MSP-MAP II: Teacher Motivation in Professional Development

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What is MSP-MAP II ?

MSP-MAP II is designed to systematically apply current knowledge of teacher motivation to the domain of teacher PD. This involves specifying the motivation-related factors that determine *whether* teachers will participate in PD and the motivational *consequences* of that participation. It also necessitates creating and modifying assessment tools to operationalize these constructs. In its role as a RETA, MSP-MAP II will directly support the work of MSPs with methodologically rigorous cross-site studies of teacher motivation and its influence on student achievement. Specific goals are to:

- Develop a knowledge base of theory, research, and assessment of teacher motivation and the PD process that MSPs can use in the design and evaluation of their interventions
- Create a suite of reliable motivation assessment tools, validated with teacher populations and in PD contexts, for MSPs to include for purposes of PD design and formative and summative evaluation
- Collaborate with MSPs to test and refine features of a proposed model of motivation and teacher PD with a goal of explaining impacts of MSP activities, and PD more broadly, on teacher learning and student achievement
- Facilitate the incorporation of the model and motivation-related PD assessment tools into existing and future MSP logic models and evaluation designs
- Disseminate the motivation and PD model and assessment tools to the broader teaching and research community

PD Motivation Process Model
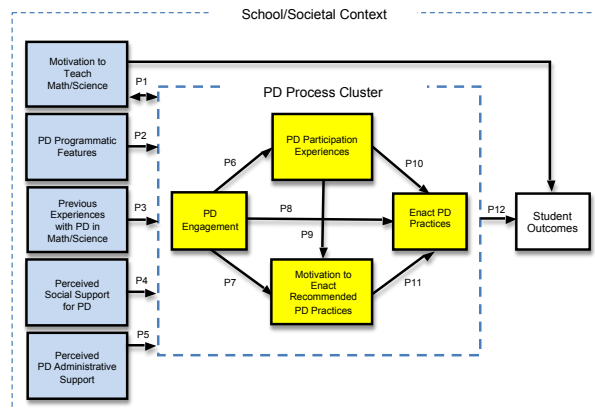
What Teachers Told Us About PD
Support for the Model

About the study:
- Mathematics teachers (*N* =165) from 18 middle and high schools responded to an open-ended questionnaire on their previous experiences with, beliefs about, and motivation for professional development.
- Data collection took place in Fall 2009 in collaboration with a PD-focused MSP before teachers received any project-related PD.

Motivation to Teach Math/Science:
- "Teaching math is my passion. It's why I wake up every morning and why I stay late most days."
- "I love to teach students how to become critical thinkers and to teach them strategies to make learning easier and more interesting. I enjoy watching students learn an abstract concept and finally 'get it.'"

PD Programmatic Features:
Positive —
- "Working with fellow teachers to solve problems and come up with solutions promotes more learning and understanding."
- "I benefited from the programs when they were short and precise and had concrete math examples."
- "Reciprocal teaching has a lot of student involvement. Direct Instruction a lot of checking for understanding."
Negative —
- "I am told what I have to implement. I am told what an acceptable goal is and I am told that I am expected to implement it. Don't gather ideas and then wipe them away by finally giving us the ideas we are 'supposed' to walk away with. Don't invalidate my years of experience."
- "I don't like workshops that waste a lot of time. Too many breaks and long lunches are frustrating."
- "I dislike programs in which speakers are continuously lecturing, with no audience input or engagement. Similar to the notion of providing students time to process and apply new/reviewed skills, programs should offer the same practice for teachers."
- "Too much information was covered in one session."

Previous Experiences with PD in Math/Science:
Positive —
- "Adding tools to my toolbox of teaching strategies, improving the interaction among my students related to math content"
- "My confidence has increased because the more strategies and methods I have learned has offered me greater success in teaching my students who all learn differently."
- "Just as my understanding of math broadened, such experiences gave me insight into multiple ways of teaching abstract concepts."
Negative —
- "They did very little. I have to come up with how to use the strategies myself."
- "They often lower confidence. It seems like we're never doing a good enough job."

Perceived Social Support for PD:
- "When my colleagues are excited about what they have done or learned at a training, it influences me a great deal to want to attend the professional development as well."
- "We also encouraged one another to attend trainings or PDs that would help us in a specific topic."
- "I have a great team and they constantly encourage each other to learn new techniques and get the most out of training."

Perceived PD Administrative Support:
- "The administrators are a positive force in why we should attend. They point out the benefits."
- "We discussed the trainings before and after I attended them and my administrator has observed the techniques being used in my classroom."
- "My impression was that the administration at our school site wasn't totally behind the goals of the grant but did acknowledge the positive benefits of our work. If the grant wasn't in place I don't think that there would have been nearly as much PD."

Success Indicators

- Create a data base of theory, research, and assessment of teacher motivation and PD that is useful to MSPs in the design and evaluation of their interventions
- Develop assessments of teacher motivation related to PD that have good psychometric properties and can be used by MSPs
- Build collaborations with MSPs and facilitate the incorporation of the proposed model of teacher motivation and PD into future and existing MSPs
- Broadly disseminate the proposed model and assessment tools

Challenges

- Develop MSP collaborations early in order to sample PD interventions at different stages of development to test all parts of the PD process cluster
- Collaborate with a variety of MSPs to test components of the model, using online surveys where possible to increase access to diverse MSP populations
- Work with MSPs to include teacher motivation for PD in their evaluation design
- Though few MSPs explicitly mention teacher motivation as a focus, many make implicit assumptions about teacher engagement in PD or have interventions that are likely to change the ways in which teachers are motivated. A challenge of MSP-MAP II will be to learn about MSPs in sufficient detail to identify projects likely to benefit from a motivational perspective.

Learn From Other Projects

- Learn from project leadership (especially on established projects) about their challenges and successes with motivating and engaging teachers in PD
- Learn about the timing and design of new MSP interventions to identify potential collaborators for the MSP-MAP II project. These include mathematics and science projects with an explicit focus on professional development as well as projects likely to impact teachers' attitudes and beliefs.
- Learn about MSPs' assumptions regarding teacher motivation for PD
- Talk to us about discovering more about your PD program:
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