ROY PEA: I'm showing up in this session as Louis Gomez, my colleague. I'm very glad to represent him here although I'm sure that I'll answer questions in a very different way than he would. So we may want to defer on that. So the topic that Louis has set for the schedule today is around school improvement and video. And this is in the context of working in a video infused professional development system that's been built by the company called Teach Gate over a number of years and then building products and services for teachers that make extensive use of it. This is an environment that has a number of hundreds of hours of professionally produced case materials of K to 8 teaching, student work, supplementary materials, online community and the like. And it's been used by tens of thousands of teachers over these last four to five years. And Louis is wanting to reflect in this talk about what's being learned through this about what these video based tools have to do with school improvement. Do they have a place in it and, if so, what? And he relates in this talk his musings that arise from the design experiences in working with teams that involve teacher unions, school leaders and the like, and the ongoing efforts to be of technical assistance to schools and districts that are seeking to improve.
So interestingly, and I can tell you this having been a co-founder of the company five years ago, it started building professional development products, the notion of multimedia libraries of exemplary research based practices, identifying teachers from diverse schools throughout the country, creating standards linked materials and really working in issues of local adaptation through online community of the resources that are provided. But it didn't take too long to discover that Teach Gate needed to be a company that didn't build products but that considered itself as a partner with the school districts and an external agency. So the company still builds products, but the point is that it views its products as a part of local change efforts and as a services company for home video as an absolutely essential tool. So I think this evolution is analogous in some way to participatory design research in software and human/computer interaction, really getting beyond the notion that the designers have a sense of what it is that users need and better understanding the environments of work and practice. But it's been played out in this case in relation to teacher professional development services.

So if you think video is an important resource for teachers and the core problem you care about is school
improvement, school improvement then is about changing the way that adults see the enterprise of schooling, so understanding that it's a public practice of teaching and the deepening of content knowledge is at the core of improvement effort. So what does video have to do with these things? The argument here is that schools tend not to improve because of simple, structural and syntactic measures like get small, get video clubs but that they tend to improve when the conditions exist for ongoing professional community where adults have consistent opportunities to learn and where the technical core of instruction is deepened among practitioners. When the teachers have a deep content knowledge and flexible strategies with which to engage learners. And Louis alludes here to work by Elmore and colleagues, Tony Bright, Ken Schneider suggesting schools are first and foremost social places where characteristics like interpersonal trust matter a great deal to improvement. Baldwin, Cohen, (Inaudible) among others. And so what does video have to do with supporting the conditions of this sort that connect to school improvement? How might video aid in the creation of professional learning communities where adults have opportunities to deepen their knowledge?

So the essential argument that has come out of
working on very large scale efforts and using video case studies and developing them with school partners over this period of time are two principal affordances that come out of the core claim that video is a site for the persistent representation of practice. One is that video in this context of school improvement has the affordance of coherence, that is as a sense making tool for aligning district goals and instruction. And a second affordance as one of relationships in establishing conversational prompts that support the construction of community among adults.
So if the core benefits of video for school improvement are these, why are those important? So in the remainder of this talk it's articulating what these properties of coherence affordance and relationship affordance mean where video is used for school improvement. So the point of this slide is to talk about the effect of the lack of coherence in most schools known today from the research literature. The enemy of school improvement symptoms include no common language of instruction among teachers and leaders, a weak professional community, teaching that's decoupled from evidence of student improvement, and on rigorous standards of what adults should know and be able to do. And so this is a graphic that often helps illustrate these issues of lack of coherence. In any given reform effort that enters
a school, the local actors see the reform very differently. So in the upper left, you've got a principal thinking of school reform in terms of direct instruction given No Child Left Behind. You've got a teacher thinking about process knowledge. The area instructional leader is very focused on content knowledge, the reading coach on collaborative learning. And so improvement requires some kind of a shared vision for change where these different points of view get brought in relation to one another. And a way to see the value of video is that it can be found out as a tool that helps to align the perceptions of the reform and its utility throughout the organization.

