notoriously difficult to acquire when teachers participating in a particular learning experience are teaching different grades and subjects, and operating within different classroom contexts (Michaels, 2013). It's easiest, Michaels suggests, when learning is "highly focused" and delivered to groups of teachers who teach the same grade level. A group of grade-level teachers may agree that all of them will use particular strategies and compare their progress, for example. However, "teacher research" can be integrated into learning experiences if participants are asked to collect audio and video evidence as well as student work and bring them back to the group for analysis. These digital artifacts are not just useful sources of instructional practice data, but prove excellent sources of evidence for evaluating the impact of professional learning (Michaels, 2013).

Of course, our ultimate goal must be to link teacher participation and learning to student out-

comes. As Michaels says, "We must go beyond teachers' self-report of change." We anticipate that samples of student work and classroom video will serve as the central data for analysis of changes in teachers' instructional practice. Our clients' posts, uploads, and digital portfolios, as well as polling data—and perhaps video of live professional development sessions—will help us assess the quality of their discussions. We anticipate learning what other kinds of evidence would be most useful over time. Although classroom observations would provide more in-depth information about changes in teachers' instruction, we believe investigating teachers' online contributions will also be revealing—and these contributions could help us develop models for scaling participation in future.

Some of the data we might use to evaluate teacher participation and both teacher and student learning are laid out in the chart on the following page.

## Sample Measures of Participation, Teaching, and Learning

Evidence of Teacher Participation	Evidence of Teacher Learning	Evidence of a Change in Teacher Practice	Evidence of Student Learning
<ul style="list-style-type: none"> <li>• Number of times videos are played</li> <li>• Number of times videos are paused</li> <li>• Locations and durations of pauses</li> </ul>	<ul style="list-style-type: none"> <li>• Quality of video analysis discussions (references to student thinking, specific moments discussed)</li> <li>• Quality of video artifacts collected (do they present evidence of student thinking?)</li> <li>• Quality of written artifacts posted</li> <li>• Pre-post surveys on pedagogical content knowledge</li> <li>• Vignettes</li> <li>• Assessments that measure teacher understanding of student preconceptions (Sadler et. al., 2013)</li> </ul>	<ul style="list-style-type: none"> <li>• Planning artifacts (are goals for student learning better aligned with concepts of disciplinary learning?)</li> <li>• Visual presentations on classroom walls (how is student thinking represented?)</li> <li>• Performance tasks that measure classroom teaching</li> <li>• Audio/video of classroom teaching</li> <li>• Student work (indicates a change in teaching)</li> <li>• Quality of classroom discussions (can be evaluated for equity also, and the way the teacher approaches errors and disagreements)</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-post formative assessments (e.g., assessment tools developed by Sadler, et. al. in the MOSART project)</li> </ul> <p>These assessments can be taken by teachers/students to assess teacher understanding of student misconceptions. They also assess changes in student learning.*</p>

(Hammer, 2013; Kersting, 2013; Michaels, 2013; O'Dwyer, 2013)

\*See <http://www.cfa.harvard.edu/smgphp/mosart/>

## Measuring the Quality of Professional Learning

Collecting these kinds of data would not only enable us as providers of digital professional learning to assess and improve our own offerings,

but also position us to contribute to the national dialogue about what constitutes effective professional learning. Dede and others have been investigating best practices in cultivating online discussion. For example, Dede suggests that “online negotiation and argumentation”—not just



“social interaction and information sharing”—are necessary for teacher learning. He also underlines the importance of facilitated discussions around “pointed” questions (Dede et. al., 2009; cited by Lemke, 2013).

We hope to be able to add to his findings. At the Teaching Channel Research and Design Conference, we identified three research questions we would like to investigate:

- Which facilitation protocols are most effective at promoting teacher engagement and learning?
- Why do some video study groups work well together and others fall apart?
- Which design elements yield the best results?

We believe the data cited above will allow us to draw some conclusions about the features of study groups that cause learning to take place. By examining the context of key contributions—which indicate when teachers seem to be learning—we hope to draw inferences concerning why learning has occurred. We also plan to look at the way study groups evolve over time. We will examine interactions within the groups, the extent to which norms of participation are developed and evolve over time, the factors in play when key ideas are taken up and shared among group members, and the quality of the conversations. We believe understanding the evolution of group dynamics will provide us with insight into the way individual teachers learn, too, because individual people develop skills and knowledge within ever-evolving groups.

## Conclusion

We believe the research on video-based professional learning affirms the theory that informs our work at Teaching Channel. With the widespread adoption of the CCSS and the NGSS, school systems are under more pressure than ever to provide teachers with the kinds of high-quality

professional learning called for by the CPE and the NCCTQ. This learning must be engaging, collaborative, focused on student learning, and grounded in everyday problems of practice. It must model new techniques, provide support for implementation, and afford teachers plenty of feedback. Our video-based web platform provides participants with a chance to watch, analyze, and discuss new practices before adapting them for use in their own classrooms. We’ve also made it easy for users to collect classroom video of their efforts and share it (along with student work, lesson plans, and other resources) with colleagues and coaches for feedback and suggestions. In addition, mindful of cautions from Erickson, Thompson, Williams, and others, we are developing tools that help teachers practice analyzing video effectively. These tools prompt users to observe teaching strategies closely, interpret student thinking effectively, and seek to understand the impact of classroom events on student learning.

In the position paper Rozelle et. al. (2013) submitted for our 2013 research and design conference, they comment that classroom video doesn’t only make it possible for us to study the complexity of teaching, but to appreciate it. The distinction is important. Teachers, administrators, parents, and policymakers must recognize and understand this complexity if we are to move professional learning to the top of our national agenda. In addition, widespread recognition of the real challenges of teaching might go a long way toward creating a culture in which our school systems ceased to approach professional learning as a remedy for some unfortunate deficit and treated it instead as an ongoing, vital, and meaningful part of any serious educator’s professional life.

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