

Summary of Results and Strategies for Teachers 2008–2009

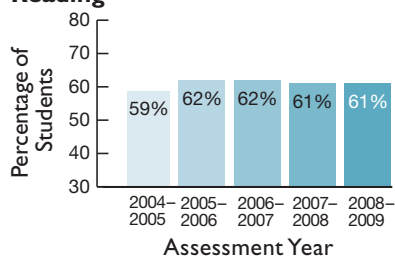
ASSESSMENTS OF READING, WRITING AND MATHEMATICS, PRIMARY AND JUNIOR DIVISIONS

PRIMARY DIVISION Comparison of Provincial Results over Time

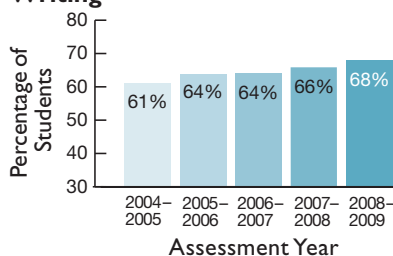
PERCENTAGE OF ALL GRADE 3 STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME

	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009
Number of Students	135 740	132 782	131 012	128 660	125 481
Reading	59%	62%	62%	61%	61%
Writing	61%	64%	64%	66%	68%
Mathematics	66%	68%	69%	68%	70%

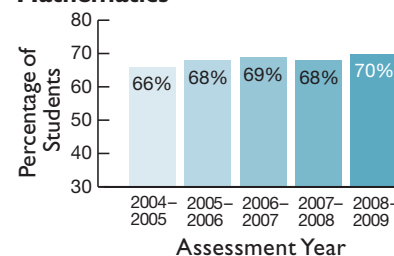
Reading



Writing



Mathematics



- There were 125 481 Grade 3 students at the time of the 2008–2009 assessment.
- The primary-division assessment is based on *The Ontario Curriculum, Grades 1–8: Language* (revised 2006) and *The Ontario Curriculum, Grades 1–8: Mathematics* (revised 2005).

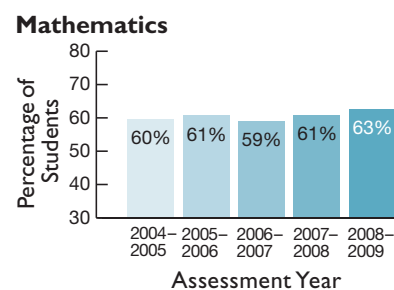
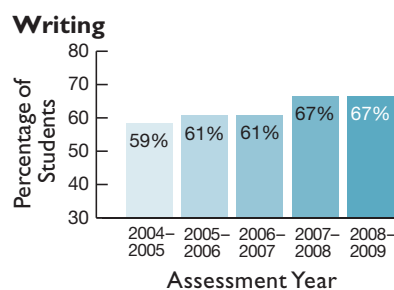
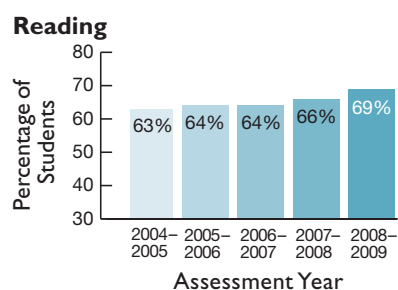
Observations

- There has been an increase of two percentage points since last year in the percentage of Grade 3 students performing at or above the provincial standard in writing (to 68%) and mathematics (to 70%).
- The percentage of students performing at or above the provincial standard in reading has remained the same (61%) since last year.
- Over the past five years, the percentage of students performing at or above the provincial standard has increased by two percentage points in reading, seven percentage points in writing and four percentage points in mathematics.

JUNIOR DIVISION Comparison of Provincial Results over Time

PERCENTAGE OF ALL GRADE 6 STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME

	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009
Number of Students	143 421	146 711	145 901	140 420	136 076
Reading	63%	64%	64%	66%	69%
Writing	59%	61%	61%	67%	67%
Mathematics	60%	61%	59%	61%	63%



- There were 136 076 Grade 6 students at the time of the 2008–2009 assessment.
- The junior-division assessment is based on *The Ontario Curriculum, Grades 1–8: Language* (revised 2006) and *The Ontario Curriculum, Grades 1–8: Mathematics* (revised 2005).

Observations

- There has been an increase of three percentage points (to 69%) since last year in the percentage of students performing at or above the provincial standard in reading.
- There has been an increase of two percentage points (to 63%) since last year in the percentage of students performing at or above the provincial standard in mathematics. The percentage in writing has remained the same (67%).
- Over the past five years, the percentage of students performing at or above the provincial standard has increased by six percentage points in reading, eight percentage points in writing and three percentage points in mathematics.

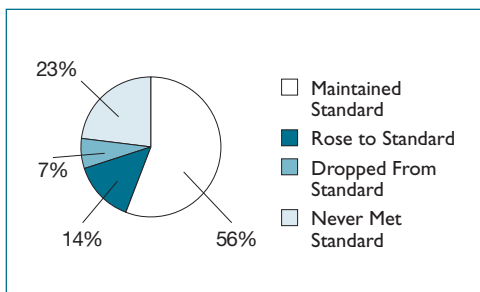
TRACKING THE PROGRESS OF STUDENTS PROVIDES NEW INSIGHTS

EQAO tracked the progress of students who wrote the primary-division assessment in 2006, when they were in Grade 3, and the junior-division assessment in 2009, when they were in Grade 6.

Tracking Student Achievement of the Provincial Standard

The graphs below show how students performed on the 2009 assessments compared to their assessment results in 2006. The percentages are based on all the students EQAO was able to track from one assessment to the next, including those who were exempted and those who provided no work to be scored.

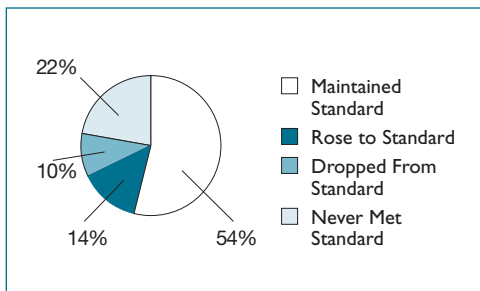
From Grade 3 Reading in 2006 to Grade 6 Reading in 2009



The reading results for the 121 623 students in the cohort are as follows:

- 56% (67 738) met the provincial standard in Grade 3 and Grade 6;
- 14% (17 622) did not meet the standard in Grade 3 but met it in Grade 6;
- 7% (8896) met the standard in Grade 3 but did not meet it in Grade 6 and
- 23% (27 367) did not meet the standard in Grade 3 or Grade 6.

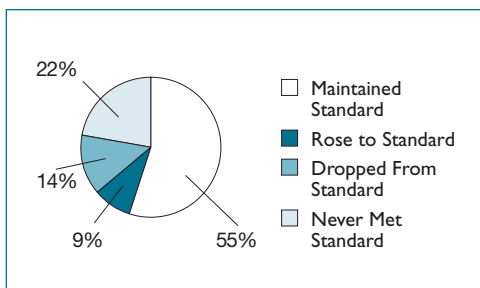
From Grade 3 Writing in 2006 to Grade 6 Writing in 2009



The writing results for the 121 629 students in the cohort are as follows:

- 54% (65 829) met the provincial standard in Grade 3 and Grade 6;
- 14% (16 883) did not meet the standard in Grade 3 but met it in Grade 6;
- 10% (12 590) met the standard in Grade 3 but did not meet it in Grade 6 and
- 22% (26 327) did not meet the standard in Grade 3 or Grade 6.

