

FROM HIGHLY RECEPTIVE TO HIGHLY SKEPTICAL: ENGAGING ALL TEACHERS THROUGH RESPONSIVE PD FACILITATION

Christine Taylor
Indiana State University
Christine.Taylor@indstate.edu

Jean S. Lee
University of Indianapolis
jslee@uindy.edu

We suggest five PD participant portraits to initiate a discussion on how best to support and facilitate PD with a wide range of participants. Our preliminary findings include five teacher portraits. We discuss how facilitators were responsive to all teachers' needs.

Keywords: Teacher Education – Inservice / Professional Development

Professional developments (PD) play a central role in efforts to improve teachers' mathematical content knowledge, pedagogical content knowledge, and beliefs about what it means to 'do mathematics' (Ball, 1990; Hill, 2007). Creating Algebra Teaching Communities for Hoosiers was the result of a Math-Science Partnership grant from Indiana's Department of Education in 2015. The study involved 15 middle and high school urban teachers, with a focus on enriching teachers' knowledge and skills for teaching algebra. This study examines: How do teacher portraits help facilitate the activities in the PD experience?

This study focuses on exploring how PD facilitators used facilitation techniques to support participants based on character portraits (Sztajn, Borko, & Smith (2017), and contributes to an area of research needed on skillful facilitation techniques (e.g., Bobis, 2011; van es, 2014) to prepare and support PD facilitators. Findings culminated in five teacher portraits.

Highly Skeptical Teacher (HST) is an experienced teacher but is uncomfortable being observed by colleagues. HST doubts students can be successful with the PD tasks. Others followed the skepticism because of HST's experience in the classroom. Facilitators probed questions to interrupt preconceived perceptions of students. **Cautiously Receptive Teacher (CRT)** is eager to apply the theories into practice but struggles to bring ideas into reality in the classroom. CRT is hesitant to try new things, but gradually over time buys into the vision of the PD. Trying out activities with students was the best technique to convince CRT of novel teaching practices. **Highly Receptive Teacher (HRT)** is highly reflective and collaborative. HRT sees the potential of all students to be mathematical learners and makes connections between teaching, the PD, and everyday life experiences. PD facilitators would ask HRT to point out students' mathematical thinking. **Box-Checker Teacher (BCT)** is extremely organized, thrives on explicit directions and timeline, and most comfortable with direct instruction. BCT's intense focus on clear tasks and schedules, and high anxiety made the group dynamics tense. PD facilitators solicited input from BCT on the clarity of expectations. **Lopsided Engager Teacher (LET)** has great relationships with all students, even the most disruptive, and is deeply troubled when other teachers do not believe that all students can learn mathematics. LET displays turns of both low engagement and intense engagement. PD facilitators stoked this passion to engage in rich discussions, and showed empathy to situations where relationships take priority over learning.

This study begins a conversation about mathematics teaching facilitation and how best to support and facilitate with a wide range of participants.

References

Ball, D. L. (1990). Breaking with experience in learning to teach mathematics: The role of a preservice methods course. *For the Learning of Mathematics*, 10(2), 10-16.

Bobis, J. M. (2011). Mechanisms affecting the sustainability and scale-up of a system-wide numeracy reform. *Mathematics Teacher Education and Development*, 13(1), 34-53.

Hill, H. C. (2007). Mathematical knowledge of middle school teachers: Implications for the No Child Left Behind policy initiative. *Educational Evaluation and Policy Analysis*, 29(2), 95-114.

van Es, E. A., Tunney, J., Goldsmith, L., & Seago, N. (2014). A framework for the facilitation of teachers' analysis of video. *Journal of Teacher Education*, 64(4), 340-356.