DreamBox Mathematics Software Opportunity for Elementary Teachers (Grades 1 - 6)

DreamBox is an adaptive learning computer program that supports conceptual understanding of mathematics. Each student is provided with a learning environment that meets their individual needs - "Seamless Formative Assessment".

If you choose to use DreamBox in your classroom, you will need to commit to a minimum of one period per week for students to access the program. Students will need technology to access the program (computer or tablet).

To be able to access individualized student data, you will need to set up your classes and determine a starting point for your students (note: this starting point will not be the same for all students, as per your assessment data).

Teachers Want to Know...

- Overview for Teachers - video link

Assessment Data - Linking Assessment and Instruction

- Student Reports - http://www.dreambox.com/student-reports
- Alignment to the Ontario Curriculum - http://www.dreambox.com/ontario-curriculum

Student Engagement in Mathematics

- Adaptive Learning Environment for each student
- Differentiated Mathematics Instruction
- Engaging Learning Environment

Resources

- Free Teacher Tools for Interactive White Boards
- Lessons to support student learning with DreamBox
- DreamBox videos

HDSB Testimonial

The link provides an overview of the use of DreamBox in a classroom at Alexander's Public School.

Other notable benefits of using DreamBox...

Family Path
Home Connection

Learning for All
ELL
Intervention

See next page for further examples.

[DreamBox - Addition Using the Open Number Line]

Addition Using the Open Number Line | Play this 2nd grade math lesson

The open number line is a powerful tool that helps students visualize making jumps forward and backward on a number line and use a variety of strategies for both addition and subtraction. These strategies include "Making Jumps of 10" (e.g. 79+33 = 79+10+10+10+3) and "Using Landmark Numbers" (e.g. 79+33 = 79+1+20+10+2). Students learn flexible thinking and efficient, accurate problem solving. You can also view the open number line tutorial.

Strategies for Teachers in the Primary Division (source: EQAO)

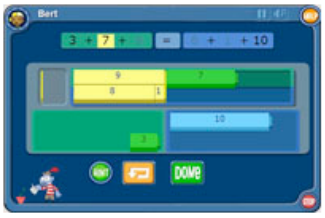
PRIMARY DIVISION: MATHEMATICS (continued)

Observations	Strategies for Improvement
Number Sense and Numeration Scorers of the open-response question requiring students to add two-digit numbers to make piles of 10 noted that many students were able to total the numbers but were less successful determining the number of 10s.	Continue to use a variety of **manipulatives** and **concrete materials** when teaching the concepts of place value. Provide students opportunities to use place value when problem solving. Continue to promote mental math. Give opportunities for students to be exposed to a variety of mental math strategies.

[Dream Box - Building Equal Expressions with Snap Blocks]

Building Equal Expressions with Snap Blocks™ | Play this 2nd grade math lesson

Snap Blocks lessons let students build and evaluate expressions with multiple addends (like 3+4+6 = 1+6+6), to build understanding of the equal sign. We increase the difficulty by increasing the number of addends on each side of the equation, using larger addends, and more. This series ends with quick true/false, equal/not equal, and less than/equal to/more than lessons, to build fluency and efficiency. You can also view the Snap Blocks™ tutorial.



Patterning and Algebra In 2012, the general population performed best on the questions from this strand. Students were successful on the questions requiring them to complete and extend number patterns, both growing and shrinking. Students continue to have difficulty determining missing numbers in equations. Scorers of the open-response question requiring students to use a number pattern and a calendar to solve a problem noted that some students skip-counted by 1s or 2s instead of 3s, and some students' explanations were incomplete.	Have students extend number patterns using a variety of starting points and pattern rules. Continue to provide various **manipulatives** for students to use to display their patterns. Reinforce the appropriate use of the **equal sign**, to signify a relationship and not a requirement to perform an operation.