Think Literacy: Cross-Curricular Approaches, Grades 7-12

Think Literacy: Cross-Curricular Approaches, Grades 7-12 is a resource document developed by teachers for teachers of all subjects who have students who are struggling with literacy skills. This resource provides practical, hands-on, classroom-ready strategies and recommends related resources that apply across subject areas in Grades 7 to 12.

Getting Started

There are 5 components to this electronic file; each parallels one of the 5 tabbed sections within the print document.

To access any of these sections, click on the bokmarks to the left.

To return to this Getting Started page, click on the Think Literacy heading at the top of any page

Preface
The Preface provides information in two areas: About this resource document (scope, audience, contributors, key messages) and How to use this resource (format, considerations, accommodating learning needs).

Reading Strategies
The Reading Strategies section includes an introduction, examples of strategies to use when "Getting Ready to Read", when "Engaging in Reading", when "Reacting to Reading" and when "Reading Different Text Forms" as well as a series of "Posters for Instruction".

Writing Strategies
The Writing Strategies section includes an introduction, examples of strategies to use when "Generating Ideas', when "Developing and Organizing Ideas", when "Revising and Editing" and when "Writing for a Purpose", using writing templates, as well as a series of "Posters for Instruction".

Oral Communication
The Writing Strategies section includes an introduction, examples of strategies to use when doing "Pair Work", when working in "Small-group Discussions" and "Whole-class Discussions", when making "Presentations" as well as a series of "Posters for Instruction".

Appendices
The Appendices section includes an "Annotated Bibliography" of 13 professional resources and a bibliography of resources cited in the Tips and Resources sections. The Appendices also include a replica of the inside front and back covers of the print document. These graphic organizers connect instructional approaches to literacy skills needed by students who are struggling with reading and writing.

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CONTENTS

About this resource document

> In this document, *literacy* refers to reading, writing and oral communication skills in all subject areas for the purpose of developing and applying critical thinking skills.

Literacy skills are at the heart of learning. You already know that. Successful students are able to read for meaning, to write with clarity and purpose, and to participate productively in classroom discussions. But many of your students may be struggling with these skills, and that makes it harder for you to teach the content of your subject area. What can you do to help struggling learners without sacrificing content and continuing to meet the needs of all students?

The key is teamwork – a whole-school, cross-curricular approach to literacy learning. When teachers of all subjects use the same proven strategies to help their students read and write in the language of their subject discipline, they build on the students' prior knowledge, and equip them to make connections that are essential for continued learning. When a math teacher demonstrates how to *skim and scan* for *signal words* to help students solve complex math problems, these skills also prepare them to read any subject text more effectively. When a drama teacher uses a *web* or *concept map* to generate ideas for a one-act play and the science teacher uses a concept map in the science lab to hypothesize about an ecosystem, they reinforce literacy strategies for students.

Students who are explicitly taught a repertoire of reading, writing and oral communication skills, and become adept at using them, are then able to apply those skills in other contexts. They become effective communicators in an idea-fuelled and information-driven world.

Scope
The scope of this resource document evolved. This initiative began with a focus on students at risk. As the project developed, it became clear that strategies helpful to students at risk would benefit all students. Research and classroom experience show that the most effective way to help struggling learners is to incorporate proven instructional strategies in every classroom.

Audience
Literacy learning is a life-long process that belongs to every teacher. This resource document is intended for teachers of all subject areas from Grades 7 to 12. Mastery of the basic skills of reading, writing and oral communication does not end in elementary school. Teachers from Grades 7 to 12 who have students who are struggling with literacy skills will find practical approaches to help these students in all subject areas.

Contributors
This resource document was developed by teachers for teachers. Before beginning the document, the writers met with a group of elementary and secondary teachers to determine the qualities of a document that would best support effective instructional practice across curriculum areas. The writing team included classroom teachers and literacy consultants with extensive classroom experience in Grades 7 to 12, from public and Catholic school boards across Ontario. Team members contributed their expertise in adolescent literacy, English as a Second Language/ English Language Development (ESL/ELD), and Special Education. This resource document accompanies a report by a province-wide Expert Panel on Students At Risk that focuses on literacy and numeracy needs for students in Grades 7 to 12.

Key Messages

... About What Struggling Students Need

- to believe they can read and write
- to experience success in the classroom
- to learn through meaningful and challenging experiences
- to have lots of opportunities for purposeful talk – before, during and after all activities
- to have structured opportunities to discuss content area topics
- to build mutually supportive relationships with other students and with teachers

The need to guide adolescents to advanced stages of literacy is not the result of any teaching or learning failure in the preschool or primary years: it is a necessary part of normal reading development. Guidance is needed so that reading and writing develop along with adolescents' ever increasing knowledge of oral language, thinking ability, and knowledge of the world.
(Moore, Bean, Birdyshaw, and Rycik, 2000)

... For Teachers

- Focus instruction on *before, during* and *after* phases of learning.
- Provide students with modelling, teaching, guided practice, and ongoing feedback.
- Explicitly teach literacy strategies, but gradually release responsibility to the learner.
- Encourage risk-taking and view errors as part of the learning process.
- Encourage students to set goals for their own learning.
- Provide accommodations to support the learning.

... For School Literacy Teams

- Work with subject area/departments to determine literacy skills required in each discipline.
- Teach the reading and writing *strategies* while teaching subject *content.*
- Know your student population - their prior knowledge, culture and individual differences.
- Use consistent terms and graphic organizers to reinforce literacy skills.
- Acknowledge the successes of students and teachers.

How to use this resource

This document provides practical, hands-on, classroom-ready strategies and recommends related resources that apply across subject areas in Grades 7 to 12. Use it to expand your own instructional strategies and as a resource to promote school-wide professional talk.

There are three main sections in this document: Reading (R), Writing (W) and Oral Communication (O). Because literacy skills are interconnected, they enhance each other - awareness of reading strategies helps students become more effective writers; use of the writing process helps them become more critical readers. And for many students, especially those who struggle with reading and writing and with the curriculum content, speaking and listening skills can be the doorway to reading, writing and critical thinking.

Each strategy begins with a two-page spread containing all the information needed to use the approach in your classroom. Additional resources may be included after the two-page spread. The *Teacher Resource* is a starting point for thinking about your subject content. The *Student Resources* can be modified and used as handouts.

The left-facing page describes the strategy and its benefits, and offers tips and resources.

The right-facing page describes what teachers and students do before, during, and after the strategy.

R

Strategy

Brief description

Purpose
· The rationale for inclusion in this document

Payoff
· Benefits for the students

Tips and Resources
· Tips to help you use this approach
· Possible extension(s)
· Resources to support

Sources and recommended reading. See the bibliography for details.
*Cross references to other section

Further Support
· How you might further support students as they learn this strategy

Strategy

What teachers do	What students do
Before ·Steps for the teacher to implement the strategy…	·How students are engaged during the strategy…
During	
After	

R

Notes

Preface

Considerations when using this resource

- The division of this document into three separate sections is for purposes of organization and clarity. However, student literacy learning is enhanced when reading, writing, and oral communication skills and strategies are explicitly taught through an integrated program.

- To foster integrative cross-curricular programming, intermediate and secondary teachers can use this document to promote school and/or cross-panel discussions and reach agreement on when an approach will be taught, who will use the samples, and how the learning of the approach will be assessed.

> *We will improve learning when we collectively, intelligently and creatively focus our efforts on improving the teaching and learning process. The more we understand about the learner, the more we understand about meaningful and responsible assessment and evaluation, the more we understand about what is to be learned, the more we understand about instructional processes, and the more we understand about collectively acting on what we understand, then the more likely we are to make a difference*. (Bennett and Rolheiser, 2001)

- On the inside front and back covers, cross-curricular approaches are grouped by student/teacher needs in a visual organizer. These charts provide a quick and handy reference for locating information about and samples of classroom strategies.

- The strategies described in the document are not sequential or interdependent. Select the approaches that best meet the needs of your students and your subject area/discipline.

- Timelines for teaching and learning an approach may vary. For example, teachers may use an approach to get a concept across to students quickly or they may want to spend longer in teaching students how to use a particular approach.

- For some students, instructional and/or environmental accommodations are necessary to ensure learning. A list of potential accommodations that may be required follows.

- The specific and generic samples given in this document should serve as a springboard for designing your own classroom samples. Keep the samples that you develop and use with your students for sharing with other teachers and for contributing to future initiatives in writing cross-curricular resources for teachers.

- An annotated bibliography of relevant professional resources summarizes key messages, classroom strategies, and insights related to literacy learning.

> *Literacy floats on a sea of talk.* (James Britton, 1970)

Accommodating Learning Needs

Accommodations refer to the teaching strategies, supports, and/or services that are required in order for a student to access the curriculum and demonstrate learning. Instructional accommodations are changes in teaching strategies; environmental accommodations are changes to the classroom and/or school environment. These accommodations provide greater opportunity for students to be successful learners.

Instructional Accommodations	Environmental Accommodations
• Ability groupings • Assistive technology, such as text-to-speech software • Augmentative and alternative communications systems • Buddy/peer tutoring • Colour cues • Concrete/hands-on materials • Computer options • Contracts • Dramatizing information • Duplicated notes • Gesture cues • Graphic organizers • High structure • Increased breaks • Large-size fonts • Manipulatives • Mind maps • Non-verbal signals • Note-taking assistance • Organization coaching • Partnering • Reduced/uncluttered formats • Reinforcement incentives • Repeating information • Rewording/rephrasing information • Spatially-cued formats • Tactile tracing strategies • Taped texts • Time allowance for processing • Time-management aids • Tracking sheets • Visual cueing • Word retrieval prompts	• Alternative workspaces • Assistive devices or adaptive equipment • Background noise minimized • Headphone use • Instructor proximity • Quiet settings • Reduced audio/visual stimuli • Special lighting • Strategic seating • Study carrels

(Adapted from Course Profile; Ontario Secondary School Literacy Course)

Reading Strategies

Introduction to Reading Strategies

Getting Ready to Read:

Previewing a Text
Analyzing the Features of a Text
Finding Organizational Patterns
Anticipation Guide
Finding Signal Words
Extending Vocabulary (Creating a Word Wall)

Engaging in Reading:

Using Context to Find Meaning
Reading Between the Lines (Inferences)
Most/Least Important Idea(s) and Information
Sorting Ideas Using a Concept Map
Visualizing
Making Notes

Reacting to Reading:

Responding to Text (Graffiti)
Drawing Conclusions (I Read/I Think/Therefore)
Making Judgements (Both Sides Now)

Reading Different Text Forms:

Reading Informational Texts
Reading Graphical Texts
Reading Literary Texts
Following Instructions

Posters for Instruction: Reading

Before Reading - Ask Questions
During Reading - Ask Questions
During Reading - Understand the Text
During Reading - Make Inferences
During Reading - Visualize
During Reading - Make Connections
During Reading - Think to Read
During Reading - Take Good Notes
After Reading - Ask Questions
After Reading - Find the Main Idea(s)
After Reading - Think About the Text

Introduction to Reading Strategies

As students progress through school, they are asked to read increasingly complex informational and graphical texts in their courses. The ability to understand and use the information in these texts is key to a student's success in learning. Successful students have a repertoire of strategies to draw upon, and know how to use them in different contexts. Struggling students need explicit teaching of these strategies to become better readers.

