**PRISM Kawartha Pine Ridge Research Project**

**Lead School Board** – Kawartha Pine Ridge District School Board  
**Lead Educator** – John Ford  john_ford@kprdsb.ca

**Participants**

- 1 Board - KPRDSB  
- 43 Grades 7 and 8 teachers, 16 Special Education teachers, approximately 1200 Grades 7 and 8 students participating in the treatment group  
- 44 Grades 7 and 8 teachers, 15 Special Education teachers, approximately 1200 Grades 7 and 8 students participating in the control group

**Project Design**

**Research Questions**

Did participation in PRISM in-service contribute to improvements in student attitudes, higher student achievement, and/or improve student beliefs and practices?

**Research Instruments**

1. PRIME Diagnostic Tools: Numbers and Operations (Test F)  
2. Teacher Attitude and Practices to Teaching Mathematics  
3. Student Characteristics Survey  
4. Teacher Log

**Research Findings**

1. Students who were identified by their teachers as the weakest in the class performed significantly better on the PRIME Numbers Diagnostic than similar students in the control group.  
2. There were no significant differences between groups on the teacher measures.  
3. Students in the treatment group showed greater improvement in attitudes to mathematics learning than students in the control group.

**Successes**

- Using PRIME diagnostic tests to measure improvements in a student’s understanding of mathematics concepts  
- Using a Student Characteristics Survey to measure improvements in student’s attitudes towards learning mathematics

**Conditions for Success**

- Research-based strategies for in-service  
- Rigorous assessment of program effects  
- Use of a research-based mathematics continuum

**Lessons Learned**

- It is possible to change the achievement of Grade 7 and 8 students at risk in mathematics

**Suggestions Based on Experience**

- Well-funded, intensive professional development is required to improve student achievement in mathematics.