So common vision, shared beliefs and concerted action. Again citing Tony Bright's work and Fred Newman's work, Louis notes that these are characteristics of emblematic features of the presence of coherence in an organization. And whether it's common vision around public teaching practice organized around a common instructional framework and critical dialog about that, shared beliefs around how accountability within the system needs to be rooted in evidence of student progress, and then concerted action that has adults continuously learning, the question is how can we be assessing video and its importance in helping to achieve these properties.
This next diagram attempts to highlight that achieving coherence is all about what people are doing, not only what they say they are doing. So in much of this work there's a lot of on the ground work and in the building work connecting the chief academic officer, the area instructional leaders, principals, area reading coaches and teachers and looking at what they do with respect to this issue of organizational coherence. And if video's important, we need to look for ways that video provides coherent action across these levels of the organization and supports the flow of those alignments. In terms of achieving coherence, the work in organizational sociology of Pfeffer and Bob Sutton argue that organizations often flounder because actors know but can't do. Often it's a sense within the organization that the problem is not knowing when it's really the problem of knowing but not being able to tie knowledge to action. And so the claim here is that persistent representations of practice in video that show the doing can aid declarative knowledge in becoming procedural knowledge by showing than doing allowing knowledgeable people to capture and parse the key elements of specific and valued practices in ways that can be part of a conversational discourse about this issue of organizational coherence. For example, if I understand
what it means to engage in accountable talk, I can point to it in video records. Video allows you to highlight the social practices you value and because there's something concrete to talk about using the video, their belief is that you can create more efficient communication among the layers in that former diagram because you'd have the same concrete object to discuss and critique.

So this slide provides a summation of a teaching course. It used to be called a case with a piece of video, and it highlights what's important in the video segment if it were to be looked at in more detail or played. And the course cases create concrete examples of practice that are shared throughout the line in an organization from management to teaching providing permanent and shared representations of issues relating to the reforms. And also an online discussion form that provides a setting for the participants to discuss their participation in these reform activities as they relate to these cases and in many cases contrasting cases in practice.

To turn to the question of the relationship affordance, recall the key argument is that video's primary value is allowing persistent representations of practice. And the first point about effective professional learning environments being community centered, Louis references the
How People Learn Book from the National Academy of Sciences. The professional learning community should be community centered with two benefits. One, professional development being linked to school wide goals, not general to the field but within a school and building community through shared professional development experiences that they can talk about local to their community. And so the core benefit of the persistence of video then in this context is it provides conversational props or talking points that support the development of a common language within the community. And the key conjecture is that one of the primary sites of community development is common language and common language being aided by shared artifacts of which video could be one. Nonetheless on this issue of relationship affordance, it needs to be emphasized and there's fairly substantial literature on this that professional learning communities don't arise so naturally on their own. They need to be grown and nurtured. You have to pay attention to their creation. And in the next several slides, Louis describes the role that participatory design and site based professional development might play in nurturing community and what role video might play there.

So these are several screens of an application
from Teach Scape Development. Tony Bright and Louis and IIS in Chicago is a tool for literacy coaches in the city. It provides a multimedia library of practice and other kinds of artifacts in teaching like student work. And the aim is to have literacy coaches that work with reading teachers assemble the multimedia resources for teachers as a method for improving those teachers' practices. It allows them to identify learning goals specific to their school, engage in one on one coaching and lead professional development meetings. And since they are the ones who are the design experts with local knowledge around need they essentially build from a collection of resources and often new resources are created, not just the ones that are already available that enable them to then work with teacher leaders work with the teachers in their system using these custom crafted materials that are responsive to local needs.

So Teach Scape has come very much to focus on its work on helping school districts create social capital through professional community among teachers and others co-designing with its clients programs of professional development. And video resources continue to play a key role in those participatory design efforts with clients. So there's very much of a focus then on the video artifact.
In this model, Teach Scape conceives of client engagements focused on program design according to this set of steps working with districts in implementing a four-step development process to collaboratively ask the right questions that make sense locally, identify problems and then develop programs. And the first two steps are ones in which video is integral. The first one involves looking at a variety of researching former practices and comparing it to what they currently do and looking at those contrasts. And then step two is design using tools like the one you saw with teacher leaders to move towards implementation and evaluation.