Struggling readers need:
- knowledge of different types of texts and the best strategies for reading them.
- multiple and meaningful opportunities to practise reading in subject-specific contexts.
- opportunities to practise reading with appropriate resources.
- opportunities to talk about their reading and thinking.
- background knowledge in subject areas.
- expanded sight vocabularies and word-solving strategies for reading subject-specific texts.
- strategies for previewing texts, monitoring their understanding, determining the most important ideas and the relationships among them, remembering what they read, and making connections and inferences.
- strategies for becoming independent readers in any context.

Common Understandings About Reading

Reading is the active process of understanding print and graphic texts. Reading is a thinking process. Effective readers know that when they read, *what* they read is supposed to make sense. They monitor their understanding, and when they lose the meaning of what they are reading, they often unconsciously select and use a reading strategy (such as rereading or asking questions) that will help them reconnect with the meaning of the text. Reading skills and strategies can be taught explicitly while students are learning subject-specific content through authentic reading tasks.

Effective readers use strategies to understand what they read *before, during*, and after *reading*.
Before reading, they:
- use prior knowledge to think about the topic.
- make predictions about the probable meaning of the text.
- preview the text by skimming and scanning to get a sense of the overall meaning.
During reading, they:
- monitor understanding by questioning, thinking about, and reflecting on the ideas and information in the text.
After reading, they:
- reflect upon the ideas and information in the text.
- relate what they have read to their own experiences and knowledge.
- clarify their understanding of the text.
- extend their understanding in critical and creative ways.

Students can be taught to be strategic and effective readers. Struggling readers benefit from a variety of instructional approaches that demonstrate reading skills as subject content is taught. Direct teaching, thinking aloud, modelling, discussion, and small-group support are only a few of the approaches teachers use to help students become more strategic and effective readers in different contexts.

R

Getting Ready to Read: Previewing a Text

A well-designed textbook, website or other print resource has a variety of elements or features that are applied consistently to help the reader locate and use the material. Some texts have more of these features, and clearer cues, than others do. Previewing a course text can help students to identify the text features and use them efficiently.

Purpose
- Learn how to navigate subject-specific textbooks and resources.
- Examine the layout and features of a particular text, and how to use it.

Payoff
Students will:
- become familiar with different course texts and resources (print and electronic).
- use strategies for effectively previewing and locating information in different texts, using the table of contents, indices and/or navigation bar.

Tips and Resources
- Most informational texts use a variety of visual, graphic and text features to organize information, highlight important ideas, illustrate key concepts, and provide additional information. Features may include headings, subheadings, table of contents, index, glossary, preface, paragraphs separated by spacing, bulleted lists, sidebars, footnotes, illustrations, pictures, diagrams, charts, graphs, captions, italicized words or passages, boldface words or sections, colour, and symbols.
- For more ideas, see Teacher Resource, *Suggested Prompts for a Text-Features Search*.

Teaching Reading in Social Studies, Science, and Math, pp. 266-269
Beyond Monet, pp. 94, 105
Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 20-21.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 28-29, 42-43.
Reaching Higher Video.

Further Support
- Provide students with a copy of a course-related text that has all of the visual and graphic features (e.g., diagrams, charts, illustrations, captions, maps, headings, titles, legends) removed or blanked out. Ask students to scan the text and suggest what the blanked-out sections might be. Have students read the body of the text and summarize the information. Ask students to identify the parts of the text that they had difficulty reading, and suggest what additional features would help them to navigate and understand the text better. Alternatively, provide students with a copy of a course-related text showing the text features only, without the body of the text. Discuss what information they can gather from the features and what predictions they can make about the content. Note the connections among the features of a text, the words, and how they help readers understand the content.
- Encourage students to preview the features of a text before they read the content. Have partners share their previewing strategies.
- Have students create text search prompts for other course-related materials.

Getting Ready to Read: Previewing a Text

What teachers do	What students do
Before • Select a subject-related textbook, Web-site, or print or electronic resource. • Create a text search handout. Use ten to twelve prompts to guide students to particular features of the text (e.g., "List the major topics in this textbook." "Locate information about early trade unions." "Where do you find a summary of each chapter?" "What symbol tells you to pause and think?" "What symbol tells you to complete a process or experiment?") See Teacher Resource, *Suggested Prompts for a Text-Features Search*. • Read the prompts out loud, if needed.	• Ask clarifying questions about the prompts and the task. • Read the task prompts and note the features of text that might be useful in completing the task.
During • Ask students to work in pairs to complete the search within a specific time frame. • Have partners share their findings with another pair.	• Read and respond to the prompts. Record findings. • Share and compare findings. Use cooperative group skills to complete the task.
After • Discuss which items were easy and which items were challenging to find. • Ask students to suggest which features of text were very helpful and not very helpful, and which features should be added to the text. • Ask students to use the text features to complete a relevant reading task.	• Identify the easy and challenging prompts. • Identify the features of text they used and explain how they helped or hindered their task. • Use the text features appropriately to complete the reading task. Make con-nections between different texts, noting the features that are common to many texts and subject areas, and those that are unique to a particular text or subject area.

Notes

Suggested Prompts for a Text-Features Search

1.   Using the Table of Contents, find the chapter number for the topic _____ (e.g., *Electricity, Integers, Energy Resources, City Life*).

2.   In the Index at the back of the text, find and list all the pages that deal with _____ (e.g., *static electricity, compound interest, Boreal forest, Louis Riel*).

3.   On page _____, what is the purpose of the coloured box *(e.g., highlights an added illustration of a concept, or provides a profile of someone in a subject-related business/industry)*?

4.   What diagram appears on page _____? What provides an explanation of that diagram? How is it connected to other information on that page?

5.   In the Table of Contents, which topic is covered in Chapter Fourteen, Section 4?

6.   On page _____, what special feature helps you to identify the definition of the concept "ecosystem"?

7.   In the Index, how many page references are there for _____? Which reference provides you with the most complete information on the topic?

8.   In Chapter Six, how many subheadings appear throughout the chapter? Where is the sub-heading that identifies _____ (e.g., *an investigation, summary, activity*)?

9.   Open the text to page _____. Why is this page important to the text and to the context of this subject (e.g., *It may be a periodic table, map of the world or organizational diagram of the federal government, which provides a framework for understanding the chapter.)*?

10.   Where would you go in the textbook to (quickly) find information about _____?

11.   Turn to page _____. Read the first paragraph and find the words in italics. What is the purpose of this feature?

12.   Open the text to pages _____and _____. Scan the words in bold-face type. Why did the writers use this feature?

13.   Open the text to page _____. Look at the graphic (e.g., *map, photograph, graph*). What is the purpose of this feature?

R

Getting Ready to Read: Analyzing the Features of a Text

There's more to a good book or Website than the words. A well-designed textbook uses a variety of graphical and text features to organize the main ideas, illustrate key concepts, highlight important details, and point to supporting information. When features recur in predictable patterns, they help the reader to find information and make connections. Readers who understand how to use these features spend less time unlocking the text, and have more energy to concentrate on the content.

In this strategy, students go beyond previewing to examine and analyze a textbook and determine how the features will help them to find and use the information for learning. You can use the same strategy to deconstruct other types of text – in magazines, e-zines, newspapers, e-learning modules, and more.

Purpose
- Familiarize students with the main features of the texts they will be using in the classroom, so that they can find and use information more efficiently.
- Identify patterns in longer texts.
- Create a template that describes the main features of the texts, and post it in the classroom so that students can refer to it.

Payoff
Students will:
- develop strategies for effectively locating information in texts.
- become familiar with the main features of the texts they will be using.

Tips and Resources
- Text features may include headings, subheadings, table of contents, index, glossary, preface, paragraphs separated by spacing, bulleted lists, sidebars, footnotes, illustrations, pictures, diagrams, charts, graphs, captions, italicized or bolded words or passages, colour, and symbols.
- See Student/Teacher Resource, *How to Read a History Textbook – Sample.*

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp.20-21.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 28-29, 40-41.
Teaching Reading in the Content Areas: If Not Me, Then Who?, pp.16-18.

* See also **Previewing a Text** to provide students with another opportunity to look at text features*.

Further Support
- Provide students with an advance organizer to guide them as they read a particular text. This organizer might be a series of prompts that ask the students to preview particular features of text and note how they are related to the main body of the text.
- Teach students the SQ4R strategy (Survey, Question, Read, Recite, Review, Reflect). For example, **survey** the title, headings, subheadings, maps, pictures, sidebars, bold or italic print, etc. Turn the title, headings, and captions into **questions**. Read the passage to answer questions. **Recite** the answers to their questions to summarize the passage. **Review** the passage to remember the main idea and important information and details. **Reflect** on the passage and process to check that they understand the text, and to generate additional questions.
- Model for students how to use the features of computer software and Internet Websites to help them navigate and read the program or site (e.g., URLs, pop-up menus, text boxes, buttons, symbols, arrows, links, colour, navigation bar, home page, bookmarks, graphics, abbreviations, logos).

Getting Ready to Read: Analyzing Features of a Text

What teachers do	What students do
Before • Ask students to recall a magazine or informational book they recently read, or a Website they recently viewed. Ask them to describe how the text looked and how they found information. Ask students what they remember about the content, and have them suggest possible reasons for how they were able to locate and/or remember information. • Select and provide copies of a text, resource or textbook chapter. Ensure every student has a copy of the selected text. • Organize students into groups of 3 to 5. Assign two different sequential chapters or sections to each group. • Ask groups to scan the assigned chapters and note features of the text that are similar between the chapters and those that are unique to a chapter. Groups record their findings on chart paper (e.g., point-form notes, Venn diagram, compare/contrast chart). • Ask each group to send an "ambassador" to the other groups to share one thing the group discovered, trading it for one thing the other group discovered. The ambassadors return to their original group and report.	• Recall something recently read or viewed and identify some features of that particular text. • Note similarities and differences among the responses from other students. • Make connections between what they remember and the features of the text. • Quickly scan chapters, and note the different features of the text. • Contribute to the group discussion and chart-paper notes. • Share findings with other groups, noting such things as chapter previews, tables of contents, charts and graphs, typography (italics, bold), questions, chapter reviews/summaries, timelines, and headings.
During • Remind students that textbooks have many different elements or features that are designed to help students learn the material being presented. Some text books have a greater variety of elements than others. • Ask each group to report about the features of their text for example, some textbooks contain an annotated overview of the text-book layout. • Create a textbook or chapter template on chart paper, indicating the common features and noting any unique features (see Student/Teacher Resource, *How to Read a History Textbook – Sample.*).	• Share the groups' findings. • Contribute to the template that the class develops.
After • Assign a relevant reading task to a small group so that students can practise using the features of the text to locate information and help them understand and remember what they read. • Encourage students to use the template to make predictions about where they might find particular information or use the features to complete a task. • Discuss how this strategy might help students navigate Web sites, e-zines, and online media.	• Use the features of text to complete the assigned reading task. • Note the features that help the reader to locate, read, understand, and remember information. • Refer to the template for future reading tasks. • Recall how they have used features of electronic texts to help find and read information.