From Grade 3 Mathematics in 2006 to Grade 6 Mathematics in 2009



The mathematics results for the 124 597 students in the cohort are as follows:

- 55% (68 387) met the provincial standard in Grade 3 and Grade 6;
- 9% (10 658) did not meet the standard in Grade 3 but met it in Grade 6;
- 14% (17 829) met the standard in Grade 3 but did not meet it in Grade 6 and
- 22% (27 723) did not meet the standard in Grade 3 or Grade 6.

Informing Professional Practice: Primary Division

The following observations and suggested strategies for improvement are meant to assist educators in helping students develop and demonstrate their knowledge and skills in reading, writing and mathematics. The suggestions are based on an analysis of students' performance on the 2009 Assessment of Reading, Writing and Mathematics, Primary Division, and on feedback from teachers who scored the assessments.

The released 2009 assessment booklets can be accessed on the EQAO Web site, www.eqao.com.

For more information on the skills assessed and the kinds of questions used to measure them, see the primary-division *Framework*, on the EQAO Web site.

For more information on the terms in bold print, refer to the list of resources at the end of this section.

Observations, Strategies and Resources

Primary Division: Reading	Observations:	Strategies for Improvement:
Reading Skills	<p>Overall, students performed well on multiple-choice and open-response questions measuring Reading Skill 1 (understanding explicitly stated information in a reading selection).</p> <p>In general, students had more difficulty on open-response than on multiple-choice questions measuring Reading Skill 2 (understanding implicitly stated information in a reading selection) and Reading Skill 3 (making connections between the reading selection and their own knowledge and experience).</p> <p>Students whose responses to open-response questions scored a Code 30 or 40 demonstrated reading comprehension by integrating specific and relevant information from the text to explain their answers.</p>	<p>Continue to use an effective literacy block (comprehensive and balanced literacy program).</p> <p>Model how to activate prior knowledge and have students reflect on the connection between what they have already learned and what they are reading by asking "How does this text connect with what I know?" Use organizers such as mind maps, anticipation guides and graphic organizers (e.g., Go charts) to teach students how to express their thoughts about texts.</p> <p>Continue to model how to use the text to support answers to reading comprehension questions.</p>
Overall Reading Expectations from the Curriculum	<p>Students performed best on questions measuring Overall Reading Expectation 3 (use knowledge of words and cueing systems to read fluently). Note that Overall Reading Expectation 3 is measured by multiple-choice questions only. Some students who selected incorrect answers for Overall Reading Expectation 3 seemed not to return to the reading selection to check the meaning.</p> <p>Students performed less well on questions measuring Overall Reading Expectation 1 (read and demonstrate an understanding of a variety of literary, graphic and informational texts, using a range of strategies to construct meaning).</p> <p>Students had the most difficulty on both multiple-choice and open-response questions measuring Overall Reading Expectation 2 (recognize a variety of text forms, text features and stylistic elements and demonstrate understanding of how they help communicate meaning). For example, for open-response question 29 on "Library Helper" (<i>Language 2</i> booklet) students tended to give a generic answer about the function of borders rather than a specific answer about the importance of the border in this particular poster and how it communicates meaning.</p>	<p>Provide opportunities for vocabulary development by having students work with vocabulary as it occurs in texts across all subject areas. Have students reread texts to find context cues to help determine word meaning.</p> <p>To develop a further understanding of text forms and text features, involve students in creating and posting anchor charts, which serve to connect past learning to future learning.</p> <p>Use questions that require higher-order thinking to challenge readers to work to interpret and understand new text successfully.</p> <p>Continue to provide students with multiple opportunities to practise the skills required by Overall Reading Expectation 2 and the associated specific expectations (e.g., model the identification of text forms, text features and stylistic elements, and give students opportunities to do the same and to explain how these relate to the meaning of a text). Ensure that students relate the general meaning of text features to specific texts and understand how the text feature helps readers to understand the text.</p>

Primary Division: Reading	Observations:	Strategies for Improvement:
Text Types	<p>Students performed best on questions relating to the long narrative (“The Animal Band”) and the information text (“The Venus Flytrap”).</p> <p>Students had the most difficulty with questions relating to the poem (“The Ice Cream Taster”).</p>	<p>Use shared reading and multimedia to engage students in poetry. Encourage students to pay attention to the language and rhythm of poetry. Have students work with poetry to develop meaning, expand their vocabulary, make inferences, identify the main idea, make judgments and draw conclusions.</p> <p>Continue to use narrative texts to build on the strength that students have in this area, and provide students with opportunities to work with all text types. Choose non-fiction texts that require background knowledge from other curriculum areas so students need to activate prior knowledge to make connections and inferences.</p>
Question Types	<p>Overall, students performed better on multiple-choice than on open-response questions when demonstrating their reading comprehension.</p> <p>Scorers observed that some students used formulaic responses when answering open-response questions. These mechanical answers were less likely to reach a Code 30 or 40.</p>	<p>Review open-response question starter words and ask students to brainstorm answers to questions using these words after listening to a read-aloud or shared reading. Have students practise answering questions with starters such as who, what, where, when and how using graphic organizers to capture the ideas and then model turning these ideas into a written answer.</p> <p>Consider using the scoring rubrics and anchors on the EQAO Web site to illustrate the understanding required to score a Code 30 or 40 on answers to open-response questions. Use teacher moderation as part of the teaching-learning critical pathways to examine and understand what makes answers to open-response questions effective.</p>
Gender	<p>For all reading selections, female students outperformed male students on most of the multiple-choice questions and on all open-response questions.</p> <p>The smallest gender gap occurred on questions relating to the short narrative (“Wayne Gretzky”) and the information text (“The Venus Flytrap”).</p>	<p>Continue to help male students develop their literacy skills across all subject areas by explicitly teaching the processes that effective readers use.</p> <p>Examine the appropriate EQAO data to pinpoint gaps and take action with strategies that work, such as using common language and common resources throughout the grades to address gender gaps in skill development.</p> <p>Use think-alouds to demonstrate the processes of proficient readers.</p>
English Language Learners and Students with Special Education Needs (Excluding Gifted)	<p>English language learners and students with special education needs did not perform as well as the general population. Their pattern of relative strengths was similar to that of the general population.</p> <p>English language learners and students with special education needs performed best on questions measuring Overall Reading Expectations 1 and 3. Students scored slightly lower on questions measuring Overall Reading Expectation 2.</p> <p>As in the general population, English language learners and students with special education needs performed best on questions relating to the long narrative (“The Animal Band”) and the information text (“The Venus Flytrap”). They performed the least well on questions relating to the poem (“The Ice Cream Taster”).</p>	<p>When working with students with different needs, use a variety of teaching approaches through differentiated instruction.</p> <p>Use instructional supports for English language learners such as purposeful and accountable talk and small groups, and directly teach word knowledge, text forms and text features. Demonstrate how these help communicate meaning through modelled and shared reading. Continue to incorporate visual tools (e.g., concept maps) and scaffolds (e.g., paragraph frames) in all subject areas.</p>

