



MSP-MAP II: Teacher Motivation in Professional Development

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About MSP-MAP II

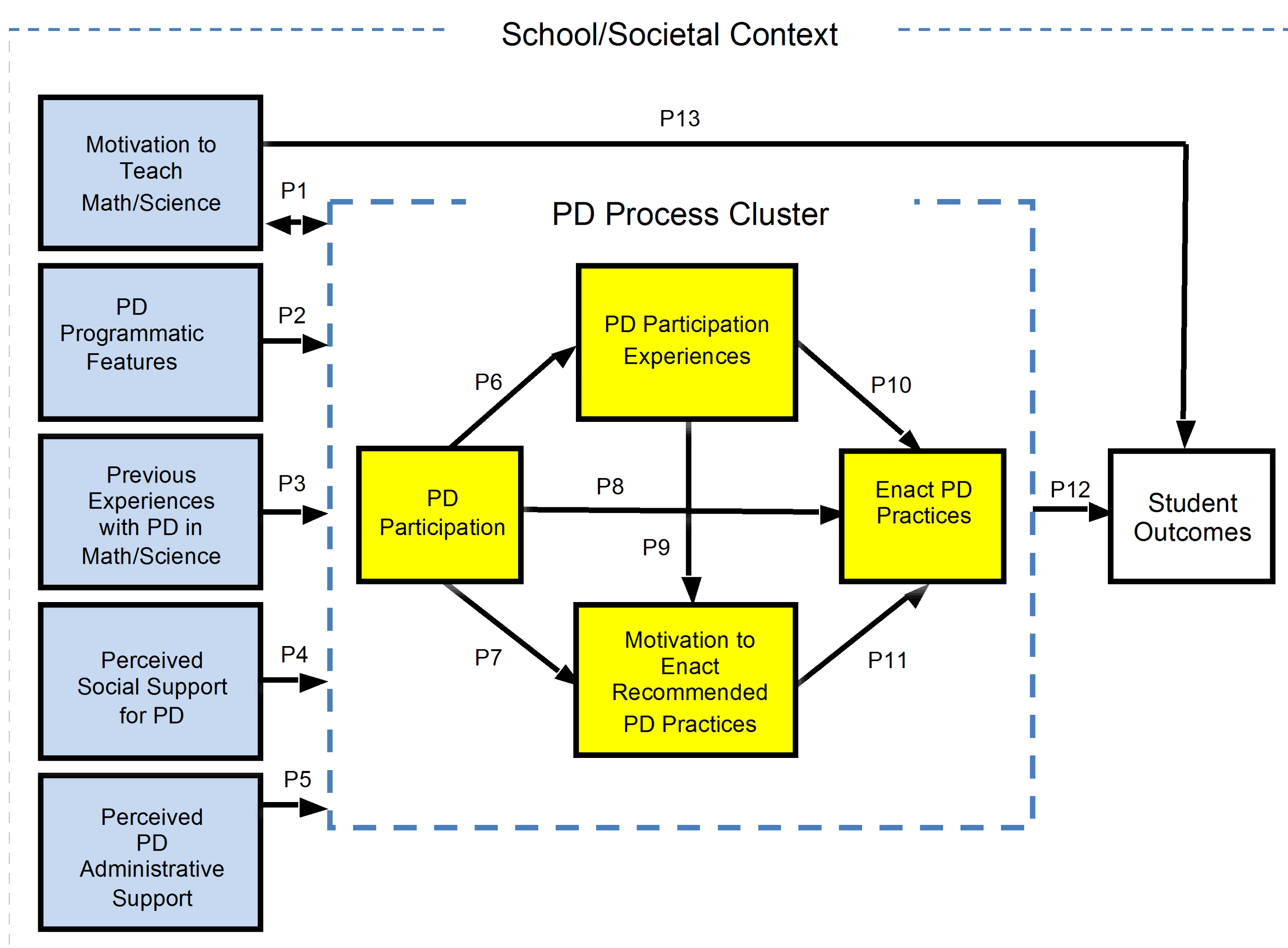
MSP-MAP II is designed to systematically apply current knowledge of teacher motivation to the domain of teacher PD. This involves specifying the motivation-related factors that determine *whether* teachers will participate in PD and the motivational *consequences* of that participation. It also necessitates 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

What is Student Success?

MSP-MAP II assumes that student success involves both achievement- and motivation-related outcomes. Successful students achieve at higher levels because they engage thoughtfully and appreciate the value of STEM education.

In MSP projects, the students are often the teachers themselves, as many MSPs focus on intensive professional development. Accordingly, MSP-MAP II defines “student success” in terms of teacher motivation. The theoretical framework at the heart of our research design is depicted below:



Are Your Teachers PD Motivated? Do You Want to Know What Matters?

These are sample items from PD Motivation Scales developed and piloted by MSP-MAP II. Scales have been given in online or paper and pencil format. Responses are open-ended and Likert-type, allowing for a balance between longer-form answers and easily administered and scored group assessments. For example, the question “How motivated would you be if...?” would have response options: Much more, Somewhat more, Neutral, Somewhat less, Much less.

Topics and sample items are shown for three different PD areas:

PD Content	
Specific vs. general content	...was specific to both my subjects and the grades that I teach
Specific student concerns	...was about how to modify my instruction for students with different ability levels
Student motivation	...was about how to increase students' beliefs that math/science is valuable
Student use of learning strategies	...was about how to encourage students to seek help when they need it
Empirical basis	...was known to increase student understanding of math/science
Communication	...was about how to communicate more effectively with parents
Implementation	...gave teachers the opportunity to practice using the strategies
General format	...involved professional learning that was spaced out over the academic year
Session format	...was taught in a way that modeled the practices that were being promoted
Presenter characteristics	... presenters were math/science teachers
Concerns about change	...recognized/acknowledged the challenges teachers face when implementing a new curriculum or teaching practices

The PD Process and Context	
Teachers and planning	...teachers determined how the PD was structured (e.g., workshop, PLC)
Administrative support	...school administrators participated in PD with teachers
School culture	...PD was considered a valuable part of the teachers' job in your school
Networking	...PD facilitated the development of professional communication and contacts with other teachers not only in your school
Colleague support	...most teachers in my school were participating

Teacher Motivations	
Cost	...took up a lot of my personal time
Extrinsic benefits	...included a stipend
Efficacy	...increased your ability to respond to difficult questions from your students
Choice/autonomy	...did not affect my control over my instructional goals and practices
Interest	...made teaching more interesting and enjoyable
Mastery	...provided time to explore, question, and debate new ideas about teaching math/science
Performance-avoidance	...could reveal that you knew less about math/science than other teachers
Performance-approach	...provided an opportunity to demonstrate that you know more about math/science than other participants
Work avoidance	...gave you ideas/strategies that reduced your teaching workload
Responsibility	...helped you to fulfill your responsibilities as a math/science teacher

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 — **Review and database complete (sample copies available and searchable online at mspmap.org)**
- Develop assessments of teacher motivation related to PD that have good psychometric properties and can be used by MSPs — **Pilot surveys complete (sample copies available)**
- Build collaborations with MSPs and facilitate the incorporation of the proposed model of teacher motivation and PD into future and existing MSPs
- Broad dissemination of 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



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Award DUE-0928103