Notes

How to Read a History Textbook - Sample

Textbook Title:	Patterns of Civilization (Subject Focus)
Unit Topics:	This is a list of the historical time periods included.
Unit Introduction:	This gives a brief overview of the historical time period to be discussed.
Chapters:	These sections look at smaller time frames or the development of specific civilizations. The chapter headings are numbered in bold-face type (red) and identify the general topics to be covered.
Subtopic Sections:	There are 4-5 subtopics in each chapter on a specific topic. The sections are in smaller bold-face type (blue).
Section Review:	At the end of each subtopic section there are questions and a short summary that help you remember what you have read. This can help you to review for tests and quizzes.
Chapter Review:	At the end of each chapter is a review or summary. The important concepts, terminology, events and people are identified. Review questions are included, organized into these categories: Recall (What happened?); Infer (What's between the lines?); and Draw Connections and Conclusions (What's beyond the lines?).
Italicized Words:	These are important concept words that are defined in the boxes at the bottom of the page, and in the glossary. A pronunciation guide is included to help you sound out the word in syllables.
Visuals:	There are maps, charts and timelines in every section. The maps help you find places and how they are related to a modern map. The charts give information about the time period. The timelines show the important events in the historical period in the section or chapter.
Web Links:	These are addresses for Websites that offer more information or examples on a specific topic.
Index:	This provides a quick way to look up specific information or concepts. The page references are given.

R

Getting Ready to Read: Finding Organizational Patterns

Information can be grouped and ordered in different ways – for example: sequentially (as in a procedure), by order of importance (as in a persuasive argument), or by classification (as in a periodic table). The way information is organized in a text is a cue to help the reader understand the ideas and make meaningful connections.

Purpose
- Preview the text structure and identify different organizational patterns.
- Become familiar with the organizational patterns of a text.

Payoff
Students will:
- make connections between reading and writing tasks.
- learn to read the text more independently.
- practise reading strategies, including skimming, scanning, rereading, making predictions, and making connections.

Tips and Resources
- For descriptions of different organizational patterns and how to spot them, see Teacher Resource, *Types of Organizational Patterns (and How to Find Them).*
- Many texts combine several organizational patterns, depending upon the topic, content, purpose and audience.
- Graphic organizers (such as timelines, flow charts, and mind maps) can help readers to "see" the relationship(s) among ideas more clearly.

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 54-55.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 28-29.

Further Support
- Provide struggling students with a graphic organizer to record the main ideas, relevant information, and/or significant concepts (e.g., flow chart, comparison chart, timeline).
- Help students to preview the text structure before they read by giving them questions to consider, or by guiding them to look for recurring information or signal words.
- Develop class reference charts for the different organizational patterns, showing the purpose, when/where the pattern might be used, characteristics, signal words, and related questions. Use these same concepts to create graphic organizers for students who need additional help.

Getting Ready to Read: Finding Organizational Patterns

What teachers do	What students do	Notes
Before • Select a text on the topic being studied (e.g., a chapter in a textbook, article in a newspaper or magazine, excerpt from reference material, or Website). Choose something short that illustrates an organizational pattern that is common to the subject area (e.g., procedure, explanation, description, process). • Provide students with the selected reading material and ask students to explain how the text is an example of this particular organizational pattern. • Provide students with an appropriate graphic organizer for the pattern, or ask students to create a graphic organizer (e.g. flow chart, comparison chart, time line…).	• Recall what they already know about the organizational pattern. Identify when/where they have seen or used that particular pattern. • Identify how the reading passage is organized and the characteristics that indicate it belongs to that particular organizational pattern. • Examine or create a graphic organizer that follows the particular pattern.	
During • Introduce the organizational pattern, explaining its purpose and characteristics, when/where it might be used, why writers use it, signal words to look for, and possible questions it will answer. • Read from the selected passage and demonstrate how to fill in the graphic organizer as you read. • Note that using the organizer can help students understand and remember what they read. See *Finding Signal Words in Text –Example*.	• Read the passage and contribute to the graphic organizer.	
After • Ask students to locate another example of this organizational pattern in their textbook or reference materials. **Alternatively,** provide students with a second example on the same topic. • Ask students to read the example and use the graphic organizer to record the ideas and information. • Have students use the organizational pattern to summarize the ideas and information from the readings.	• Find an example of the organizational pattern in a text or resource on a relevant topic. • Read the example and record the ideas and information on the same graphic organizer. • Reread the graphic organizer notes and use the organizational pattern to write a summary of the readings.	

Types of Organizational Patterns (and How to Find Them)

Spatial Order	**Spatial Order**
• What specific person, place, thing or event is described? • What details are given? • How do the details relate to the subject? • Does the description help you to visualize the subject? • Why is the description important? • Why did the author choose this organizational pattern?	Information and ideas are arranged in an order related to the geographic or spatial location (e.g., left to right, top to bottom, foreground to background). This pattern is often used in descriptions, maps, diagrams and drawings help to record spatial details. Signal Words: above, across from, among, behind, beside, below, down, in front of, between, left, to the right/left, near, on top of, over, up, in the middle of, underneath.
Order of Importance	**Order of Importance**
• What is the main idea? • What are the important details? • Are there examples, facts, or statistics to support the main idea? • What is the most important detail? • What is the least important detail? • How are the details organized? • Why did the author choose this organizational pattern?	Information and ideas are arranged in order of importance (e.g., least important to most important; or the 2-3-1 order of second most important, least important and most important). This pattern can be used in persuasive writing, reports, explanations, news reports and descriptions. Pyramid, sequence and flow charts are examples of visual organizers. Signal Words: always, beginning, first, finally, following, in addition, most important, most convincing, next.
Cause/Effect	**Cause/Effect**
• What process, event or subject is being explained? • What is/are the cause(s)? • What is/are the effect(s)? • What are the specific steps in the process? • What is the outcome, product or end result? • How does it work or what does it do? • How are the causes and effects related? Is the relationship logical? • Why did the author choose this organizational pattern?	Details are arranged to link a result with a series of events, showing a logical relationship between a cause and one or more effects (e.g., describe the cause first and then explain the effects, or describe the effect first and then explain the possible causes). It is sometimes called a problem/solution order or process order, and may be used in explanations, descriptions, procedures, process reports, and opinion writing. Cause-and-effect charts and fishbone diagrams can be used to illustrate the relationships. Signal Words: as a result of, because, begins with, causes, consequently, due to, effects of, how, if…then, in order to, leads to, next, since, so, so that, therefore, when…then.
Generalization	**Generalization**
• What generalization is the author making? • What facts, examples, statistics or reasons are used to support the generalization? • Do the details appear in a logical order? • Do the details support or explain the generalization? • Why did the author choose this organizational pattern?	Information is arranged into general statements with supporting examples. The pattern may be general-to-specific or specific-to-general. Generalizations may appear at the beginning or the end of a report, essay, summary, or article. Webs, process charts, and pyramid charts help to record the causal sequence that leads to a specific outcome. Signal Words: additionally, always, because of, clearly, for example, furthermore, generally, however, in conclusion, in fact, never, represents, seldom, therefore, typically.

Types of Organizational Patterns (and How to Find Them)

Time Order • What sequence of events is being described? • What are the major incidents or events? • How are the incidents or events related? • What happened first, second, third, etc.? • How is the pattern revealed in the text? • Why did the author choose this organizational pattern?	**Time Order** Details are arranged in the order in which they happen. This is also called chronological order, and is often used in incident reports, biographies, news articles, procedure, instructions, or steps in a process. Visual organizers include timelines, flowcharts, and sequence charts. Signal Words: after, before, during, first, finally, following, immediately, initially, next, now, preceding, second, soon, then, third, today, until, when.
Compare/Contrast • What is being compared? • What is the basis for the comparison? • What characteristics do they have in common? • In what ways are the items different? • Did the author make a conclusion about the comparison? • How is the comparison organized? • Why did the author choose this organizational pattern?	**Compare/Contrast** Details are arranged to show the similarities and differences between and among two or more things (e.g., ideas, issues, concepts, topics, events, places). This pattern is used in almost all types of writing. Venn diagrams, graphs and cause/effect charts illustrate the comparison. Signal Words: although, as well as, but, common to, compared with, either, different from, however, instead of, like, opposed to, same, similarly, similar to, unlike, yet.
Classification • What is being classified? • What is the concept being defined? • How are items being grouped? • What are the common characteristics? • What are the categories? • What examples are given for each of the item's characteristics? • Is the grouping logical? • Why did the author choose this organizational pattern?	**Classification** Details are grouped in categories to illustrate or explain a term or concept. This pattern is often used in descriptions, definitions and explanations (e.g., a writer describes each category, its characteristics, and why particular information belongs in each category). Classification notes, column charts, T-charts, tables and webs can be used to group ideas and information. Signal Words: all, an example of, characterized by, cluster, for instance, group, is often called, looks like, many, mixed in, most, one, part of, the other group, resembles, similarly, sort, typically, unlike, usually.
Combined/Multiple Orders • What is the topic or subject? • What is the main idea? • What are the relevant details? • How are the ideas and information organized? • What organizational patterns are used? • Why did the author choose these organizational patterns?	**Combined/Multiple Orders** Many textbooks and reference materials use many organizational patterns to present information and ideas. Sometimes a single paragraph is organized in more than one way, mixing comparison/contrast, cause/effect and order of importance. Tables and webs can be used to illustrate the links among different organizational patterns. Look for the patterns and trends in the signal words.

R

Getting Ready to Read: Anticipation Guide

What we already know determines to a great extent what we will pay attention to, perceive, learn, remember, and forget. (Woolfolk, 1998)

An *Anticipation Guide* is a series of questions or statements (usually 8 to 10) related to the topic or point of view of a particular text. Students work silently to read and then agree or disagree with each statement.

Purpose
- Help students to activate their prior knowledge and experience and think about the ideas they will be reading.
- Encourage students to make a personal connection with a topic or unit of work so that they can integrate new knowledge with their background experience and prior knowledge.

Payoff
Students will:
- connect their personal knowledge and experience with a curriculum topic or issue.
- engage with topics, themes and issues at their current level of understanding.
- have a purpose for reading subject-area text.
- become familiar and comfortable with a topic before reading unfamiliar text.

Tips and Resources
- An anticipation guide works best when students are required to read something that contains unfamiliar information. The idea of the guide is to raise students' awareness of related issues and help them make connections with what is familiar and unfamiliar about that text.
- In creating your anticipation guide, write open-ended statements that challenge students' beliefs. Avoid using statements that are "right" or "wrong" or that ask simply for a "yes" or "no" response. You don't want statements such as, "School cafeterias should not sell so much junk food." Instead, write "Teenagers consume more junk food than is good for them."
- · For ideas to help you craft the statements, see Teacher Resource, *Anticipation Guide – Sample Statements* based on Chapter 5 of *Canada: The Story of a Developing Nation*
- For a blank anticipation guide you can use for this activity, see Student Resource, *Anticipation Guide Template.*

When Kids Can't Read, What Teachers Can Do, pp. 74-80.

Further Support
- Put students in pairs to complete the anticipation guide if they are having trouble making connections with the theme or topic, or if they are having trouble with the language (for example, ESL students).
- To provide an opportunity for struggling students to contribute in a more supportive situation, divide the class into small groups of four or five and ask them to tally and chart their responses before participating in a whole-class discussion.
- Reads statements aloud to support struggling readers.