Primary Division: Writing	Observations:	Strategies for Improvement:
Writing Skills	<p>As in 2008, when responding to the short- and long-writing tasks, students performed better on Writing Skill 3 (using conventions—spelling, grammar, punctuation) than on Writing Skill 1 (developing a main idea with sufficient supporting details) and Writing Skill 2 (organizing information and ideas in a coherent manner).</p> <p>Scorers reported that written work that used effective opening and/or concluding sentences and that linked ideas in a logical and sequential order usually received a Code 30 or 40. Written work that provided a list of unrelated ideas or a list of ideas without supporting details generally received a Code 10 or 20.</p>	<p>Continue to provide an effective writing program using key instructional approaches.</p> <p>Provide students with authentic and meaningful writing tasks so they have the interest and information to develop a main idea with sufficient supporting details.</p> <p>Read students the first few lines of fictional and non-fictional texts that have particularly effective beginnings and discuss with them how the beginnings relate to the rest of the text.</p> <p>Use a think-aloud to consider what the reader needs to know about a topic and why, and how to add more details. Show how to organize the ideas in a logical sequence.</p> <p>Conference with students to provide feedback on their writing to assist them in making the connection between the criteria that were satisfied and those that were not. Regularly use a topic-development-focused conference to encourage students to clarify their main idea and develop it with relevant specific details. Based on the conference, explain the next steps so that the student can make his or her writing more clear and coherent.</p>
Overall Writing Expectations from the Curriculum	<p>Overall, students performed well and most consistently on multiple-choice and open-response questions measuring Overall Writing Expectation 3 (apply knowledge of language conventions and present written work effectively).</p> <p>Students performed less well on Overall Writing Expectation 1 (develop and organize content) and Overall Writing Expectation 2 (use knowledge of form and style). They performed at a similar level on both of these expectations.</p>	<p>Have teachers participate in moderated marking sessions, so that they use consistent criteria and terminology when providing feedback for improvement. Prior to the sessions, give common writing tasks to students with agreed-upon sets of performance criteria. Use the outcome of the sessions to plan next steps.</p> <p>Have students use a revising and editing checklist to help them improve the clarity of content, correctly use writing conventions and track their progress in developing their writing skills over time. Continue to encourage peer assessment using guidelines such as checklists.</p> <p>Encourage the use of a few well-chosen graphic organizers and use the same graphic organizers for reading and writing so students can see the similarities between the two processes (e.g., between deconstructing a story as a reader and constructing a story as a writer). Start with organizers as a scaffold and help students develop their use beyond a formulaic response. Teach students how to move information from a graphic organizer to a written paragraph. Ask students to do this in groups, with partners and individually.</p> <p>Continue to help students incorporate the elements of writing into their written work, especially ideas and content. Model how to focus on a few ideas and specific details relevant to the text form, purpose and audience required by the prompt rather than listing a lot of underdeveloped ideas and details.</p>
Question and Writing Task Types	<p>For topic development, students performed better on multiple-choice questions than on short- and long-writing tasks.</p> <p>Students performed better on the short-writing tasks than on the long-writing task.</p>	<p>Continue to introduce students to the written text forms required by the curriculum and model how to organize writing in each form.</p> <p>Explicitly share and discuss models of good writing in detail, pointing out elements such as sentence structure, paragraphing and vocabulary, so that students become aware of the choices that the writer has made.</p>

Primary Division: Writing	Observations:	Strategies for Improvement:
Question and Writing Task Types (continued)	<p>Students performed at a similar level on both short-writing tasks.</p>	<p>Gather evidence about student writing and determine the area of greatest need. Design classroom assessments and common criteria that reflect what successful student work looks like. Consider using the EQAO rubrics and the anchors on the EQAO Web site, so students are aware of what is expected of them. Have them assess sample work and decide on next steps to improve it.</p> <p>Provide opportunities for students to develop endurance for longer writing tasks and include opportunities to practise responding to on-demand writing prompts.</p> <p>Continue to give students opportunities to explore their interests, lives and world beyond the classroom through non-fiction writing. Model the selection and organization of ideas and have students work in small groups, keeping in mind their purpose (i.e., to explain, persuade, describe or inform) and the audience they are addressing. Have them share their work and discuss what makes it effective.</p> <p>Continue to model careful reading of the writing prompts to identify the topic, written form, purpose and audience.</p>
Gender	<p>Female students consistently outperformed male students on all multiple-choice questions and short- and long-writing tasks.</p>	<p>Use visual anchor charts to encourage full and complete written responses. These charts act as a mnemonic device for students, as they develop each component of their response. Model how to provide an idea and then support it with specific details.</p> <p>Use writing frames, which are outlines or templates that give students a structure for communicating what they want to say, as students begin a writing task. Encourage students to move gradually beyond using them mechanically to organizing their writing organically.</p> <p>Continue to use classroom practices proven by teacher inquiry projects to improve boys' literacy achievement, such as social interaction before writing.</p> <p>Continue to provide a variety of writing topics of interest to both genders. Make reading and writing an engaging focus in the classroom in all subjects.</p>
English Language Learners and Students with Special Education Needs (Excluding Gifted)	<p>English language learners and students with special education needs did not perform as well as the general population, although their pattern of relative strengths and weaknesses was similar to that of the general population.</p> <p>In general, English language learners and students with special education needs performed better on Overall Writing Expectation 3 than on Overall Writing Expectation 1 and Overall Writing Expectation 2.</p> <p>English language learners and students with special education needs performed slightly better on multiple-choice items measuring topic development than on short- and long-writing tasks relating to topic development.</p>	<p>Encourage students with special education needs to use assistive technologies for idea generation, organization and completion of writing tasks whenever possible.</p> <p>Differentiate instruction to optimize student writing through, for example, focused lessons in small groups, graphic organizers and guided practice.</p>

Except as noted, for the following suggested strategies for reading, go to

- www.eworkshop.on.ca;
- click “Literacy Resources” under “Resources” and
- click “Expert Panel Reports/Guides to Effective Instruction” in the left-hand column.

The listed titles will appear on the right-hand side.

Differentiated instruction: Go to

- the webcast *Differentiated Instruction: Continuing the Conversation* at <http://www.curriculum.org/secretariat/march29.shtml>
- pages 14–15 of *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>
- the webcast *Building Upon Our Successes* at <http://www.curriculum.org/secretariat/september28.shtml>

English language learners: Go to

- *Many Roots, Many Voices: Supporting English Language Learners in Every Classroom* at <http://www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf>
- the webcast *Teaching and Learning in Multilingual Ontario* at <http://www.curriculum.org/secretariat/december7.shtml>
- “A View from the Front of the Class: Preparing for the OSSLT” at <http://www.eqao.com/eMagazine/2008/01/eMagazine.aspx?Lang=E+ArticleID=03+ItemID=11>
- “Capacity Building Series, Secretariat Special Edition #8, ELL Voices in the Classroom” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/ELL_Voices09.pdf

Go charts: Go to page 3.29 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Graphic organizers: Go to page 10.16 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Higher-order thinking: Go to

- the webcast *Dr. Annette Woods: Critical Literacy* at <http://www.curriculum.org/secretariat/april21.shtml>
- the presentation *Developing Thinking Skills Through Higher-Level Questioning* at https://admin.na3.acrobat.com/_a59783387/thinkingskills
- pages 8.14–8.15 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Instructional supports: Go to

