



REPORT TO

## STUDENT ACHIEVEMENT AND WELL BEING, CATHOLIC EDUCATION AND HUMAN RESOURCES COMMITTEE

# UPDATE REPORT ON THE PILOT PROJECT FOR JUMP MATHEMATICS

*I can do everything through Him who gives me strength*  
*Philippians 4:13*

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M. Vanayan, Sr. Coordinator, Educational Research D. Koenig, Human Resources/Labour Relations L. DiMarco, Superintendent of Curriculum, Leadership & Innovation; ICT		
<b>INFORMATION REPORT</b>		

**Vision:**

*At Toronto Catholic we transform the world through witness, faith, innovation and action.*

**Mission:**

*The Toronto Catholic District School Board is an inclusive learning community rooted in the love of Christ. We educate students to grow in grace and knowledge and to lead lives of faith, hope and charity*



R. McGuckin

Associate Director of Academic Affairs

A. Sangiorgio

Associate Director of Planning and Facilities

C. Jackson

Executive Superintendent of Business Services and Chief Financial Officer

Angela Gauthier

Director of Education

## **A. EXECUTIVE SUMMARY**

In January 2015, the JUMP Mathematics Pilot was initiated in 13 elementary schools. Based on feedback from these schools, during the 2015-2016 school year, there was renewed focus on professional development. As EQAO data are not available, it is too early to determine the impact of the program on student achievement.

## **B. PURPOSE**

This annual report on the JUMP Mathematics Pilot initiative is made available to schools through the Curriculum Leadership and Innovation Department to inform planning within the Toronto Catholic District School Board.

## **C. BACKGROUND**

The Toronto Catholic District School Board initiated a pilot of JUMP Mathematics in 13 elementary schools in January 2015. Introductory professional learning took place which covered the philosophy and approach and an overview of the teaching and student resources to begin the launch of JUMP Mathematics. During the 2015-2016 school year, schools strengthened and renewed their commitment to professional learning and program implementation.

## **D. EVIDENCE/RESEARCH/ANALYSIS**

Sources of evidence for this report highlight the following elements for 2015-2016: 1. Professional Development; 2. Principal Study Groups; 3. Research Department Survey.

### **1. Professional Development**

- Three sessions of in-services were provided by the JUMP team to 154 teachers.
- Follow-up in-school supports (2 days per month) were available to each school from November 2015 to June 2016 to address planning needs, answer questions at staff meetings, and provide one-to-one support.

- Grade 3 and Grade 6 demonstration lessons and a debrief session by John Mighton took place; lessons were video-taped and distributed to the pilot schools.
- A presentation by Dr. Tracy Solomon, Hospital for Sick Children, is scheduled for October, 2016.

Professional learning topics included the following:

- overview of the components of the JUMP Math resources and how to plan and teach with them;
- promoting of a positive learning environment and building student confidence;
- maintaining a balanced approach to mathematics by concurrently addressing conceptual and procedural learning, explicit and inquiry-based learning;
- building understanding and mastery by breaking mathematics down into sequential, scaffolded steps, while still allowing students to make discoveries;
- using continuous assessment to ensure all students are engaged and none are left behind.

## **2. Principal Study Groups**

In a joint venture between the pilot schools and JUMP Math, a principal study group was established as a means to determine what the instructional leaders of each school wanted to achieve through participation in the pilot. Three study sessions were convened.

The learning goals for the Principal Study Groups are listed below:

- Learn how to best support teachers with the implementation of JUMP Math.
- Learn how to support teachers with assessment and reporting.
- Learn about JUMP Math’s approach to problem solving and how to support teachers in preparing students for EQAO testing.
- Learn more about what cognitive science is saying about how children learn math.

Sessions included presentations (John Mighton, other members of the JUMP team), sharing of research, “Question and Answer” period, instruction, and problem solving strategies.

### 3. TCDSB Research Department Survey

In May 2016, teachers from all 13 elementary schools that participated in the JUMP Pilot were invited to complete a JUMP Pilot Survey. Responses were received from 9 of the 13 schools, for a total of 47 completed surveys. The limited response rate requires that the results be interpreted with caution and considered preliminary.

#### Survey Results (n = 47)

- Teachers who responded indicated that they are using JUMP with all students as this is considered a school-wide initiative. They reported using JUMP Math in all Numeracy strands.
- Teachers rated the following as *very helpful or helpful*: teacher resources (71%); professional development (47%); student Assessment and Practice Book (80%).
- Teachers reported using the materials provided regularly (*very often, often*): Lesson plans and teacher resources (65%); student assessment and practices books (96%); JUMP Math Smart board lessons (42%).
- The Teacher Resources (lesson plans) were rated positively (*very good, good*) with regard to: content (80%); clarity (38%); organization (41%); flow of ideas (51%); ease of use (42%).
- The Student Assessment and Practice books were rated positively (*very good, good*) with regard to: content (76%); clarity (69%); organization (67%); flow of ideas (71%); scaffolding (80%).
- The JUMP Math Smart Board lesson materials were rated positively (*very good, good*) with regard to: content (50%); clarity (43%); organization (44%); flow of ideas (41%); scaffolding (49%).
- Regarding the training received, 27% reported *very effective or effective*; 42% indicated it was *somewhat effective*; 18% *not effective* and 13%, *not applicable*.
- The majority of teachers (62%) are confident regarding implementation of JUMP Math in the classroom; 36% are *somewhat confident*; 2% *not confident*.
- About a third of the teachers are not supplementing the JUMP Math program with another program; others include at least some supplementation (e.g., Nelson Math, EQAO-type questions).
- When asked to rate the helpfulness of the JUMP Math for students, teachers indicated that it benefitted *very much* those students typically achieving at Level 2 (79%); Level 1 (53%); and Level 3 / 4 (38%).

- Teachers reported that students benefited (‘*very much*’ or ‘*quite a bit*’) in terms of: confidence (67%); perseverance (49%); achievement (68%); disruptive behaviour (37%); participation (61%).
- When asked regarding parent feedback, the majority reported that no feedback was given (69%). About a quarter indicated the feedback was positive, and 5% reported it was negative.
- Most teachers (63%) indicated that students enjoyed the program; 17% reported ‘*no*’; 20% were ‘*unsure*’.
- Most teachers indicated they would continue using JUMP Math either with supplementary programming (57%) or exclusively (29%); 14% reported they would not choose to continue with the program.
- Teachers were asked to share additional comments. Comments that may inform future planning and dialogue are listed here (*frequency of the comment appears in parentheses*): works best as a supplementary program (8); more problem-solving needed (6); does not meet the needs of students at Level 4 (3); more training is needed throughout the year (3); workbooks were not allowed to be sent home (2).

## **E. METRICS AND ACCOUNTABILITY**

The following actions are required to ensure the viability of the JUMP Math program:

- Gather input from teachers on an ongoing basis during professional learning sessions to help deepen implementation and provide timely feedback to inform planning.
- Monitor and track the achievement and attitudes of students in the JUMP program using EQAO Grade 3 and Grade 6.
- Monitor teacher attitudes and perceptions through the implementation of an annual survey by the Research Department.
- Ensure that schools participating in the program are committed and willing and clarify expectations around the use of JUMP for purposes of the pilot.
- Review the preliminary feedback in an effort to continue to address the needs that emerged.

## **F. CONCLUDING STATEMENT**

This report is for the consideration of the Board.