General Support Services

- PGES Support: Establishing an effective classroom environment
  Specific strategies to create a positive teacher-student relationships and student-to-student relationships in the classroom
- New teacher support for STEM teachers
- Formative assessment Action Research Teams
- Assessment literacy K-12
- Engagement strategies for the K-12 classroom
- Mathematics and Science Teaching and Learning School Profiles
- Planning and facilitation of local ongoing math or science cadre meetings
- Long-range professional learning planning for mathematics and science improvement
- Analysis of mathematics and science data for school level program improvement
- Support for administrators through joint classroom observations and feedback to teachers
- Evaluation service: PIMSER can serve as the Project Evaluator for math and science grant submissions

Next Generation Science Standards

- Short Courses
  Elementary: Force and Motion, Properties of Matter, Light, Waves, Engineering Process and Design, Constructing Explanations and Engaging in Argument from Evidence, Earth Systems, Planning and Carrying Out Investigations, Life Science
  Middle School: Developing and Using Models, Constructing Explanations and Engaging in Argument from Evidence, Waves, Energy
  High School: Developing and Using Models including Data Analysis and Mathematics and Computational Thinking
- Introduction to the Next Generation Science Standards
- Integrating Engineering into Units of Study
- Infusing the Practices into Units of Study
- Unit development for 3-dimensional teaching
- Project Based Learning as a framework for NGSS implementation
- Assessment design
- Literacy integration in the science classroom using the Literacy Design Collaborative model: elementary, middle and high school levels

KCAS in Mathematics

- Games for elementary that integrate the mathematical practices
- Discourse in the mathematics classroom: how to engage in productive talk
- Teaching fractions for conceptual understanding in the intermediate grades 4-6
- Using the number line in elementary and middle school
- Number sense in the primary grades
- Achieving Success in the Algebra II and Calculus Classroom with Underserved Students
- Creating an Effective Mathematics Classroom
- Effective use of manipulatives to promote student understanding at the primary, intermediate, middle and high school levels
- How Students Learn Mathematics
- Mathematical Practices in the elementary, middle and high school classroom
- Use of technology to support teaching and learning in the middle and high school