- *Supporting English Language Learners, Grades 1 to 8: Video and Print Resources* at <http://www.curriculum.org/LNS/ELL/index.shtml>
- “Capacity Building Series, Secretariat Special Edition #8, ELL Voices in the Classroom” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/ELL_Voices09.pdf

Literacy block: Go to “Capacity Building Series, Secretariat Special Edition #1, Learning Blocks for Literacy and Numeracy” at http://www.curriculum.org/LNS/coaching/files/pdf/WhatWorks_May07.pdf

Male students: Go to

- pages 17–21 and 37–38 of *Me Read? No Way! A Practical Guide to Improving Boys’ Literacy Skills* at <http://www.edu.gov.on.ca/eng/document/brochure/meread.pdf>
- the other resources at <http://www.edu.gov.on.ca/eng/curriculum/boysliteracy.html>

Mind maps and anticipation guides: Go to

- page 8.17 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*
- the other online teaching resources at www.eworkshop.on.ca

Non-fiction: Go to

- sample lesson on pages 5.26–5.31 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*
- the webcast *High-Yield Strategies to Improve Student Learning* at <http://www.curriculum.org/secretariat/may2.shtml>

Poetry: Go to

- Research Monograph #7 from the Literacy and Numeracy Secretariat, "Poetry: A Powerful Medium for Literacy and Technology Development" at <http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Hughes.pdf>
- pages 111–114 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Six, Writing*
- the sample lesson on pages 5.19–5.21 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Strategies: Go to "View from the Front of the Class: Closing the Gender Gap: Strategies That Work" at <http://www.eqao.com/eMagazine/2009/02/eMagArticle.aspx?Lang=E&ArticleID=03 &ItemID=33>

Support: Go to pages 7.19–7.23 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Teacher moderation: Go to

- "Capacity Building Series, Secretariat Special Edition #2, Teacher Moderation: Collaborative Assessment of Student Work" at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf
- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>

Teaching-learning critical pathways: Go to "Capacity Building Series, Secretariat Special Edition #6, Teaching-Learning Critical Pathways" at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/teaching_learning.pdf

Text features: Go to

- pages 5.26–5.31 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*
- pages 2.16–2.18 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Text forms: Go to pages 4–5 of "Capacity Building Series, Secretariat Special Edition #5, Non-Fiction Writing for the Junior Student" at <http://www.curriculum.org/secretariat/files/Apr18JuniorStudent.pdf>

Text types: Go to page 8.28 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Think-alouds: Go to page 4.6 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Vocabulary development: Go to pages 8.11–8.13 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*

Except as noted, for the following suggested strategies for writing, go to

- www.eworkshop.on.ca;
- click "Literacy Resources" under "Resources" and
- click "Expert Panel Reports/Guides to Effective Instruction" in the left-hand column.

The listed titles will appear on the right-hand side.

Assistive technologies: Go to Chapter 10, "Computer-Based Assistive Technology," *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>

Conference: Go to

- Appendix 6-3: "Sample Writing Conference Record" at http://www.eworkshop.on.ca/edu/pdf/Appendices_writing.pdf
- pages 25–27 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*

Differentiate instruction: Go to the "Differentiated Writing Instruction" segment of the webcast *High-Yield Strategies to Improve Student Learning* at <http://www.curriculum.org/secretariat/may2.shtml>

Effective beginnings: Go to pages 5.6–5.8 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*

Elements of writing: Go to pages 1.14–1.20 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*

**Primary Division:
Reading and
Writing**

**List of
Resources
(continued)**

Gather evidence: Go to

- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>
- “Data in Action: Exploring the Many Layers of EQAO Assessment Data: Peeling the Onion” at <http://www.eqao.com/eMagazine/2008/10/eMagArticle.aspx?Lang=E&ArticleID=08&ItemID=30>

Graphic organizers: Go to

- Chapter 10 of *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*
- the writing appendices at http://www.eworkshop.on.ca/edu/pdf/Appendices_writing.pdf

Key instructional approaches: Go to *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*

Logical sequence: Go to pages 5.6–5.8 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*

Moderated marking: Go to

- “Capacity Building Series, Secretariat Special Edition #2, Teacher Moderation: Collaborative Assessment of Student Work” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf
- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>

Non-fiction writing: Go to

- pages 1.21 and 6.11–6.13 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*
- the first video in Part 4 of the webcast *High-Yield Strategies to Improve Student Learning: Teaching Non-Fiction Writing, Reading Conference: Text Structure* at <http://www.curriculum.org/secretariat/may2.shtml>
- the webcast *Quality Teaching: It’s Intentional*, Dr. Douglas Reeves: Non-Fiction Writing at <http://www.curriculum.org/secretariat/april21.shtml>

Revising and editing checklist: Go to Appendix 6-4: “Independent Writing Revising and Editing Checklist” at http://www.eworkshop.on.ca/edu/pdf/Appendices_writing.pdf

Students with special education needs: Go to *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>

Teacher inquiry projects: Go to the resources at <http://www.edu.gov.on.ca/eng/curriculum/boysliteracy.html>

Text forms: Go to

- pages 1.20–1.21 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*
- pages 4–5 of “Capacity Building Series, Secretariat Special Edition #5, Non-Fiction Writing for the Junior Student” at <http://www.curriculum.org/secretariat/files/Apr18JuniorStudent.pdf>

Think-aloud: Go to pages 2.4 and 2.5–2.7 of *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*

Visual anchor charts: Go to “Spotlight: Celebrating the Success of an Ontario School” at <http://www.eqao.com/eMagazine/2008/05/eMagArticle.aspx?Lang=E&ArticleID=05&ItemID=21>

Writing frames: Go to page 20 of *Me Read? No Way! A Practical Guide to Improving Boys’ Literacy Skills* at <http://www.edu.gov.on.ca/eng/document/brochure/meread/meread.pdf>

Primary Division: Mathematics	Observations:	Strategies for Improvement:
Number Sense and Numeration	<p>Students continue to perform better on questions requiring the demonstration of specific knowledge (e.g., how to count forward by 25s, round two-digit numbers to the nearest 10 or relate a multiplication sentence to an array).</p> <p>As in previous years, students were less successful on questions requiring a multi-step solution involving concepts concerning money and composing numbers.</p> <p>Scorers noted that successful solutions to question 8 often included organized drawings to illustrate the relationship between the number of quarters and the total amount of money.</p>	<p>Demonstrate how to apply the Four-Step Problem-Solving Model (i.e., understand the problem, make a plan, carry out the plan, reflect on the solution) when solving multi-step questions, and give students multiple opportunities to apply this model.</p> <p>Continue to encourage students to use manipulatives (concrete materials) to help them solve multi-step problems.</p> <p>Continue to model appropriate problem-solving strategies (e.g., act it out, make a model with concrete materials, draw a diagram, use the guess-and-check method, make a table) and provide students with the opportunity to solve a variety of engaging problems. Have students compare their solutions to various problems.</p>
Measurement	<p>Students were successful on questions requiring the demonstration of specific knowledge (e.g., how to tell time, read temperature benchmarks or understand the relationship between days and weeks) and its meaning.</p> <p>Students continue to confuse the concepts of perimeter and area.</p> <p>Similar to last year, students had difficulty ordering lengths recorded with different units (e.g., cm, m) (question 25).</p> <p>Scorers noted that successful processes for question 10 involved labelling the sides of both rectangles and/or writing a number sentence to show understanding of perimeter.</p>	<p>Provide meaningful hands-on problem-solving contexts for students to investigate the concept of area using irregular shapes on a grid that cover parts of some grid squares.</p> <p>Continue to teach the concepts of perimeter and area simultaneously.</p> <p>Continue to provide opportunities for students to compare and order lengths in centimetres and metres.</p>
Geometry and Spatial Sense	<p>Students performed well describing movement from one location to another using a grid map.</p> <p>Students were less successful on questions requiring the application of geometric concepts (e.g., to identify congruent two-dimensional shapes, geometric properties of three-dimensional shapes or lines of symmetry).</p> <p>Scorers noted that successful answers to question 9 included evidence of understanding the reflective property of symmetry (i.e., matching when you fold).</p>	<p>Continue to provide students with opportunities to draw paths on grid maps and describe them using directional language.</p> <p>Provide students with opportunities to identify lines of symmetry and to clearly explain the concept of symmetry relating to reflections.</p> <p>Provide opportunities for students to identify congruent two-dimensional shapes in pictorial representations.</p> <p>Provide opportunities for students to sort three-dimensional figures using various geometric properties (e.g., vertices, edges and faces).</p> <p>Have students describe similarities and differences using geometric language.</p>

