**Project Objectives**

- To prepare teachers to engage 5th – 8th Grade students in Algebra through innovative teaching methods
- To increase teacher content knowledge of Algebra and its connections to higher Mathematics
- To support the implementation of Minnesota Mathematics Standards
- To develop blended "learning target" lessons for use in the teaching and learning of Algebra

**Program Layout/Calendar**

**Two-week Summer Professional Development program**

**Week 1 Content focus:**

- Algebra and Number sense (base 10 and other bases)
- Rational and irrational numbers Part 1 & 2
- Looking for Pythagoras Distance formula
- What do you mean “Line of best fit?”

**Week 2 Content focus:**

- Name that polygon and other linear equations
- What's the difference
- Representing data via graphs
- Probability’ Mini lesson sharing Evaluation

**Morning sessions for content:**

Teachers learn mathematics content to enrich their content knowledge.

**Afternoon sessions:**

Teachers learned several pedagogical strategies for teaching. Teachers are engaged in hands-on activities with the iPads

Four follow-up sessions throughout the academic year

**Major Findings/Impacts**

1. Increased teachers’ Mathematics content knowledge for teaching elementary and middle schools
2. Increased teachers’ pedagogical knowledge for teaching algebra
3. Supported teachers’ competence in integrating technology in teaching mathematics by using iPads meaningfully in the teaching and learning
4. Introduced teachers to several Apps for teaching mathematics that support students’ learning
5. Support teachers’ professional development through the academic year
6. Provided teachers with free iPads and accessories to enable them enact the practices they learned during the summer professional development