Getting Ready to Read: Anticipation Guide

What teachers do	What students do
Before • Preview the text to find themes or big ideas. • Using Student Resource, *Anticipation Guide Template*, create a one-page anticipation guide with eight or ten general statements about these themes, each requiring the reader to agree or disagree; e.g., "You should always tell other people exactly what you think about them." • Distribute copies of the anticipation guide to the students. Explain that this is not a test, but an opportunity for them to explore their own thoughts and opinions. They complete the guide first individually and then share their thoughts in a whole-class discussion. • To engage students in a whole-class discussion, start with a simple hand-count of the numbers of students who agreed or disagreed with a particular statement. Then ask the students who disagreed to share their thinking, followed by those students who agreed with the statement. • Record (or ask a student to record) some of the key points made during the discussion, using a "T- chart" (agree/disagree) on the board or an overhead.	• Working individually, read each statement on the anticipation guide and check off responses. • Contribute responses in the class discussion and explain them.
During • Explain the topic of the reading assignment and how it connects with anticipation guide statements and discussion. • Ask students to keep the guide beside the text as they read it, so that they can jot down page numbers that correspond to the issues.	• Read the assigned text (certain pages, a chapter, or alternative resource such as a magazine article) and jot down page numbers beside each agree/disagree statement (for information that relates to the issue).
After • Ask students to return to the statements and to make notes from what they have discovered in their textbook that may confirm or change their opinions.	• Make notes that confirm or change their opinions about the statements.

Notes

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Anticipation Guide - Sample Statements

- Circle "Agree" or "Disagree" beside each statement below before you read your history textbook, *Canada: The Story of A Developing Nation*.
- Following our class discussion of these statements, you will read Chapter 5 in the textbook, noting page numbers that relate to each statement.
- When you have finished reading, consider the statements again based on any new information you may have read. Circle "Agree" or "Disagree" beside each statement and check to see whether your opinion has changed based on new evidence.

Before Reading	Statements*	Page #	After Reading
1. Agree/ Disagree	A good citizen always does what the government tells him/her.		Agree/ Disagree
2. Agree/ Disagree	People who don't own land have no right to be on it.		Agree/ Disagree
3. Agree/ Disagree	True leaders are always recognized for the rightness of their causes.		Agree/ Disagree
4. Agree/ Disagree	Might is always right.		Agree/ Disagree
5. Agree/ Disagree	People who are native to a country should be given priority in making any decisions about it.		Agree/ Disagree
6. Agree/ Disagree	Mean people eventually get what they deserve.		Agree/ Disagree
7. Agree/ Disagree	Whenever there is a disagreement, majority opinion should rule.		Agree/ Disagree
8. Agree/ Disagree	If followers commit a wrongful act, the leader should pay the price.		Agree/ Disagree

*Statements based on Chapter 5 of *Canada: The Story of a Developing Nation*, Toronto: McGraw-Hill Ryerson, 2000.

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Anticipation Guide - Template

- Circle "Agree" or "Disagree" beside each statement below before you read your textbook, _____.

- Following our class discussion of these statements, you will read Chapter ___ in the textbook, noting page numbers that relate to each statement.

- When you have finished reading, consider the statements again based on any new information you may have read. Circle "Agree" or "Disagree" beside each statement and check to see whether your opinion has changed based on new evidence.

Before Reading	Statements*	Page #	After Reading
1. Agree/ Disagree			Agree/ Disagree
2. Agree/ Disagree			Agree/ Disagree
3. Agree/ Disagree			Agree/ Disagree
4. Agree/ Disagree			Agree/ Disagree
5. Agree/ Disagree			Agree/ Disagree
6. Agree/ Disagree			Agree/ Disagree
7. Agree/ Disagree			Agree/ Disagree
8. Agree/ Disagree			Agree/ Disagree

R

Getting Ready to Read: Finding Signal Words

Writers use signal words and phrases (also called *transition words* or *connectors*) to link ideas and help the reader follow the flow of the information.

Purpose
- Preview the text structure.
- Identify signal words and phrases, and their purposes.
- Familiarize students with the organizational pattern of a text.

Payoff
Students will:
- make connections between reading and writing tasks in related subject-specific texts.
- read and reread subject-specific reading material.
- practise their reading strategies of skimming, scanning and rereading; make predictions about the topic and content as they read and reread; learn signal words; and use the signal words when summarizing.

Tips and Resources
- *Signal words* are words or phrases that cue the reader about an organizational pattern in the text, or show a link or transition between ideas. For an example, see Teacher Resource, *Finding Signal Words in Text – Example.* For a list of signal words, see Teacher Resource, *Types of Organizational Patterns (and How to Find Them)*.
- *Organizational patterns* include sequence, comparison, problem/solution, pro/con, chronological, general to specific, cause/effect, and more. For more information, see *Finding Organizational Patterns*.
- A *graphic organizer* provides a visual way to organize information and show the relationships among ideas (e.g., a timeline, flow chart, or mind map). For an example, see Teacher Resource, *Sample Flow Chart with Signal Words to Organize Thinking*.

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp., 24-25, 54-55.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 30-31.
Reaching Higher: Making Connections Across the Curriculum: Strategies to Support the Development of Literacy Skills in All Subject Areas, pp. 7-8.

Further Support
- Before students read an unfamiliar or challenging selection, provide them with the signal words and the related organizational pattern (e.g., *first, second, next, then, following*, and *finally* indicate a sequence of first to last).
- Encourage students to scan reading passages to identify signal words and preview the text structure before they read.
- Have students reread an excerpt from a familiar subject-specific resource. (Students may read independently, with a partner, or listen as another person reads aloud.) Small groups identify the signal words that cue a text structure, link ideas or indicate transitions between ideas. Small groups share and compare their findings.

Getting Ready to Read: Finding Signal Words

What teachers do	What students do
Before • Show a familiar text passage that has signal words highlighted (e.g., *before*, *after*, *during*, *next*, *during*, *on top of*, *next to*, *in addition*). • Tell students that authors use particular words to link ideas together and organize their writing, and to help readers understand the flow of ideas. • Have students determine the pattern (sequential, compare and contrast) of these words and suggest possible purposes for them in this reading passage. • Identify the contextual information that these words give to the meaning of the text (e.g., time, location, sequence, importance, summary, comparison, contrast). • Model for students how to use these words to provide hints for reading the passage.	• Scan the familiar passage to identify highlighted words and phrases. • Group and sort words. • Categorize words and identify possible headings for the categories. • Use the signal words to predict the text structure and organizational pattern.
During • Ask partners to scan the selected text and identify the words the writer has used to help guide their reading. • Ask students to identify some of the signal words and note how they relate to the meaning of the passage (e.g., "These signal words indicate a sequence. This will help me track the ideas and information in order. A sequence pattern sometimes means I will be reading a procedure or a set of instructions."). • Ask students to use the signal words to help them read to understand the ideas and information in the passage.	• Identify and record signal words. • Compare their words with the findings from other partners. • Use the signal words as clues to find the meaning of the text. • Read the passage and identify the main idea. • Orally share main idea with a partner.
After • Model how to summarize the main ideas using the signal words and phrases to organize the summary. • Create a class chart of the signal/ transition words and how they might be used to help the reader understand the text. • Model for students how to create a personal dictionary of signal words and their meanings. • Ask students to describe how using the signal words helped them to understand and summarize the content. Students might record their responses in a learning log or share orally with a partner.	• Write a brief summary of the passage, using the signal words to organize the summary. • Contribute to the class reference chart. • Add words to personal dictionaries. • Describe how they used the signal words to help understand what they read.

Notes

Sample Flow Chart with Signal Words to Organize Thinking

After reading a process description of the stages involved in mixing concrete, students might complete a flow chart to help them remember the sequence of steps

Mixing Concrete

First...
- Choose a mixing site with a clean, smooth, flat surface, such as a wheelbarrow or mortar box.

Next...
- Measure the ingredients.
- Layer sand, gravel, then cement.
- Mix dry ingredients with a concrete hoe.

Then...
- Measure the amount of water needed.
- Make a depression in dry mix and pour in water, a little at a time.
- Mix thoroughly.
- Add more water and keep mixing thoroughly.

Finally...
- Test the concrete using a settling test. (Smack the concrete with the back of the shovel, then jab it with a hoe to make ridges. If the ridges slump or disappear, there is too much water; if you can't create ridges, there is too little water.)

In conclusion...
- Make sure you mix properly and thoroughly by scraping the bottom and sides of the wheelbarrow.
- The mix should be an even colour.

Flow Chart with Signal Words to Organize Thinking

Sequence Flow Chart

First....

Next...

Then...

Finally...

In conclusion...

R

Finding Signal Words in Text - Example

The heading asks: "How does light enter your eye?" I will look for the answer to this question as I read. I can use signal words and the organizational pattern to help me understand how light enters your eye.

As I scan the section, I notice the words "*If you compare, both, in the same way,* and *like".* This tells me that the writer probably uses comparison to explain how light enters the eye.

As I read more closely, I notice the words "*If you compare the eye to the camera."* Now I know what the eye is being compared to. The hole in the eye is called the pupil and the camera hole that lets light in is called the aperture.

One way of comparing two things is to describe one item fully, then describe the other item. I notice that the next paragraph describes the eye and that the third paragraph describes the camera.

How Does Light Enter Your Eye?

The Hole to the World
You have learned that light either travels from a source to your eyes or reflects off an object to your eyes. But how exactly does light enter your eye? If you compare the eye to the camera, you will see that both have a hole that lets in light.
In the eye, this hole is called the **pupil.**
In the camera, it is the **aperture.**

The pupil of your eye is surrounded by a band of muscle, called the iris. This band controls the size of the pupil, and so controls the amount of light that can enter your eye. In dim light, the iris opens and pupil dilates, or becomes wider, so you can gather more light. In bright light, such as outside, your iris closes down so the eye receives just the right amount of light. This happens automatically, without your conscious control.

In the same way, the **diaphragm** changes the size of the aperture of a camera lens to allow in the proper amount of light. The shutter of a camera acts like a door. If the shutter is open for a long time, more light enters the camera. Which part of your eye is like a camera's shutter?

Kyn Barker, et al. Science and Technology 8. (Toronto: Addison Wesley, 2000) p. 192.

R

Getting Ready to Read: Extending Vocabulary (Creating a Word Wall)

Students are required to learn, on average, over 2 000 words each year in various subject areas. Those who have trouble learning new words will struggle with the increasingly complex texts that they encounter in the middle and senior school years. A *word wall* is a wall, chalkboard or bulletin board listing key words that will appear often in a new unit of study, printed on card stock and taped or pinned to the wall/board. The word wall is usually organized alphabetically.

Purpose
- Identify unfamiliar vocabulary and create a visible reference in the classroom for words that will appear often in a topic or unit of study.

Payoff
Students will:
- practise skimming and scanning an assigned reading before dealing with the content in an intensive way. Students will then have some familiarity with the location of information and with various elements of the text.
- develop some sense of the meaning of key words before actually reading the words in context.
- improve comprehension and spelling because key words remain posted in the classroom.

Tips and Resources
- *Skimming* means to read quickly – horizontally – through the text to get a general understanding of the content and its usefulness.
- *Scanning* means to read quickly – vertically or diagonally – to find single words, facts, dates, names, or details.
- For directions, see Student Resource, *Skimming and Scanning to Preview Text*.
- Before building the word wall, consider using **Analysing the Features of Text** to help students become familiar with the text.
- Consider posting certain words for longer periods (for example: words that occur frequently in the unit, words that are difficult to spell, and words that students should learn to recognize on sight).
- Have students refer to the word wall to support their understanding and spelling of the words.
- For a sample word wall, see Teacher Resource, *Word Wall Sample for Grade 9 Science*.