Primary Division: Mathematics	Observations:	Strategies for Improvement:
Patterning and Algebra	<p>Overall, Grade 3 students performed very well on questions from this strand.</p> <p>In general, students were successful extending both geometric and numeric patterns.</p> <p>Students continue to be less successful on questions involving the concept of equality in equations with addends on both sides of the equal sign.</p> <p>Scorers noted that successful solutions to question 7 gave evidence of understanding the pattern by illustrating the rule (e.g., through diagrams, an extension of the graph or list of the number pattern).</p>	<p>Continue to provide students with opportunities to use a variety of tools to solve multi-step problems involving numeric and geometric patterns.</p> <p>Continue to provide students with opportunities to investigate expressions and equality by modelling equations using a variety of tools and strategies (e.g., concrete materials, guess and check).</p>
Data Management and Probability	<p>In general, students were successful representing data with a bar graph.</p> <p>Students continue to struggle with items that involve multi-step processes (e.g., interpreting and drawing conclusions from data, using a spinner to predict the frequency of an outcome in a simple probability experiment).</p> <p>Students had difficulty determining the mode of a set of data.</p> <p>Scorers noted that successful answers to question 27 had a scale that had a many-to-one correspondence to accommodate the full range of data.</p>	<p>Continue to provide students with various representations of data to interpret and analyze. Teach them how to create graphs with appropriate scales that have many-to-one correspondence to display the full range of data.</p> <p>Ensure that students understand that mode is the value that occurs most often in a set of data and not the greatest number.</p>
Question Types	<p>As in previous years, on open-response questions, many students provided undeveloped, unclear or incomplete explanations or justifications.</p> <p>For multiple-choice questions with answers that have multiple components, students often did not fully consider all components in the answers before making their selection.</p>	<p>Use strategies for promoting written communications (e.g., model writing, shared student writing, think-talk-write) to demonstrate how to provide complete and detailed explanations and justifications. Allow students to practise explaining their mathematical processes and justifying their conclusions both orally and in writing, using appropriate mathematical vocabulary.</p> <p>Provide students with opportunities to be exposed to multiple-choice items using released EQAO materials throughout the year. Facilitate discussions involving both correct and incorrect answers.</p> <p>Give students opportunities to create their own multiple-choice questions and answers.</p> <p>Provide students with strategies for answering multiple-choice questions, such as eliminating obviously incorrect answers and working backward using the options provided to determine the answer.</p>

Primary Division: Mathematics	Observations:	Strategies for Improvement:
Question Types (continued)		Use shared mathematics to provide students with opportunities to (1) solve multi-step problems in groups and (2) present alternative solutions using a variety of strategies (e.g., think-pair-share , show and tell , co-operative problem solving) and discuss them with others.
Gender	Overall, male and female students performed equally well on both multiple-choice and open-response questions.	Continue to have students work in mixed-gender groups to benefit from the strengths of others and to experience viewpoints of the other gender.
English Language Learners	As in 2008, English language learners showed a similar pattern of strengths and weaknesses to that of the general population but performed at a level slightly below.	Continue to provide English language learners with opportunities to consolidate learning in all areas of the mathematics curriculum. Continue to provide English language learners with multiple opportunities to solve problems in contexts in which they are required to read, interpret and answer questions about what they have read and explain their thinking and justify their answer.
Students with Special Education Needs (Excluding Gifted)	As in 2008, students with special education needs did not perform as well as the Grade 3 population in general in any strands.	Ensure students with special education needs regularly receive accommodations that are listed in their Individual Education Plan. Continue to support students with special education needs using Universal Design for Learning and differentiated instruction .

Except as noted, for the following suggested strategies for mathematics, go to

- www.eworkshop.on.ca;
- click “Numeracy Resources” under “Resources” and
- click “Expert Panel Reports/Guides to Effective Instruction” in the left-hand column.

The listed titles will appear on the right-hand side.

Concrete materials: Go to pages 19–24 of *Early Math Strategy: The Report of the Expert Panel on Early Math in Ontario* at <http://www.edu.gov.on.ca/eng/document/reports/math/index.html>

Differentiated instruction: Go to

- pages 14–15 of *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/index.html>
- the webcast *Differentiating Mathematics Instruction* at <http://www.curriculum.org/secretariat/may28.shtml>

English language learners: Go to *Many Roots, Many Voices: Supporting English Language Learners in Every Classroom* at www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf

Expressions and equality: Go to pages 26–36 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Patterning and Algebra*

Four-step problem-solving model: Go to pages 36–38 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two, Problem Solving and Communication*

Manipulatives: Go to pages 18–28 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Three, Classroom Resources and Management*

Mode: Go to pages 123–128 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Data Management and Probability*

Perimeter and area: Go to pages 121–134 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Measurement*

Problem-solving strategies: Go to pages 38–45 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two, Problem Solving and Communication*

Promoting written communications: Go to pages 72–79 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two, Problem Solving and Communication*

Shared mathematics: Go to pages 66–68 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume One, Foundations of Mathematics Instruction*

Think-pair-share, show and tell, co-operative problem solving: Go to pages 68–69 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two, Problem Solving and Communication*

Three-dimensional figures: Go to

- pages 14–16 and 159–166 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Geometry and Spatial Sense*
- the webcast *Understanding Geometric Figures Through Drawing and Paper Folding* at <http://www.curriculum.org/secretariat/february6.shtml>

Universal Design for Learning (UDL): Go to pages 10–13 of *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf

Informing Professional Practice: Junior Division

The following observations and suggested strategies for improvement are meant to assist educators in helping students develop and demonstrate their knowledge and skills in reading, writing and mathematics. The suggestions are based on an analysis of students' performance on the 2009 Assessment of Reading, Writing and Mathematics, Junior Division, and on feedback from teachers who scored the assessments.

The released 2009 assessment booklets can be accessed on the EQAO Web site, www.eqao.com.

For more information on the skills assessed and the kinds of questions used to measure them, see the junior-division *Framework*, on the EQAO Web site.

For more information on the terms in bold print, refer to the list of resources at the end of this section.

