

Using Distance Video Technologies in Research on In-Service Teacher Development

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Question(s) for Discussion: What challenges arise in using video as a research tool to assess how teachers take what they learn in professional development and make noticeable shifts in their teaching practice?

Session Description: The Just ASK project builds on 15 years of NSF-funded work by the Just ASK team on “adapting science kits” (ASK) as a K-6 professional development strategy and using distance technologies to reach small, rural school districts. The project is designed to produce (1) a validated set of ASK lessons and accompanying classroom videos specific to STC K-6 science kits; (2) a Web-based community of practice where ASK activities and classroom videos can be accessed and posted and where teachers can interact in real time with other teachers nationwide; and (3) research evidence on the impact of ASK communities of practice on school districts programs, teachers, and students in a group of pilot schools. The ASK approach focuses primarily on having teachers adapt science inquiry activities to “teach more than science when you teach inquiry science.” This ASK approach uses and respects the teacher’s prior knowledge and recognizes that “much of what a teacher needs to know (and know how to do) is learned in the context of practice [from other teachers]” (Schlager & Fusco, 2004). The ASK approach builds communities of practice with colleagues within school buildings and districts and with colleagues and experts outside—both of which are critical to continued professional development (Darling-Hammond & Ball, 1998). Teachers are in the third year (2009-10) of helping each other to develop and study a new generation of ASK lessons and to use the Just ASK website for building 14 topic-based communities of practice across the six small, rural, and small-town pilot schools. Both lesson plans and video footage (with teacher commentary) are being developed by pilot teachers and posted on the Just ASK website. In the final years (2010-12) of the project, the Just ASK website will be opened to teachers nationally via links with kit publishers. The website, with its 14 communities of practice, will be maintained for at least three years after NSF funding has ended.

The research plan calls for expert observers to rate baseline and post-treatment teaching by pilot teachers. Within this context, the proposed presentation will focus on the following:

- (1) Using a real-time connection to one of the Just ASK classrooms (if technically possible in the session); the session will demonstrate the use of the PolyCom View Station to observe and record teachers implementing an adapted STC lesson and to record and edit teacher implementation of ASK lessons with teacher commentary on how and why they are adapting inquiry science lessons to simultaneously teach reading and/or writing.
- (2) The presentation will also include a sample of an adapted lesson posted on the Just ASK website and instruments planned for assessing change in the strategies used by teachers when they teach science and when they adapt inquiry science for simultaneously teaching reading and/or writing with science.

Session presenters will solicit feedback on plans and suggestions for (1) use of video for distance data collection on teaching practices and (2) use of observation protocols and instruments with distance-collected video recordings of teaching practices.