Words, Words, Words pp. 70-71.
When Kids Can't Read, What Teachers Can Do, Chapter 10.
Reaching Higher – Making Connections Across the Curriculum, p. 7-8.
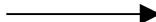
Further Support
- Add a picture to the word cards (preferably a photograph from a magazine) as a support for ESL students and struggling readers.
- Provide each student with a recording sheet so that they can make their own record of the key words for further review.
- If it appears that students will need additional support, review the terminology on the word wall in the two classes following this activity, using Take Five or Think/Pair/ Share, which are described in the Oral Communication section.

R

Getting Ready to Read: Extending Vocabulary (Creating a Word Wall)

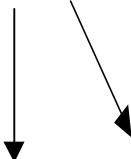| What teachers do	What students do	Notes
Before • Before class, preview the text for key vocabulary. • Prepare strips of card stock (approximately 4" x 10") for words. • Divide students into groups of 3. • Provide stick-on notes, markers, and masking tape or pins for each groups of students. • Explain to students that together the class will find key vocabulary in the assigned text, and will help each other to understand and spell the key vocabulary by creating a "word wall" in the classroom that they can refer to for the duration of that particular topic. • Distribute Student Resource, *Skimming and Scanning to Preview Text*, and read and clarify the techniques with students.	• With their group find an appropriate space where they can talk face-to-face and write down the words. • Find the chapter or get a copy of the assigned text. • Follow along on the handout as the teacher reviews skimming and scanning.	
During • Ask students to skim the text to get a general sense of what's in it and where things are. • Engage students in some general discussion of the topic, making a few brief notes on the board about big ideas. • Direct students to independently scan the text for unfamiliar words. • Ask students to create a personal list of 10 unfamiliar words. • Direct students to small groups and ask the groups to compare personal lists and create a group master list. • Distribute eight pieces of card stock (approx. 4" x 10"), markers and pieces of masking tape to each group.	• Skim the text, looking at illustrations and subtitles to get a general idea of the topic of the text. • Scan the text for words they do not know, marking them with stick-on notes (optional) and then making a personal list of the words. • Compare personal lists. Choose the words for a group master list. • In each group, print the key vocabulary words in large letters on card stock and tape or pin them to the blackboard or bulletin board, preferably alphabetically.	
After • Lead some discussion of the words and ask students to speculate on their meaning. If appropriate, describe prefixes and suffixes that are unique or common to the subject area. • Ask each group to look up the meaning of its words and then to explain the meaning to the rest of the class.	• Use the glossary in the textbook dictionary(ies) to find the meaning of the words. • Present their words to the rest of the class. • Add the meaning to the words on the cards in smaller letters.	

Skimming and Scanning to Preview Text

Skimming	
What is it?	When you SKIM, you read quickly to get the main idea of a paragraph, page, chapter, or article, and a few (but not all) of the details.
Why do I skim?	Skimming allows you to read quickly to get a general sense of a text so that you can decide whether it has useful information for you. You may also skim to get a key idea. After skimming a piece, you might decide that you want or need to read it in greater depth.
How do I skim? Read in this direction. ⟶	1. Read the first few paragraphs, two or three middle paragraphs, and the final two or three paragraphs of a piece, trying to get a basic understanding of the information. 2. Some people prefer to skim by reading the first and last sentence of each paragraph, that is, the topic sentences and concluding sentences. 3. If there are pictures, diagrams, or charts, a quick glance at them and their captions may help you to understand the main idea or point of view in the text. 4. Remember: You do not **have to read every word when you skim.** 5. Generally, move your eyes horizontally (and quickly) when you skim.

Scanning	
What is it?	When you SCAN, you move your eyes quickly down a page or list to find one specific detail.
Why do I scan?	Scanning allows you to locate quickly a single fact, date, name, or word in a text without trying to read or understand the rest of the piece. You may need that fact or word later to respond to a question or to add a specific detail to something you are writing.
How do I scan? Read in this direction.	1. Knowing your text well is important. Make a prediction about where in a chapter you might find the word, name, fact, term, or date. 2. Note how the information is arranged on a page. Will headings, diagrams, or boxed or highlighted items guide you? Is information arranged alphabetically or numerically as it might be in a telephone book or glossary? 3. Move your eyes vertically or diagonally down the page, letting them dart quickly from side to side and keeping in mind the exact type of information that you want. Look for other closely associated words that might steer you towards the detail for which you are looking. 4. Aim for 100% accuracy!

Word Wall Sample for Grade 9 Science

Word Wall

amoeba	cell	genetic	nucleus
abiotic	ecology	hybrid	propagation
biosphere	ecosystem	mitosis	species

Word Cards with Definitions

biosphere
The portion of planet Earth that supports life and the living organisms within it.

hybrid
An organism resulting from crossing individuals of two different but closely related species.

R

Engaging in Reading: Using Context to Find Meaning

Writers use a variety of ways to convey the meaning of unfamiliar words and concepts. These include definitions, examples, descriptions, illustrations, clarifications, parenthetical notes, comparisons, elaborations, and typographical cues.

Purpose
- Help students to infer the meaning of unfamiliar words and concepts, using clues from the text.

Payoff
Students will:
- be able to read subject area texts more independently.
- discuss important concepts related to the subject.
- understand how to find context clues and make good use of them.
- monitor their understanding while reading different texts.

Tips and Resources
- *Context* refers to the text surrounding a word or passage, or the conditions that surround something.
- Effective readers use their knowledge about words and text structures, and their prior knowledge about a subject, to help figure out unfamiliar words and concepts in new contexts.
- For tips, see Student Resource, *Clues for Using Context to Find Meaning*.
- For subject-specific examples, see the following:
  - Teacher Resource: *Using Context to Find Meaning – Science & Technology Examples.*
  - Teacher Resource: *Using Context to Find Meaning – Electricity Example.*
  - Teacher Resource: *Using Context to Find Meaning – Geography Examples.*

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 40-41.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, pp. 38-39.
When Kids Can't Read, What Teachers Can Do, Chapter 9.
Words, Words, Words, pp. 16-31, 51, 55, 130-131, 136, 139.

Further Support
- At the beginning of a unit, pre-teach important concepts and unfamiliar vocabulary. For example, for a history lesson on the Great Depression, describe terms such as the economy, stock market crash, migrant, and dust bowl.
- Use graphic organizers (such as concept attainment charts, concept ladders, or concept flow charts) to help students see connections and use relevant vocabulary.
- Take five minutes at the beginning of a reading task to examine a particular paragraph or section that has an unfamiliar word or concept. Model for students how to use the context of the sentences and paragraphs to determine the meaning of the word or concept.
- Have students create and maintain a subject-specific dictionary of words, phrases and concepts with their definitions, synonyms, related words and examples.

Engaging in Reading: Using Context to Find Meaning

What teachers do	What students do
Before • Select a reading passage on a current topic or issue. Identify one or more important concept words in the text. • Write the concept word on the chalkboard and ask students to suggest possible meanings for the word. • Direct students to the concept word in the text. Ask students to read the paragraph(s) and confirm or reject their suggested meanings. • Discuss how they were able to determine the meaning of the concept word in context. Note that writers use different ways of providing meanings for concepts and words. Record these on the chalkboard. • Show several examples from a course text or resource. (For subject specific samples, see the Teacher Resources on the following pages.) • Model how to use context to determine the meaning of the words/concepts.	• Recall what they already know about the topic or concept. Make connections to known words and phrases. • Locate the concept word in the passage, and read the text. • Make connections between the new learning and what they already know about the concept. • Note different ways a reader can use context to help figure out unfamiliar ideas, concepts and words. • Identify how to determine meaning and monitor understanding.
During • Provide groups of students with different reading passages on the same topic/concept. • Ask groups to read the passage, identify the important concept, determine the meaning of the concept, and (optionally) complete a concept map. For more on concept maps, see *Sorting Using a Concept Map*. • Ask groups to share and compare their findings. Discuss similarities and differences in order to establish a common understanding of the concept. • Concept maps can be posted, or a class concept map can be created based on the compiled findings.	• Read the passage, identify the important concept, and use context to understand the passage. • Contribute to the concept map, if that strategy is used. • Define the important concept.
After • Ask students to describe how they used context to understand what they read. • Assign further reading so that students can practise using context when reading.	• Describe how they used context to help understand the text (e.g.: "I read ahead to look for a definition or more information." "I looked for diagrams and side bars." o*r* "I looked for signal words that pointed me to the relevant information.").

Notes

Using Context to Find Meaning - Electricity Example

In "Learning about Electricity," the writer uses different ways to help the reader understand electricity and electric circuits. Context clues include definition, example, description, illustration, clarification, parenthetical, comparison, or elaboration.

Read the excerpt and see how many different context clues the writer provides for the different concepts and terms related to electricity and electric circuits. Write your annotations on the left-hand side of the excerpt. After reading, try to make a quick sketch of an electrical circuit.

Write Your Annotations Here
Definition: Electricity is a form of energy.

Description: *It is produced by the movement of electrons.*

3.1 Learning About Electricity

Electricity is a form of energy. It is produced by the movement of electrons. But do you know what actually happens when you flip a switch to turn on the light, or the computer, or the television set? Why don't all the lights go out in your house when one light bulb burns out? Electricity is very useful, but if people do the wrong thing, electricity can also hurt. In some cases it can even kill. Safety is key when it comes to electricity.

Electric Circuits

How does electricity flow? Electricity flows through paths, or electric circuits. Electrons travel through these paths, but only if they can move around the path and get back to where they started. If the path is broken, the electrons will not move.

A closed circuit allows electrons to travel through an unbroken path and back to where they started. An open circuit has a break in the path. Electrons will not move through an open circuit.

All circuits must contain three things: connecting conductors, an energy source, and a load. A conductor is a device, such as a wire, that allows electricity to pass easily through it. An **energy source**, such as a battery, is what gives the circuit its energy. A **load** is a device or appliance that uses the energy, such as a light bulb. Figure 3.2 shows the symbols for the basic parts of a circuit.

ScienceWise 11, (Toronto: Irwin Publishing, 2003).

Using Context to Find Meaning – Geography Examples

A typical textbook page may contain ten or more terms that students have difficulty understanding. Some textbooks put these terms in bold print.

	Text Samples*	Meaning in Context
1	*People and the Hydrosphere* In the past we thought oceans were great places to dump things. We felt that they were so large that there could never be a problem. Today, we know that isn't so. With so many people living in coastal zones dumping their sewage and garbage into the oceans, there are big problems for the water life (the fish we eat!) and for us. (p. 89)	The term "hydrosphere" in the title can be associated with the words "oceans" and "water life" if you know the meaning of "hydro." This is a case where students need to deconstruct the word into its two component parts: hydro = water; and sphere = domain.
2	The continental drift theory suggests that the earth's crust is divided up into large pieces called **plates** which are floating on the hot, plastic-like top layer of the **mantle** (the large middle layer of the earth). (p. 100)	The terms "plates" and "mantle" are defined in context with descriptive phrases that help us to "see" what they mean.
3	Molten rock, **magma**, is formed and explodes up through the cracks and breaks in the plates to the surface of the earth to form volcanoes. (p. 101)	The term "magma" is defined by other words, (e.g., "molten rock") that stand beside it.
4	The type of agriculture that is practised depends on several factors including climate, soil, and **topography**. Some areas are fortunate enough to have a wealth of sunshine and timely rain, rich soil, and flat (or gently rolling) topography. Others are faced with short growing seasons, lack of rainfall, and steep slopes. People have adapted their farming practices to suit their locations and climates. (p. 147)	Contrast is used here to give an indication that **topography** refers to a broad variety of landscape forms – "flat," "gently rolling," "steep slopes." Climate elements add some confusion because they are not topography.
5	Most places where irrigation is practised use **surface irrigation**. In fact, about 96% of all irrigation is surface irrigation. Canals and ditches carry water to fields. Farmers make small openings in the walls to let the water flow from the canals and ditches into the fields. With **sprinkler irrigation**, the water is carried by pipes to the field and sprayed onto the crops using a sprinkler head. (p. 207)	The terms "surface irrigation" and "sprinkler irrigation" are explained through the use of examples of these forms of irrigation. For example, surface irrigation = canals and ditches; sprinkler irrigation = pipes with sprinkler heads.