Observations, Strategies and Resources

Junior Division: Reading	Observations:	Strategies for Improvement:
Reading Skills	<p>More students received a Code 30 or 40 on open-response questions measuring Reading Skill 1 (understanding explicitly stated information in a reading selection) and Reading Skill 2 (understanding implicitly stated information in a reading selection) than on Reading Skill 3 (making connections between the reading selection and their own knowledge and experience).</p> <p>Scorers observed that responses that scored a Code 30 or 40 demonstrated reading comprehension by integrating specific and relevant information from the text without going beyond the space provided.</p> <p>On open-response questions that required students to use their own ideas, scorers sometimes noted that formulaic mnemonic organizers including the letter E for "extend" or "experience" led to superficial extensions. Students may have better used the allotted answer space for additional textual support or for explanations linking such support to their argument.</p>	<p>Continue to use an effective literacy learning block (comprehensive and balanced literacy program).</p> <p>Model how to activate prior knowledge to understand a text. Encourage students to use background knowledge by asking them how it helps them understand the text. Have students think about what they have already learned about the topic, the author, the time period, the genre, the text form and relevant reading strategies.</p>
Overall Reading Expectations from the Curriculum	<p>Students performed at a similar level on questions measuring Overall Reading Expectation 1 (read and demonstrate an understanding of a variety of literary, graphic and informational texts, using a range of strategies to construct meaning) and Overall Reading Expectation 2 (recognize a variety of text forms, text features and stylistic elements and demonstrate an understanding of how they help communicate meaning).</p> <p>Students performed less well on Overall Reading Expectation 3 (use knowledge of words and cueing systems to read fluently). The questions assessing this expectation typically ask students to choose a word closest in meaning to a familiar or unfamiliar word from the reading selection.</p>	<p>Continue to provide students with multiple opportunities to practise the skills required by Overall Reading Expectation 3 and the associated specific expectations. Use modelled, shared and guided reading to demonstrate how to apply a specific cueing system or strategy when reading a text. Give students the opportunity to demonstrate their knowledge of words and cueing systems to read fluently (e.g., use words from oral vocabulary and grade-level texts, terminology used regularly in discussions and posted on anchor charts and words from shared-, guided- and independent-reading texts and resource materials in the curriculum subject areas).</p> <p>Use think-alouds to model how students can use click or clunk to monitor their comprehension of vocabulary and ideas in reading selections.</p>

Junior Division: Reading	Observations:	Strategies for Improvement:
Text Types	<p>Students performed best on the long narrative (“Echoing Howls”) and the short narrative (“Digging for Gold”). Students had the most difficulty responding to open-response questions dealing with the poems (“Freeze-Up” and “The Islands”).</p>	<p>Continue to provide students with opportunities to work with all text types and genres required by the language curriculum up to the end of Grade 6.</p> <p>Use shared reading and multimedia to engage students in poetry. Encourage them to pay attention to the language and rhythm of poetry. Have students work with poetry to develop meaning, expand their vocabulary, make inferences, identify the main idea, make judgments and draw conclusions.</p>
Question Types	<p>Students performed better on multiple-choice questions than on open-response questions.</p> <p>Students who used specific references to the text to support their answers received higher scores. Scorers noted that the support was effective when the student explained the relationship between it and the rest of the answer.</p> <p>Answers to open-response questions that received a Code 10 or 20 often retold or listed information from the text without answering the question.</p>	<p>Continue to teach strategies for locating information and determining its importance, such as skimming and scanning, using text features, recognizing signal words and using the structure of the text for clues to meaning.</p> <p>Use teacher moderation as part of the teaching-learning critical pathways to help teachers examine and understand what makes an open-response question effective.</p> <p>Model how to determine which part of the text supports an answer and demonstrate how to use support and connect it to the rest of the answer.</p> <p>Use the scoring rubrics and anchors (available on the EQAO Web site) to illustrate the understanding required to score a Code 30 or 40 on open-response questions.</p>
Gender	<p>Girls consistently outperformed boys on open-response questions relating to all texts. Boys outperformed girls on a few multiple-choice questions. The gender gap was the smallest on questions assessing Overall Reading Expectation 3.</p>	<p>Continue to help male students develop literacy skills across all subject areas by explicitly teaching the processes that effective readers use.</p>
English Language Learners and Students with Special Education Needs (Excluding Gifted)	<p>English language learners performed better on questions assessing Overall Reading Expectation 2 than on those assessing Overall Reading Expectation 1.</p> <p>Students with special education needs and English language learners did not perform as well as the general population. Their pattern of relative strengths and weaknesses across questions was similar to that of the general population.</p> <p>Students with special education needs did slightly better on multiple-choice questions than on open-response questions. Their scores were the highest on the short and long narratives. They had the most difficulty with the poems.</p>	<p>Support English language learners with purposeful talk during the literacy learning block to build on prior knowledge and scaffold their learning.</p> <p>Continue to use differentiated instruction when working with students with special education needs.</p> <p>Continue to incorporate visual tools (e.g., concept maps), vocabulary tools (e.g., word charts) and scaffolds (e.g., paragraph frames) to assist English language learners and students with special education needs across all subject areas.</p>

Junior Division: Writing	Observations:	Strategies for Improvement:
<p>Writing Skills</p>	<p>Student performance improved across all writing skills between 2008 and 2009.</p> <p>As in 2008, when responding to the short- and long-writing tasks, students performed better on Writing Skill 3 (using conventions—spelling, grammar, punctuation—in a manner that does not distract from clear communication) than on Writing Skill 1 (developing a main idea with sufficient supporting details) and Writing Skill 2 (organizing information and ideas in a coherent manner).</p>	<p>Continue to provide an effective writing program using key instructional approaches.</p> <p>Provide students with authentic and meaningful writing tasks so they practise developing a main idea with sufficient supporting details presented in a clear, coherent manner.</p> <p>Participate in moderated marking sessions to facilitate the use of consistent criteria and terminology when providing feedback for improvement. Ask students to score responses using the generic scoring rubrics (available on the EQAO Web site) and to compare and explain their scores.</p> <p>Conference with students to provide feedback on their writing to assist them in making the connection between the criteria that were satisfied and those that were not. Regularly use a topic-development-focused writing conference to encourage students to clarify their main idea and develop it with specific relevant details. Explain the next steps so that the student can make his or her writing clear and coherent.</p>
<p>Overall Writing Expectations from the Curriculum</p>	<p>In general, students performed well on Overall Writing Expectation 3 (apply knowledge of language conventions and present written work effectively). Students performed less well on multiple-choice questions and open-response tasks measuring Overall Writing Expectation 1 (develop and organize content) and Overall Writing Expectation 2 (use knowledge of form and style in writing).</p> <p>However, students were least successful on multiple-choice questions measuring Overall Writing Expectation 3 that required them to identify the sentence written correctly.</p>	<p>Continue to provide modelled- and shared-writing mini-lessons. Explain that good writers reflect on and develop their skills, or their craft, to become more effective. Use craft of writing topics, such as effective leads, voice, complex sentence structure, idea sequencing and closing sentences.</p> <p>Encourage the use of graphic organizers to outline the beginning, middle and end of a piece of writing; to group main ideas and supporting details into well-organized units; and to ensure that the answer fits in the space provided for the answer.</p> <p>Continue to provide opportunities for students to develop endurance for longer writing tasks.</p> <p>Use on-demand writing prompts regularly, and model how to focus on a few relevant ideas and adequately develop them with specific and relevant supporting details, as opposed to simply listing several underdeveloped ideas and details.</p>
<p>Question and Writing Task Types</p>	<p>As in 2008, students performed better on multiple-choice questions measuring Writing Skill 1 and Writing Skill 2 than on the topic-development rubric for the writing tasks.</p> <p>Students performed slightly better on the two short-writing tasks than on the long-writing task.</p> <p>Scorers reported that, in general, students demonstrated a good understanding of the requirements of different forms, purposes and audiences.</p>	<p>Continue to work with students on the written text forms required by the curriculum, and model how to organize writing in each form.</p> <p>Explicitly share and discuss in detail models of good writing, pointing out elements such as sentence structure, paragraphing and vocabulary, so that students become aware of the choices that the writer has made.</p> <p>Gather evidence about student writing and determine the area of greatest need. Design classroom assessments and common criteria that reflect what successful student work looks like. Share these as well as the EQAO rubrics and anchors with students, so they are aware of what is expected of them. Have them assess sample work and decide on next steps to improve it.</p>