In the last minute I will highlight a specific example for Louis. This is a preeminent case of co-design with the Milwaukee Public School Systems. This has been a three or four-year engagement that's now ended. The district got new leadership. With the new, out goes what was before. And the district's professional development had a number of features here that made them really good for collaborative design, school based leadership. Their professional development emphasized capacity building. They had district wide learning targets that drove school based professional development. They used school based learning teams to provide clarity, academic decision
making. They wanted high quality local school based initiative that were consistent on the (inaudible) standards and really wanted to focus on coupling data on student learning with pedagogical and curricular decision making at the school level. And so what they asked TeachScape to do was to collaborate with their senior leadership to build a professional development learning community with a special focus on scaling capacity building, work with mentors to support an alternative certification program where it really helps to have novel ways to provide instructional materials to teachers. The platform supported that. And to develop a program to help MPS teachers attain the competency based licensure for the state, and a bunch of work on literacy and math coaches. And through that effort and that collaboration having the concrete representations of practice was the big resource that gave local design teams an important task to do, reviewing the media materials, doing trial professional development, using those resources, discussing outcomes and working together to evaluate their efforts after the fact. And in the closing slide, Louis highlights as a conclusion that with thoughtful design, video can make the essence of reform more concrete through these persistent representations of practice. It can interrupt the private
practice of teaching and that's meant in a good sense, not to interrupt teachers whenever they're privately teaching but enable a shared language of teaching but get beyond the isolation, supporting local professional community and through augmenting social practice and then building trust. And so I think in relation to standards, this talk is more about process standards for working the schools, for creating video case materials and practices that work for them in realizing education reforms that use these several affordances of videos for teaching practices.

ROY PEA: I'll entertain some questions, and if Louis would have to answer them, I will throw it out to the crowd and maybe they can help. Sure.

AUDIENCE MEMBER: I thought your Milwaukee case was interesting in light of the approach to developing the community because Milwaukee has a very serious turnover problem. And so we know that the average stay at a teaching job today is about three years and that there's an increasing number of short term teachers entering the system nationally (inaudible). But that is particularly a strong thing in Milwaukee in certain schools. And so I'm wondering how your system would respond to this turnover problem because it seems to me that there are places in Milwaukee where professional community would have a really
hard time developing because where people change almost every year, a fairly large turnover, how could your system adjust to that reality?

ROY PEA: Well, I mean it seems that given multiple levels in the triangle that you saw from the chief academic officer on down to the teachers, they have structures in place and using persistent representations of practice and ways of engaging the different levels of participants and that would provide enough of the ongoing coherence so that people can slot their way in in a way that if we have to bootstrap on their own individual (inaudible).

AUDIENCE MEMBER: Along those same lines, your plan for your Milwaukee piece has a number of similarities to the urban systemic initiative that was conducted there a number of years ago. How does your plan differ from that urban systemic initiative which really wasn't terribly successful?

ROY PEA: Well, the first thing to say is that I'm sure the properties (inaudible) with Partner or with Teach Scape which where I'm at the (inaudible) school, you know, the different local learning teams and so forth no doubt came out of the urban systemic initiative efforts that weren't realized and for a variety of reasons. I don't know the particulars of the situation but where there was
felt to be considerable receptivity of bringing technologically enabled partnership to helping realize the new ways to (inaudible).

AUDIENCE MEMBER: Well, that's (inaudible) because that was not a part of your -- the point you're talking about was not a part of the (inaudible).

JERE CONFREY: Are there any more questions?

ROY PEA: I mean one thing to note, and I'm sure there'll be some follow up on this, Teach Scape's CEO by the name of Mark Aggeson was Peter Jennings' deputy producer for the last ten years. And many of the video professionals, you know, have shot video in war zones among other things, and they have highlighted that shooting video in classrooms which there are now hundreds of examples of the (inaudible). They've developed a whole host of techniques for working out acoustical issues, working with various forms of video and compression for serving this reliably scaled (inaudible). So there's a lot of knowledge that we share with the researchers cause this has really worked to solving problems of scale.