*All text samples are taken from *Physical Geography: Discovering Global Systems and Patterns*, Toronto: Gage 2000.

Using Context to Find Meaning – Science & Technology Examples

Reading is a process of finding meaning in text. Writers use many ways to convey the meaning of words and concepts. Some are overt and some are subtle. These clues include definitions, examples, descriptions, illustrations, clarification, parenthetical notes, comparison, and elaboration. Here are some samples from Science & Technology texts:

Sample Text	Type of Clue
"**Electricity** is a form of energy. It is produced by the movement of electrons."	Definition
"**Hydraulic** systems use liquids under pressure to move many things. Huge amounts of soil at a construction site can be moved with **hydraulic machinery**, such as backhoes and excavators."	Description Example
"Oil from the tank is sent along a **conductor** (a hose or pipe) to a pump where it is pushed into a **cylinder** or metal pipe. A cylinder is like a large syringe."	Parenthetical note Comparison
"To find out more about atoms, scientists want to make particles move even faster. A machine called a **supercollider** will do this. Figure 2.1 shows how this machine works."	Illustration

Clues for Using Context to Find Meaning

Clue	Description	Signals
Definition	The unfamiliar word is specifically defined in the sentence, or in the preceding or following sentences.	• "is" or "which means" • commas that set off a qualifying phrase
Example	The unfamiliar word is illustrated by one or more examples.	• "for example," "including," or "such as" • pictures or diagrams
Description	Characteristics or features of the unfamiliar word are described.	• descriptive words • sensory words • adjectives and adverbs
Illustration	The unfamiliar word is shown in a diagram, picture or map.	• "see figure 2.1" • graphic features on the page
Clarification	The meaning of the unfamiliar word is restated in slightly different language, summarized, or paraphrased.	• "in other words," "sim-ply," "clearly"
Parenthetical Note	The meaning of the unfamiliar word is pro-vided in parentheses directly following the word.	• (......)
Comparison	The meaning of the unfamiliar word is pro-vided by contrasting or comparing it to another word, phrase or concept.	• "such as," "like," "com-pared to," "unlike" or "similar to" • synonyms, antonyms • charts
Elaboration	Additional information about the unfamiliar word is provided in the following sentences and paragraphs. This may be a description of a related event, process or product, or a question prompt.	• "in addition," "another," or "consequently"
Typography and Design	Design features draw attention to important words and concepts, and to their definitions.	• **bold**, *italics*, and other embellishments

R

Engaging in Reading: Reading Between the Lines (Inferences)

An inference is the ability to connect what is in the text with what is in the mind to create an educated guess. (Beers, 2003)

Making inferences from words that are read or spoken is a key comprehension skill. Students may miss vital information if they fail to make appropriate inferences.

Purpose
- Draw meaning from text – through explicit details and implicit clues.
- Connect prior knowledge and experiences to the text in order to make good guesses about what is happening, may have happened, or will happen in the future.

Payoff
Students will:
- develop greater awareness that texts can be understood on more than one level.
- become capable and confident in comprehending the subtle meanings in texts.

Tips and Resources
- *Explicit details* appear right in the text (for example, names, dates, descriptive details, facts).
- *Implicit details* are implied by clues in the text. Readers are more likely to recognize implicit details if they relate to prior knowledge and experiences.
- *Inferences* are conclusions drawn from evidence in the text or reasoning about the text.
  "Readers transact with the text, constructing meaning from the information that the author provides in the text and the information they bring to the text." – Beers, 2003
- You can encourage students to make inferences by providing sentence starters similar to the following:
  - I realize that...
  - Based on…I predict that…
  - I can draw these conclusions...
  - Based on this evidence, I think…
- For more information, see:
  - Student Resource, *Reading Between the Lines to Infer Meaning*
  - Teacher Resource, *Making Inferences from a Job Ad – Sample*.

When Students Can't Read: What Teachers Can Do, Chapter 5.
Reading and Writing for Success, Senior, pp. 262-263.
Cross Curricular Literacy; Strategies for Improving Middle Level Students' Reading and Writing Skills, pp. 34-35, 58-59.
Cross Curricular Literacy; Strategies for Improving Secondary Students' Reading and Writing skills, pp. 26-27, 48-49.

Further Support
- Provide additional opportunities for students to practise making inferences with subject-specific texts in a supported situation – perhaps in a small group with the teacher acting as the facilitator.
- Pair struggling or ESL learners with a more capable partner as they do the activities in this strategy.

Engaging in Reading: Reading Between the Lines (Inferences)

What teachers do	What students do
Before • Explain to students that some information is stated explicitly in the text (for example, names, dates, and definitions). On the other hand, sometimes readers must draw a conclusion about what is meant based on clues in the text. This strategy is called "making inferences" or good guesses, and is also referred to as "reading between the lines." • Distribute Student Resource, *Reading Between the Lines to Infer Meaning* . • Ask students to pick out the explicit information in the first item on the hand out, and then to infer meaning, or draw a conclusion about the "bouquet of flowers."	• Read the first item on the handout and pick out the explicit information about "the bouquet of flowers". • Make an inference about the meaning of the "bouquet of flowers."
During • Direct students to read the remaining examples on the handout. • Engage the whole class in discussion about the meaning to be inferred from each statement.	• Infer meaning from the clues in each statement on the handout. • Provide various interpretations of the situations described in each statement.
After • Help students to transfer the skill of inferring meaning by providing a sample of a subject-specific text or pictures that require them to make inferences. See Teacher Resource, *Making Inferences from a Job Ad* for a sample drawn from *Mathematics for Everyday Life II*.	• Practise inferring meaning from the subject-area text or picture.

Notes

Reading Between the Lines to Infer Meaning

Explain what you think might be happening in the following situations:

1. A young man brings a bouquet of flowers to the home of a girl who goes to his school.

2. A truck is parked in a Canadian Tire parking lot. No one is inside, the headlights are on and the driver's door is open.

3. A man arrives at the home of a woman with red roses and a diamond ring.

4. Your neighbour, married about a year ago, is shopping for diapers and baby formula.

5. A car containing two men has been parked in front of your neighbour's home every day for a week.

6. A car stops at a gas station in the middle of the night and a woman rushes in asking to use the telephone.

7. A friend of yours suddenly begins buying everything in sight – fancy food, expensive clothes, a big-screen TV, a dishwasher, and a new car.

8. Two of your friends were rushed to the hospital together one evening. When you see them the next day, they look fine, but seem embarrassed when you ask what happened.

9. You see your neighbours' new truck in front of their house in the morning. All four tires are flat.

Making Inferences from a Job Ad - Sample

Sunil and Moira are applying for jobs they saw advertised at a busy restaurant in the shopping mall. The ad indicated the following:
- an hourly rate of $7.10 for greeters
- an hourly rate of $6.85 plus tips for servers.

Some job requirements for both positions were also indicated, and these are listed in the table below.

1. Sunil and Moira are both to be interviewed for a job at the restaurant. How might they prepare for their interviews, considering the requirements listed in column 1? In column 2, write some things the applicants might say to show their qualifications.

Requirement	Possible things to say
Cleanliness	
Outgoing personality	
Reliable work habits	
Punctuality	
An excellent attendance record	
Reliable organizational skills	

Why would cleanliness be an important requirement for a restaurant job?

2. The interviewer tells them that successful candidates will be contacted between 5 p.m. and 6 p.m. the next day.
   a. How should Moira and Sunil arrange their schedules the next day?
   b. What message would it send to the potential employer if they could not be reached between 5 p.m. and 6 p.m.?

3. While being interviewed, Moira and Sunil were told that
   - servers and greeters work 6-hour shifts
   - servers usually serve $100 worth of food and beverages per hour
   - servers could expect a 10% to 15% tip on all food and beverage sales

Based on this information and the wages mentioned above, which job would you recommend that the two request?

Adapted from: Enzo Carli et al. *Mathematics for Everyday Life 11* (Toronto: Irwin Publishing, 2003) p. 11.

R

Engaging in Reading: Most/Least Important Idea(s) and Information

Determining important ideas and information in text is central to making sense of reading and moving toward insight. (Stephanie Harvey and Anne Goudvis, 2000)

Purpose
- Find the main idea(s) in text by distinguishing between the most important and least important information.

Payoff
Students will:
- become familiar with the text and make judgments about the content.
- work collaboratively with a partner – using reading, note taking, and oral strategies – to make sense of the text.

Tips and Resources
- Determining the main idea(s) in a text is not always a clear, straightforward process. Some or all of the following strategies can help the students:
  - Activate prior knowledge to help students connect to the information in the text.
  - Note the type of text and its typical audience and purpose (e.g., to persuade, to explain, to illustrate).
  - Set a clear purpose for the text so that students have common ground for finding the main idea.
- Main ideas are often found in first sentences or last sentences in a paragraph, or first and last paragraphs in a chapter.
- The reader constructs meaning, deciding on what is most important based on prior knowledge and experience. What is important to one reader may not be as important to another, unless both have a common goal or purpose.
- See Teacher Resource*, Most /Least Important Ideas and Information – Sample from a Science Textbook*. For a blank template that can be handed out in class, see Student Resource, *Most/Least Important Idea(s) and Information*.

Strategies That Work, Chapter 9.
Mosaic of Thought, pp. 94-95.

Further Support
- On the two days after you use this strategy, review the concepts orally using Take Five.
- After students have done a least-important/most-important "T" chart on their own or in pairs, model the process an additional time by thinking aloud through another passage. Ask students to compare their choices with yours.
- Put students in groups of four, with each group having a different passage from the same chapter of the textbook, to create their own think-aloud for that passage. Ask students to number off as they begin their work (from 1 to 4) and to remember their number. Students work together to decide most-important / least-important ideas and information and provide reasons for their choices as they prepare their think-aloud. Ask the #3s (and ask the #1s to assist them) to present their think-aloud to the rest of the class.

