ONTARIO PUBLIC SCHOOL BOARDS' ASSOCIATION

Leading Education's Advocates

EFFECTIVE PRACTICES IN ELEMENTARY MATHEMATICS EDUCATION

School Board___Toronto District School Board_____

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Name of Program/Initiative/Strategy: Math-e-Motion

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

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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-e-Motion (MEM):

This 4 day summer camp style institute for teachers and students of grades 7-9 offers experience in mathematics in an integrated, collaborative approach where mathematical reasoning, communication and application are stressed. Teachers study mathematics for teaching then try out the new learning with the students in this JEPL environment. Teachers and students build skills, use technology and collaborate. MEM is offered centrally. The Math Team constructs, facilitates and monitors this annual, ever growing institute. This school year, a customized Math AQ was offered to continue the professional learning using a CIL-M/JEPL model throughout the year. 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. 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 which leads to learning experiences that excite, engage and increase confidence and achievement of all learners. Teachers and students overwhelmingly report positive changes in the teaching and learning of mathematics. Parents and the community join in on the last day and responses are overwhelmingly positive, every time.

What has been the impact on Student Learning?

Teacher actions, beliefs and attitudes have an immense influence on student confidence and achievement. Through the ongoing, continuous, JEPL inquiry based work with teachers, the impact on students has been very positive. Students are recognized as individual learners who bring immense ability and knowledge into the classroom. Students are risk takers, can communicate their thinking in a supportive math community without fear. They view their teachers as co-learners and students are excited, curious and confident to persevere in their pursuit of learning. Teachers and students do not believe in predetermined, imposed limits on their mathematical abilities and such a limitless self-perception brings out the best attitudes and actions for learning and teaching. The excellent impact on students is reflected in the large requests to return to the camp year after year by the students, teachers and parents.