Junior Division: Writing	Observations:	Strategies for Improvement:
Question and Writing Task Types (continued)		<p>Continue to give students opportunities to explore their interests, lives and world beyond the classroom through non-fiction writing. Model the selection and organization of ideas, and have students work in small groups, keeping in mind their purpose (i.e., to explain, persuade, describe or inform) and the audience they are addressing.</p> <p>Continue to model careful reading of the writing prompts, with a focus on using a highlighter to identify the topic, written form, purpose and audience.</p>
Gender	<p>Female students consistently outperformed male students on multiple-choice writing questions and on the short- and long-writing tasks.</p> <p>Male students performed better on the short-writing tasks than on the long-writing task.</p>	<p>Use writing frames, which are outlines or templates that give students a structure for communicating what they want to say, as students begin a writing task. Encourage students to move beyond using them mechanically to organizing their writing organically.</p> <p>Continue to use classroom practices proven by teacher inquiry projects to improve boys' literacy achievement, such as social interaction before writing.</p> <p>Continue to provide a variety of writing topics that are of interest to both genders. Make reading and writing an engaging focus in the classroom in all subjects.</p>
English Language Learners	<p>English language learners did not perform as well as the general population. Their pattern of relative strengths and weaknesses was similar to that of the general population.</p> <p>English language learners performed better on multiple-choice questions measuring Writing Skill 1 and Writing Skill 2 than on the writing tasks.</p> <p>Students performed slightly better on the two short-writing tasks than on the long-writing task.</p> <p>English language learners performed better on the use-of-conventions rubric than on the topic-development rubric for the short- and long-writing tasks.</p>	<p>To assist English language learners, continue to incorporate visual tools (e.g., paragraph frames) for all subject areas.</p> <p>Provide opportunities for students to communicate, orally and in writing, in their home language to brainstorm, rehearse and plan ideas for writing.</p>
Students with Special Education Needs (Excluding Gifted)	<p>Students with special education needs did not perform as well as the general population. Their pattern of relative strengths and weaknesses was similar to that of the general population.</p> <p>Students with special education needs performed better on multiple-choice questions measuring Writing Skill 1 and Writing Skill 2 than on the writing tasks.</p> <p>Students with special education needs performed slightly better on the two short-writing tasks than on the long-writing task.</p> <p>Students with special education needs performed better on the use-of-conventions rubric than on the topic-development rubric for the short- and long-writing tasks.</p>	<p>Encourage students with special education needs to use assistive technologies for idea generation, organization and completion of writing tasks, whenever possible.</p> <p>Differentiate instruction for students with different needs through activities such as small-group-focused lessons, graphic organizers and guided practice.</p>

Except as noted, for the following suggested strategies for reading, go to

- www.eworkshop.on.ca;
- click “Literacy Resources” under “Resources” and
- click “Expert Panel Reports/Guides to Effective Instruction” in the left-hand column.

The listed titles will appear on the right-hand side.

Activate prior knowledge: Go to

- page 88 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 5, Reading*
- the online teaching resources at www.eworkshop.on.ca

Click or clunk: Go to page 55 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 1, Junior Learner, Part 1*

Concept map: Go to

- pages 14–15 of *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>
- the webcast *Building Upon Our Successes* at <http://www.curriculum.org/secretariat/september28.shtml>

Cueing systems: Go to page 16 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 5, Reading*

Differentiated instruction: Go to the webcast *Differentiated Instruction: Continuing the Conversation* at <http://www.curriculum.org/secretariat/march29.shtml>

English language learners: Go to

- pages 1 and 3–8 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 3, Planning and Classroom Management*
- pages 23–26 of *Many Roots, Many Voices: Supporting English Language Learners in Every Classroom* at <http://www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf>
- the webcast *Teaching and Learning in Multilingual Ontario* at <http://www.curriculum.org/secretariat/december7.shtml>

Learning block: Go to

- “Learning Blocks for Literacy and Numeracy” at http://www.curriculum.org/LNS/coaching/files/pdf/WhatWorks_May07.pdf
- “Timetabling” on pages 45–50 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 3, Planning and Classroom Management*

Locating information and determining its importance: Go to

- pages 47–48 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 1, Junior Learner, Part 1*
- “Sample Lesson 2.1—Identifying the Main Idea and the Author’s Purpose” in *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 5, Reading*

Male students: Go to

- pages 17–21 and 37–38 of *Me Read? No Way! A Practical Guide to Improving Boys’ Literacy Skills* at <http://www.edu.gov.on.ca/eng/document/brochure/meread/meread.pdf>
- the resources at <http://www.edu.gov.on.ca/eng/curriculum/boysliteracy.html>

Modelled, shared and guided reading: Go to

- pages 60–77 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 5, Reading*
- *Comprehending in Action: Synthesizing (Module 4)* PowerPoint presentations and teacher resources, including model lessons and lesson plans at <http://www.curriculum.org/LNS/coaching/profresources.shtml>

Poetry: Go to

- Research Monograph #7 from the Literacy and Numeracy Secretariat, “Poetry: A Powerful Medium for Literacy and Technology Development” at <http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Hughes.pdf>
- pages 111–114 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*

Teacher moderation: Go to

- “Capacity Building Series, Special Edition #2, Teacher Moderation: Collaborative Assessment of Student Work” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf
- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>

Teaching-learning critical pathway: Go to the “Capacity Building Series, Special Edition #6, Teaching-Learning Critical Pathways” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/teaching_learning.pdf

Think-alouds: Go to

- the Expert Panel Reports or *A Guide to Effective Literacy Instruction, Grades 4–6: Volume 5, Reading*
- the strategies and sample lessons on pages 44–47 and 56–59 of *Think Literacy: Cross-Curricular Approaches, Grades 7–12* at <http://www.edu.gov.on.ca/eng/studentssuccess/thinkliteracy/files/Reading.pdf>

Use support: Go to pages 34–38 of *A Guide to Effective Literacy Instruction: Volume 5, Reading*

Except as noted, for the following suggested strategies for writing, go to

- www.eworkshop.on.ca;
- click “Literacy Resources” under “Resources” and
- click “Expert Panel Reports/Guides to Effective Instruction” in the left-hand column.

The listed titles will appear on the right-hand side.