Engaging in Reading: Most/Least Important Idea(s) and Information

What teachers do	What students do	
Before • Select a passage from a subject-area text. • With students, set a clear purpose for reading the passage. • Give students time to read the passage. • Read the passage aloud to students, asking them to think about the most important and least important idea(s).	• Read the passage silently, thinking about the purpose for reading. • Listen to the passage being read, while thinking about their own choices for most important and least important idea(s).	**Notes**
During • Reread the passage aloud, while thinking aloud through the various sentences and ideas, to make judgments about least important and most important ideas. See Teacher Resource, *Most / Least Important Ideas and Information – Sample from a Science Text book*.	• Record most important and least important ideas on a "T" chart in their note books, after the teacher has done the think-aloud through the passage.	
After • Assign students an additional passage of text, setting a clear purpose for reading. • Ask students to use the handout, Student Resource, *Most /Least Important Ideas and Information* to record their choices for least important and most important ideas/information in the passage. • ***Alternatively***, ask students to use two different colours of highlighters on photo copied text – one colour for the most important ideas and information and one for the least important. • Put students in pairs to share and justify their choices. (Provide a fresh photocopy for them to synthesize their ideas.)	• Read the assigned text, conscious of the purpose for reading. • Reread and record the most important and least important ideas and information. • Reflect on choices with a partner, and make any changes necessary to the chart based on this discussion.	

Most/Least Important Ideas and Information

Sample from a Science Textbook

This short passage from *Sciencepower 9* could be used by the teacher as a script to demonstrate a think-aloud to students, showing how to decide what's important in a text, and what's less important. It could also be used as an overhead for the same purpose.

Text: Chemicals in Farming*	Most/Least Important Idea(s) and Information
If you had been alive in Canada 150 years ago, you would have probably been living on a farm. Even 50 years ago, over 20 percent of Canadians worked and lived on farms. Today the farm population is about 2.5 per-cent, <u>feeding a much larger population and producing food exports for the rest of the world</u>.	Less important – gives some background information. More background – less important. This seems important – quite a change from 150 or even 50 years ago.
One reason for this change is <u>mechanization</u>. A farmer with a tractor and other machines can do the work that used to require dozens of farm hands. Another reason is <u>chemicals,</u> which can be used to produce crops with higher yields and less spoilage.	This is important, part of the reason why there are fewer farms and farmers. *Considering this is science class, this idea has got to be the most important idea in this text.*

Key idea from this passage:

Fewer people are involved in farming today, because chemicals can be used to produce crops with higher yields and less spoilage.

*Excerpt from *Sciencepower 9* (Toronto: McGraw-Hill Ryerson, 1999), p. 277.

Most/Least Important Ideas and Information

Read the text assigned by the teacher and record (exactly) the most important and least important ideas and information. When you have finished recording, go to the bottom section of the chart and write what you believe to be the key idea from the whole text.

Title of textbook, chapter, or article: _____

Pages read: _____   Purpose for reading: _____

Most Important Ideas and Information	Least Important Ideas and Information

Key idea from this passage:

R

Engaging in Reading: Sorting Ideas Using a Concept Map

A *concept map* is a way to visually organize your understanding of information. It is hierarchical in nature, beginning with the subject or topic at the top or side of the page, and then branching into sub-topics and details.

Purpose
- Record ideas during reading.
- See the relationships among ideas, and distinguish between main ideas and supporting details.

Payoff
Students will:
- remember important details from the text.
- organize information in a memorable and accessible way to help with studying.

Tips and Resources
- Brain-based research shows that visual organizers, such as concept maps, can be highly effective in helping students who struggle with reading and writing.
- If possible, provide students with several samples of concept maps that look different so that they get a sense of how concepts can be organized.
- Concept maps usually have words written on the lines that join the bubbles to show the relationships between the items.
- Concept maps generally do not use colour or pictures. They are meant to show the connections between ideas and the hierarchy of those ideas.
- Spend time deconstructing the concept map and pointing out the connections between the various topics and ideas.
- To help students get started with concept mapping, see Student Resource, *Concept Map – Sample Template*. For a slightly more complex template, see Student Resource, *Concept Map – Branching Template*.
- To see concept mapping in action, turn to Teacher Resource, *Concept Map – Weaponry Sample*. There are three pages: page 1 contains sample text that can be read aloud to students as they listen for ideas that catch their interest; page 2 contains a partial concept map that can be filled in as the reading progresses; and page 3 contains a completed concept map to show what a finished product might look like. Both the partial and completed concept maps can be made into overheads for use with the whole class.

Beyond Monet, Chapter 10.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 44-45.
Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 36-37.

Further Support
- Pair students or put them in groups to read the text and create their concept maps.
- Encourage students in pairs or groups to choose one person who will read the text aloud first while a partner or group member records single words that represent main ideas or details.

R

Engaging in Reading: Sorting Ideas Using a Concept Map

What teachers do	What students do
Before • Make an overhead of the sample text (3 paragraphs). Note: Do not tell students the topic of this text ahead of time. • Read the sample text aloud to the class, asking them to listen for and note the ideas that stand out in their minds or are of greatest interest. • Engage students in discussion about the ideas that captured their interest. • Show a sample concept map and record additional details on it. • Ask students to suggest words to write on the lines between the concept map bubbles, to describe the connections between the items.	• Listen and record ideas of greatest interest as the teacher reads the text. • Contribute ideas and suggestions to the class discussion.
During • Provide students with miniature stick-on notes. • Assign a reading of part or all of a chapter in a textbook. • Challenge students to begin creating a concept map – based on the overall topic, sub-topics, and details – by drawing bubbles in the correct hierarchy.	• Read the text and use stick-on notes to identify topics, sub-topics, and details. • Create a concept map using stick-on notes to guide them to the ideas they need to include. • Complete the concept map, except for the words on the lines joining the bubbles.
After • Put students in pairs to share and compare their concept maps. • Ask students to discuss and reach consensus on the main ideas and details. • Challenge students to add their suggested words to the connecting lines between the bubbles. • Encourage students to use this strategy whenever they read complicated texts.	• Compare and discuss differences between their concept maps. • Reach consensus on the topics, sub topics, and details. • Confer to add the words that show the connections between the topics, sub topics, and details.

Notes

Concept Map – Weaponry Example (Page 1 of 3)

- This text comes from a chapter about World War I in a Grade 11 History textbook.

- The chapter discusses the causes of the war, the role of technology, the major battles, and the search for peace in a fair amount of detail.

- All aspects of this chapter are important and work together to give a concise picture of the war.

- The accompanying concept maps include the other sub-topics – identified from sub-headings in the chapter – but focus on developing the sub-topic on technology as an illustration for students. The partial concept map allows the teacher to develop the details from class discussion. A completed concept map gives students a picture of the final product. Both can be made into over heads for use with students.

- Do not tell students the topic of the text before you read it to them. They should draw their own conclusion about the topic.
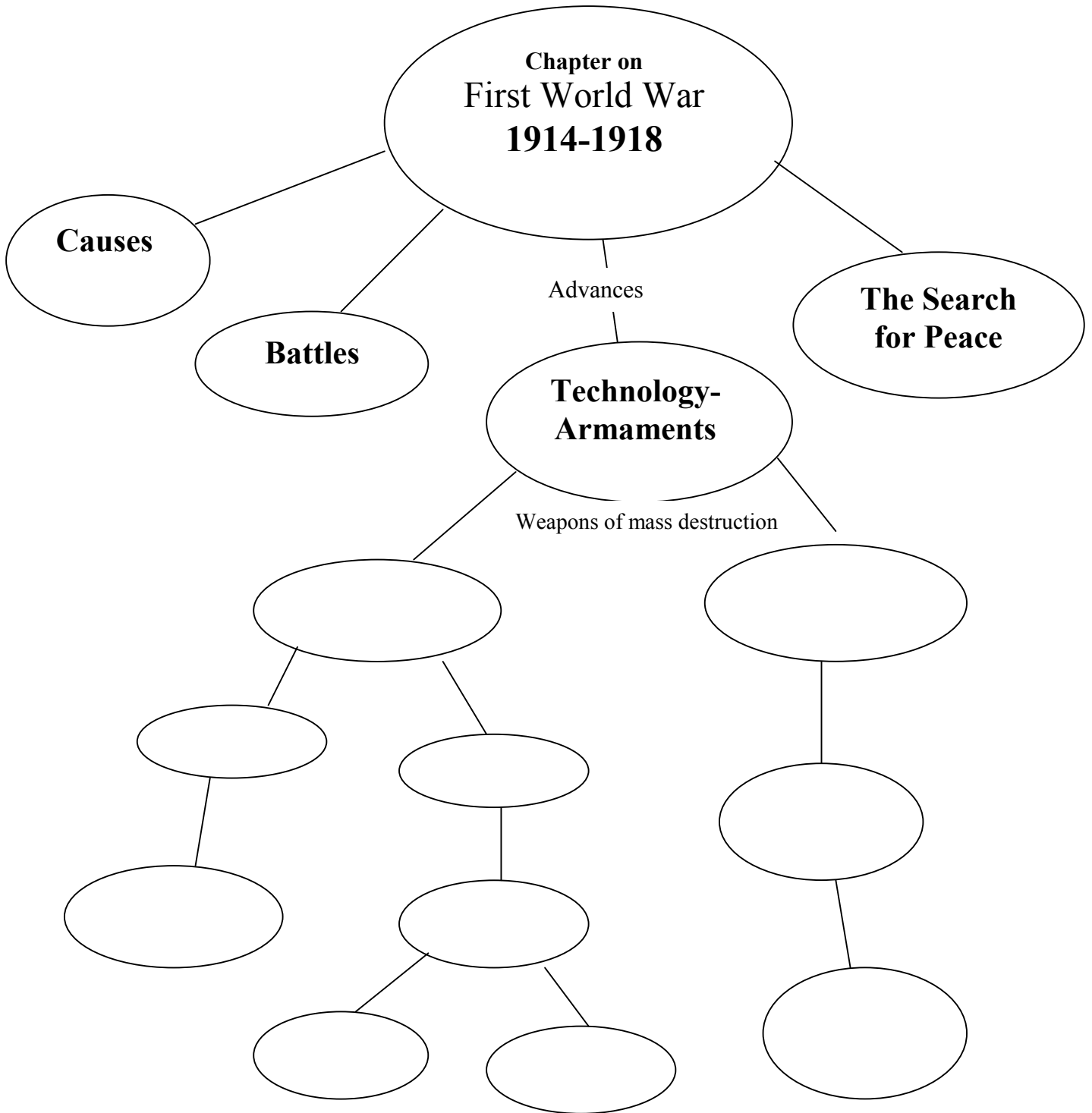

As war clouds gathered and even during the fighting, advances in technology were feverishly applied to a new industry – armaments. The types of weapons and the enormous quantities turned out by European, and later American, industries between 1900 and 1918 not only made the war longer and bloodier, but they changed the nature of war.

