



ONTARIO PUBLIC
SCHOOL BOARDS'
ASSOCIATION

Leading Education's Advocates

EFFECTIVE PRACTICES IN ELEMENTARY MATHEMATICS EDUCATION

School Board _____ Toronto District School Board _____

Contact Person and Email Address ___ Antonio Santos Antonio.santos@tdsb.on.ca _____

Name of Program/Initiative/Strategy: **Math for Young Children**

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.?

Math for Young Children (M4YC):

Through a culture of learning and collaboration, teachers examine student learning trajectories based on inquiry topics of their choice. They conduct diagnostic assessments and clinical interviews and based on observations and reflections, construct next steps focused on development of students along a learning continuum. M4YC is offered centrally with SOE collaboration to choose school teams. The Math Team constructs, facilitates, monitors over the initiative's two year time frame. School teams consist of administrator, two lead teachers with option of more teachers per school. The Math PC/ IL and school teams come together using CIL-M/Job Embedded Professional Learning model for inquiry 8 times per year minimum hence the OT coverage, resource funds and manpower required are costly. Resources are chosen to support in depth learning of mathematics and pedagogy to best serve the students at an early age as foundations are laid. Success indicators begin with the teachers and administrators as co-learners alongside their students. It is the change in mindset, repertoire of strategies, in depth content knowledge, use of teaching and learning tools for teachers and students which leads to learning experiences that excite, engage, and increase confidence and achievement of all learners. Teachers and students overwhelmingly report positive changes in teaching and learning of mathematics and numeracy.

What has been the impact on Student Learning?

Success in mathematics in the early grades is critical. Early mathematics understanding has a profound effect on mathematical proficiency in the later years. The focus is on young students capable of learning mathematics alongside high expectations for all students. The evidence of impact is positive. Students are risk takers and can communicate their thinking in many ways and enjoy being challenged, knowing they are supported in a math learning community of co-learners. Students are listened to, observed, questioned to assess their thinking and understanding. Students act in the same manner towards peers as they co-learn and collaborate demonstrating that they value their learning and that of their peers. The descriptive feedback and responses of the students reflect their active engagement, interest and perseverance to literally do more mathematics because they enjoy it. The perception of themselves as a student of mathematics is positive and limitless; a factor that will support their ongoing future learning in mathematics.