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## The Power of Collaboration: A Taste of Improvement Science

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Through a collaborative partnership between Georgia State University and Atlanta Public Schools, we sought to develop the practices of our secondary mathematics pre-service teachers to increase their students' conceptual understanding and engagement in the mathematical practices. Although our pre-service teachers passed edTPA, a performance-based, subject-specific assessment for teacher candidates, they did not always meet the standard on key rubrics that addressed conceptual understandings. Additionally, when observed with the MCOP<sup>2</sup>, they also struggled to engage students and promote conceptual understanding (Gleason, Livers, & Zolkowski, 2015). Using the Plan-Do-Study-Act Cycle on co-planning and co-teaching during the internship (Sears, et al., 2017; Bacharach, Heck, & Dahlberg, 2010) to monitor the developments, we reflected on the following questions: *Where are the pre-service teachers struggling? What experiences are we providing through our current courses to support their development? What can we do better to improve our outcomes?*

Collaboratively, we decided to work with the Standards of Mathematical Practices and Co-Planning and Co-Teaching interventions. Our process involved:

1. Familiarization – identifying mathematical practices in sample teaching videos.
2. Internalization and Application – using new understandings to plan and implement in their own practice.
3. Reflection – view their own teaching to assess their practice.
4. Feedback – receive feedback from others, including the cooperating teachers, university supervisors, and professors. At a roundtable session, participants will be presented with a comparison of strategies used in the past and in this cycle. We will also discuss our next steps to refine our process for continuous improvement.