Assistive technologies: Go to Chapter 10, “Computer-Based Assistive Technology,” *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>

Conference: Go to pages 25–27 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*

Craft of writing: Go to page 20 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*

Differentiate instruction: Go to the webcast *High-Yield Strategies to Improve Student Learning, Part 3: The Gradual Release of Responsibility Model—Clip Four: Differentiated Writing Instruction* at <http://www.curriculum.org/secretariat/may2.shtml>

English language learners: Go to

- pages 1 and 3–8 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 3, Planning and Classroom Management*
- pages 23–26 of *Many Roots, Many Voices: Supporting English Language Learners in Every Classroom* at <http://www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf>
- the webcast *Teaching and Learning in Multilingual Ontario* at <http://www.curriculum.org/secretariat/december7.shtml>

Focus: Go to “Mini-lesson: Bringing Focus to a Piece of Writing” on page 77 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*

Gather evidence: Go to

- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>
- “Data in Action: Exploring the Many Layers of EQAO Assessment Data: Peeling the Onion” at <http://www.eqao.com/eMagazine/2008/10/eMagazine.aspx?Lang=E>

Graphic organizers: Go to

- page 50 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6, Writing*
- the resources at www.eworkshop.on.ca

Key instructional approaches: Go to pages 29–36 of *A Guide to Effective Literacy Instruction, Grades 4 to 6, Volume 6, Writing*

Moderated marking: Go to

- “Capacity Building Series, Secretariat Special Edition #2, Teacher Moderation: Collaborative Assessment of Student Work” at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf
- the webcast *Teacher Moderation: Collaborative Assessment of Student Work* at <http://www.curriculum.org/secretariat/september10.shtml>

Non-fiction writing: Go to

- the webcast *Non-Fiction Writing* at <http://www.curriculum.org/secretariat/april18.shtml>
- the webcast *High-Yield Strategies to Improve Student Learning, Part 4: Teaching Non-Fiction Writing—Clip One: Reading Conference: Text Structure (persuasive writing)* at <http://www.curriculum.org/secretariat/may2.shtml>
- the webcast *Quality Teaching: It’s Intentional, Dr. Douglas Reeves: Non-Fiction Writing* at <http://www.curriculum.org/secretariat/april21.shtml>

Students with special education needs: Go to *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students with Special Education Needs, Kindergarten to Grade 6* at <http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf>

Teacher inquiry projects: Go to

- *Me Read? No Way! A Practical Guide to Improving Boys’ Literacy Skills* at <http://www.edu.gov.on.ca/eng/document/brochure/meread/meread.pdf>
- the resources at <http://www.edu.gov.on.ca/eng/curriculum/boysliteracy.html>

Text forms: Go to

- pages 11–13 of *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume 6: Writing*
- “Capacity Building Series, Secretariat Special Edition #5, Non-fiction Writing for the Junior Student” at <http://www.curriculum.org/secretariat/files/Apr18JuniorStudent.pdf>

Writing frames: Go to page 20 of *Me Read? No Way! A Practical Guide to Improving Boys’ Literacy Skills* at www.edu.on.ca/eng/document/brochure/meread/meread.pdf

Junior Division: Mathematics	Observations:	Strategies for Improvement:
Number Sense and Numeration	<p>Overall, students performed well on questions involving estimation.</p> <p>Students had greater difficulty with questions involving rate and ratio.</p> <p>Scorers noted that successful solutions to</p> <ul style="list-style-type: none"> question 28 often showed each step of the solution process. question 29 often used drawings with a common unit to represent and compare fractions. 	<p>Instruct students to differentiate between when to apply estimation strategies and when to use calculations.</p> <p>Provide students with opportunities to compare fractions using different representations (e.g. pictorial, percent, decimal, common denominator, common numerator).</p> <p>Continue to demonstrate a variety of ways to justify answers (e.g., diagrams).</p>
Measurement	<p>Students did well when asked to find the area of a rectangle but were less successful with questions involving the area of a parallelogram.</p> <p>Students struggled with the question involving the conversion of metric area units.</p> <p>Scorers noted that successful solutions to question 10 often included evidence of understanding the dimensions of the shapes needed to calculate their areas.</p>	<p>Provide opportunities for students to construct and deconstruct parallelograms using triangles to reinforce the area relationships.</p> <p>Provide students with practice converting from square metres to square centimetres using a factor of 100×100.</p>
Geometry and Spatial Sense	<p>Students performed equally well on open-response and multiple-choice questions involving transformations.</p> <p>Students did well identifying angles as obtuse, acute or right.</p> <p>Scorers noted that successful answers to question 7 included precise measurements and accurate use of rulers and protractors.</p>	<p>Continue to provide students with opportunities to develop their spatial sense by identifying, performing and describing transformations.</p> <p>Instruct students to make drawings when appropriate as part of their problem-solving process.</p>
Patterning and Algebra	<p>Overall, students continue to perform well on questions dealing with growing patterns.</p> <p>Scorers noted that successful solutions to question 9 often included representations (e.g., diagram, number sequence) of the next stages of the pattern.</p>	<p>Continue to model appropriate problem-solving strategies (e.g., act it out, make a model with concrete materials, draw a diagram, use guess-and-check, make a table) and provide students with opportunities to solve a variety of engaging problems.</p>
Data Management and Probability	<p>Students continue to be challenged by questions involving concepts of probability.</p> <p>In general, students performed well when required to create a broken-line graph.</p> <p>Scorers noted that successful solutions to question 8 compared probabilities using common representations (e.g., common denominators, percents or decimals).</p>	<p>Provide students with opportunities to strengthen their proportional reasoning through probability questions involving predicting and representing the probability of an outcome.</p> <p>Provide opportunities for students to create and interpret graphs with the same data but using different scales.</p>

Junior Division: Mathematics	Observations:	Strategies for Improvement:
Question Types	Students had difficulty with multiple-choice questions and open-response tasks involving a multi-step solution process.	Continue to provide opportunities for students to work in groups on questions involving a multi-step process to investigate different problem-solving strategies and to describe their similarities and differences.
Gender	Girls performed slightly better on open-response questions.	Have students work in mixed-gender groups to benefit from viewpoints of the other gender.
English Language Learners	Once again, English language learners scored slightly lower than the general Grade 6 population.	Continue to provide English language learners with opportunities to solve mathematical problems in contexts that strengthen their English-language skills.
Students with Special Education Needs (Excluding Gifted)	Students with special education needs did not perform as well as the general Grade 6 population in any strands. They had slightly more difficulty with multiple-choice than with open-response questions.	Provide opportunities for students to practise answering multiple-choice questions and develop strategies such as eliminating answer choices.

Junior Division: Mathematics

List of Resources

Except as noted, for the following suggested strategies for mathematics, go to

- www.eworkshop.on.ca;
- click “Numeracy Resources” under “Resources” and
- click “Expert Panel Reports/Guides to Effective Instruction” in the left-hand column.

The listed titles will appear on the right-hand side.

English language learners: Go to *Many Roots, Many Voices: Supporting English Language Learners in Every Classroom* at <http://www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf>

Estimation strategies: Go to pages 25–26 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Number Sense and Numeration, Grades 4 to 6: Volume 1, The Big Ideas*

Parallelograms: Go to pages 33–34 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Data Management and Probability, Grades 4 to 6*

Problem-solving strategies: Go to pages 38–45 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two, Problem Solving and Communication*

Proportional reasoning: Go to pages 41–45 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Number Sense and Numeration, Grades 4 to 6: Volume 1, The Big Ideas*

Transformations: Go to pages 66–72 of *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Geometry and Spatial Sense, Grades 4 to 6*