AUDIENCE MEMBER: Videography in the war zone.

AUDIENCE MEMBER: So I think this is new to me. So I don't know about Teach Scape so if you have all of this archival data and it's been shown to teachers and
(inaudible), what's the research database that (inaudible) helping (inaudible) that (inaudible) and analyzed?

ROY PEA: It's a great question. As a company and not receiving federal grant funding, it doesn't have the same (inaudible). It'd have to work more like a company, a media company in getting releases for kids to be appearing on shows or on the web that are part of schools. So I think the issues that are raised there would require for researchers, I know that the company's very interested in making those resources broadly available cause there are thousands of hours of video (inaudible) used and part of the courses. We ought to make them available for researchers but the issues is I'm sure would require chasing down the families of the kids and getting permission.

AUDIENCE MEMBER: Well, my understanding of this is that if you don't receive federal dollars and you're a company and you are an independent company that you're not bound by the same IRB conditions that we're bound by.

ROY PEA: Right, but the research --

MALE SPEAKER: But as a researcher you are.

MALE SPEAKER: But actually, we dealt with this issue in the Illinois IRB where we wanted to show video that had been collected under the, you know, the commercial
(inaudible) basis, and they ultimately decided it was okay. They felt that that covered the uses that we wanted it to. So they might.

MALE SPEAKER: I would love to see your films.

MALE SPEAKER: Yes.

MALE SPEAKER: I think this is an important point because there are a lot of people talking about the importance of video for teacher training, teacher practitioners, parents even. That's not an IRB issue because there's nothing published. They only (inaudible) actually sit and write a study. So one might ask are these data just really available? Can other people, you know, see them apart from what they published on them? So I don't know. You might not know the answer to that.

ROY PEA: Good question.

MALE SPEAKER: Yes.

ROY PEA: But to answer the question, not clearly just an IRB. It's also data sharing for among practitioners and parents and the public and government and people who want to do standards, and they're not publishing anything.

JERE CONFREY: He can take one more.

AUDIENCE MEMBER: Just a comment and I think that's back to something we discussed earlier is the idea of sharing. And I think realistically, someone who might
obtain a grant or start a business and invests a tremendous amount of their lifeblood collecting video might hesitate when someone says send it to me. I'd like to analyze it. Especially if they haven't had time to analyze it yet. So I actually think we need to go back to that discussion of video sharing and address some of the issues that make sharing difficult if there are (inaudible).

JERE CONFREY: Ricki, last comment.

RICKI GOLDMANN: Yeah. The (inaudible) are tucked away in the corner here. There was a reason when I published my book that an entire case study with video clips on the web in 1998 was not included, and that's because there was a young boy I studied for about two years who in my eyes, he was making stories but in the teacher's eyes, he was an enormous liar. And he was constantly getting into trouble in school and he was also bringing knives to school and at one point he was expelled. And I had to make a decision about whether or not to put him in the book and, therefore, have his picture in the video on the web. We forget that even though it isn't an IRB issue, there are just ethical issues about somebody who's agreed to be in the video and who later on might be in trouble with the law or might be up for president of the United States and says he just inhaled or didn't inhale or
swallow, you know. I mean he was in the Army. He wasn't in the Army. You know, whatever. But, you know, I think that there are some, really on a serious level, I like to make some jokes, but on a serious level, the issues are really about when we tape the video there has to be some contract between those people that we take the video of, and they always have to have, at least according to my sort of stance, some ability to say, Ricki, the video has to come off the web or I do not want that as public information. And they have to know how it's being used. So whether or not we're following IRB's, I think that we have an ethical stance as a community to sort of think about the consequences of the video.

JERE CONFREY: Thanks, Ricki. Will you all also join me in thanking Roy again because given somebody who's done so much video himself and then presenting another person's talk and doing such a fine job.