

# DIGITAL LEARNING DAY

## Using Video Technology to Improve Teacher Effectiveness

The use of video technology to capture and analyze teaching practice is emerging as a powerful medium to assess and improve teaching practice. A new wave of web-based tools combine coaching and video examples of best practices based on teaching skills that produce improvements in student learning. In fact, hundreds of studies show large effects on the use of “microteaching”—videotaping a teacher delivering a mini lesson to a group of students and engaging him or her in careful reflection followed by feedback and coaching.<sup>1</sup>

Resulting advances in video technology coupled with increased precision in observing and rating teacher behaviors holds great promise to dramatically improve teaching quality and student learning. The 2012 interim report, [\*Gathering Feedback for Teaching: Combining High-Quality Observations with Student Surveys and Achievement Gains\*](#), sponsored by the Bill & Melinda Gates Foundation, described the findings from the analyses of a number of alternative approaches to observing effective teaching.<sup>2</sup> It produced an extensive annotated video library that provides models of exemplary practice for use in teacher professional development. Teachers benefit by comparing their own videotaped teaching with coded videos that capture high-quality teaching.

One example of a well-designed system for professional learning is [MyTeachingPartner](#) (MTP), developed by Robert Pianta, dean of the Curry School of Education and director of the University of Virginia Center for Advanced Study of Teaching and Learning, and his colleagues in the late 1990s.<sup>3</sup> It combines a video library of annotated examples of best practice and web-mediated individualized coaching. The focus for professional learning is based upon the Classroom Assessment Scoring System, or CLASS—a valid observational assessment of teacher-student interactions that predict gains in student achievement.

An MTP coaching cycle provides viewing of multiple video examples, skills training in connecting teacher responses to students’ engagement and skills, and individualized feedback on and analysis of one’s own interactions with students. All together, these loops of videotaping, feedback, and conferencing via phone calls or Skype-type teleconferences encourage teachers to observe, enact, and understand the connections between their behavior in the classroom and student learning.

In experimental studies of teachers in middle and high school classrooms across four academic areas showed that the MTP-Secondary coaching program produced changes in teacher behavior that led to gains in student achievement. The improvements carried over to a second year suggesting that the effects will be more durable, further increasing the potential impact and cost effectiveness of the program.

MTP coaching appears to be one of the only professional-development programs to show an impact in improving teacher effectiveness and student achievement when evaluated in a controlled study. Overall, the MTP program—a video library and web-based coaching through which professional development—appears not only effective for changing teacher-student interactions and improving student learning, but it offers the means to scale up highly effective teaching across schools and districts.

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<sup>1</sup> J. Hattie, *Visible Learning: A Synthesis of Over 800 Meta-analyses Relating to Achievement* (New York, NY: Routledge, 2009).

<sup>2</sup> T. Kane and D. Staiger, “Gathering Feedback for Teaching: Combining High-Quality Observations with Student Surveys and Achievement Gains” (Seattle, WA: Bill and Melinda Gates Foundation, January 2012).

<sup>3</sup> R. Pianta, “Teaching Children Well: New Evidence-Based Approaches to Teacher Professional Development and Training” (Washington, DC: Center for American Progress, November 2011).