

EFFECTIVE PRACTICES IN ELEMENTARY MATHEMATICS EDUCATION

School Board_York Region District School Board

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Name of Program/Initiative/Strategy MATH AQ

Hyperlinks to Documents or Website(s) Describing this Program/Initiative/Strategy

Description of Program/Initiative/Strategy)

The focus is on exemplary mathematics practices that excite, engage and increase student confidence and achievement. In the brief description please provide answers to the following questions: Where the program/initiative/strategy is delivered (school/board locations)? Who is responsible for delivering and monitoring the program/initiative/strategy? Who is the target audience? Are there any community partnerships involved? Are there any staffing or budget implications? Are there any special resources required? What are your indicators of success, etc.?

One strategy we have used at Mackenzie Glen PS to develop effective math practice is to support teacher capacity in mathematics through teachers and administrators engaging in Additional Qualifications in Mathematics.

YRDSB partnered with EFTO AQ to provide a blended course model for PJ Math part 1 and 2. Our school was a host site for both Math Part 1 and 2. As we had just started our math journey, we encouraged our staff to take Math Part 1 with us. Prior to the provincial reimbursement, part of our school professional development budget was used to subsidize Math Part 1 to make it more accessible. Administrators, as co-learners, and teachers worked together to deepen their understanding of math.

The conversations that started in the course became a focus for grade team planning, staff meetings and weekly memos. Resources were purchased intentionally to support teacher learning and changing practice. More and more conversations about the math curriculum started to unfold. Teachers felt comfortable to take risks and embrace new pedagogy and try things in their classrooms. Administrators also became active teachers and co-taught in

classrooms. Teachers who initially were unable to take qualifications with our school team are now independently seeking out math courses to "catch up." We look forward to continuing with Math Part 3 next year at our school!

By the end of June 2016,

- 26 of our 30 teachers will have Math Part 1. (87% of our teachers)
- 15 of our 30 teachers will have Math Part 2 (50% of our teachers)
- 2 of our 4 intermediate teachers have Intermediate and or Intermediate Senior Mathematics.
- Principal part 1 and 2, VP Math Specialist

What has been the impact on Student Learning?

We see emerging evidence of many promising practice.

- Student math talk is evident in our classrooms.
- Students now self select manipulatives and work in partnerships on meaningful problems.
- Strings are used in all grades to support computational fluency. Mental math is a part of everyday math learning. This supports students' as they apply number sense skills throughout mathematical strands.
- Students are able to represent their thinking in a variety of ways using number lines, t-charts, concrete materials.
- As teachers develop comprehensive math programs students are demonstrating by conversation and representations a greater conceptual understanding of the big ideas.