The world was shocked by the frequent use of weapons of mass destruction such as gas. As early as 1914, gas was employed on the battlefield. The main types of gas were chlorine and mustard gas. Chlorine gas produced violent choking and death while mustard gas left horrible internal and external burns. Even those soldiers who survived gas attacks were often left with disfiguring scars or damaged lungs that often resulted in an early death.
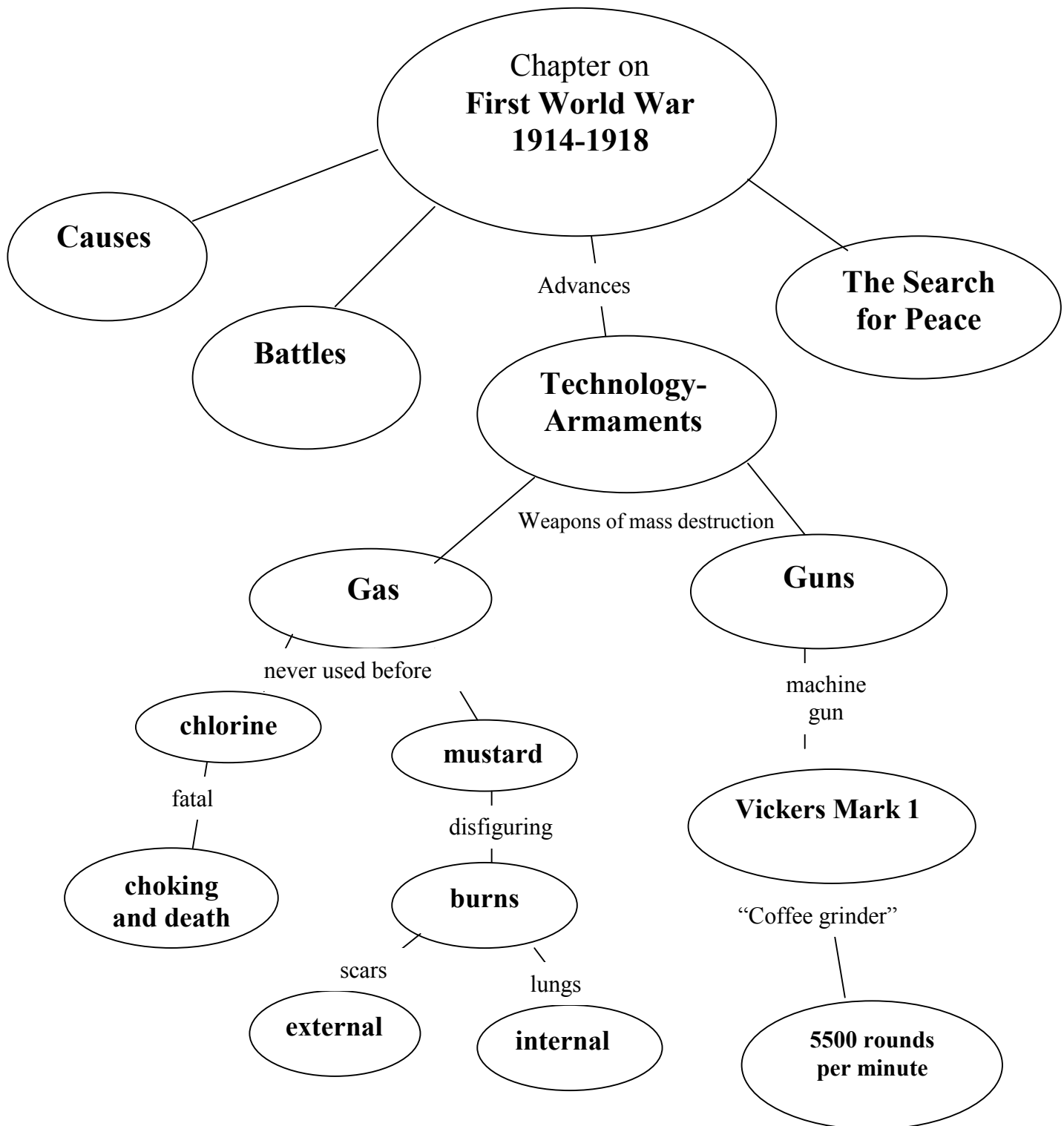
Although machine guns had been developed earlier, they were perfected as brutally effective killing machines of the First World War. This marriage of industrial technology and the mass citizen armies resulted in millions of casualties along the killing fields of Europe. Placed in an entrenched position, defenders using a weapon such as the Vickers Mark 1 could fire 5500 rounds per minute at the densely packed and exposed waves of troops coming forward. Soldiers referred to this weapon as the "coffee grinder" because it ground to pieces waves of attacking troops.

Excerpted from: Don Quinlan et al., *Twentieth Century Viewpoints: An Interpretive History for the 21st Century.* Second Edition. (Toronto: Oxford University Press, 2003), pp. 51-52.

Concept Map – Weaponry Example (Page 2 of 3)

Chapter on
First World War
1914-1918

Causes

Battles

Advances

**Technology-
Armaments**

**The Search
for Peace**

Weapons of mass destruction

Concept Map – Weaponry Example (Page 3 of 3)

Chapter on
**First World War
1914-1918**

Causes

**The Search
for Peace**

Advances

Battles

**Technology-
Armaments**

Weapons of mass destruction

Gas

Guns

never used before

machine
gun

chlorine

mustard

Vickers Mark 1

fatal

disfiguring

**choking
and death**

burns

"Coffee grinder"

scars

lungs

external

internal

**5500 rounds
per minute**

Concept Map – Sample Template

Concept

Definition or Formula

Evidence or Steps

Examples or Review

Concept Map – Branching Template

Concept

Context Sentence

Examples of Concept	Words that Connect	From Context

Meaning of Concept

Personal Connections to Concept
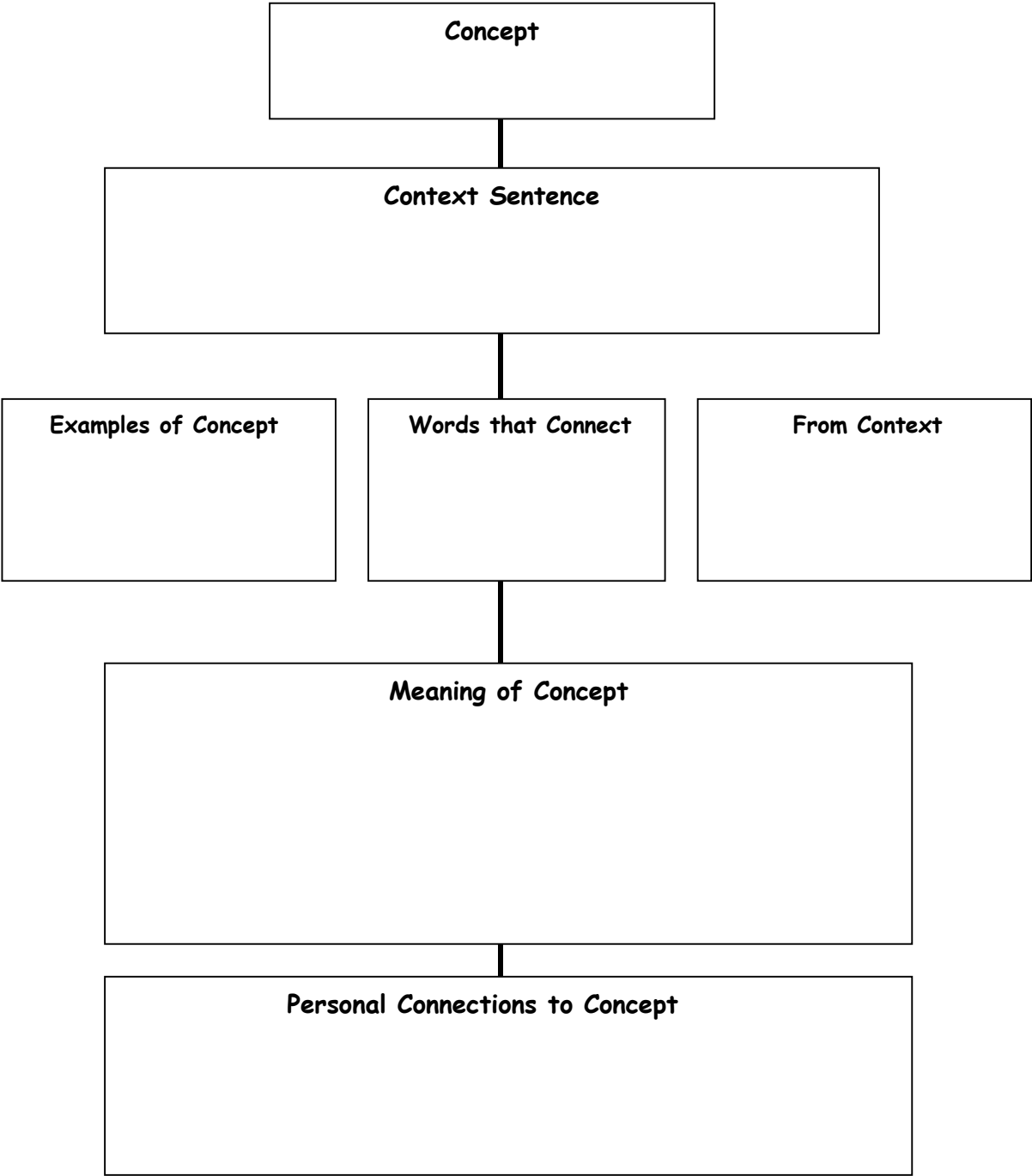
Engaging in Reading: Visualizing

> *Unseen text is the information that resides inside the reader's head: ideas, opinions, essential background knowledge. The unseen text is unique to each reader.* (Cris Tovani, 2002)

Visualizing text is a crucial skill for students because if they can get the picture, often they've got the concept. When students don't get those pictures in their heads, the teacher may need to think aloud and talk them through the ideas in the text, explaining the pictures that come to mind. Visualization can help students to focus, remember, and apply their learning in new and creative situations. It is an invaluable skill in subjects such as Math, Science, and Design & Technology, where understanding spatial relationships can be a key to solving complex problems.

Purpose
- Promote comprehension of the ideas in written texts by forming pictures in the mind from the words on the page.

Payoff
Students will:
- reread and reflect on assigned readings.
- develop skills for independent reading.
- improve focus and attention to detail.

Tips and Resources
- Words on a page can be a very abstract thing for some students. They don't inspire pictures in the mind or create other types of sensory images. Teaching students to visualize or create sensory images in the mind helps them to transform words into higher-level concepts.
- In order to visualize text, students must understand the concepts of *seen text* and *unseen text*. Seen text involves everything they can see on the page: words, diagrams, pictures, special typographical features. Unseen text draws on their background knowledge and experiences, and their word knowledge as they come across unfamiliar vocabulary.
- See Teacher Resource, *Visualizing from Text – Sample Text to Read Aloud*. Also see Student Resource, *Practise Visualizing from Text*.

I Read It, But I Don't Get It, Chapter 8.
Cross Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 30-31.
Cross Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 22-23.

Further Support
- Learning to visualize takes practice. Model the strategy of visualizing for your students, using a variety of texts from the subject area.
- Put students in pairs from the beginning of this strategy and allow them to work through the texts together.

Engaging in Reading: Visualizing

What teachers do	What students do
Before • Read the assigned text to students, asking them to try and "see" in their minds what the words are saying. • Share some mind pictures derived from the text. See Teacher Resource, *Visualizing from Text – Sample Text to Read Aloud*, which includes a think-aloud script. Invite some students to share the pictures in their heads. • Engage students in a class discussion about the importance of visualizing text in their minds – to get the idea or concept the words are trying to convey. • Give students an example of how important the picture/concept idea is by sharing the example of deciduous and coniferous trees – if students can picture a maple,oak or birch for deciduous trees and a spruce or pine tree for coniferous, then they have the concept of trees that lose their leaves, and trees that are ever green.	• Listen carefully to the text, trying to picture the words.
During • Provide additional text samples. See Student Resource, *Practise Visualizing from Text*. • Ask students to work individually to create mind pictures from the text. • Ask each student to join with three other students to compare their mind pictures.	• Read silently and make notes about mind pictures that emerge from the words in the texts. • Compare and discuss their mental images. • Ask questions of each other to determine why the mental images may differ.
After • Engage students in whole-class discussion about the kinds of things that may have triggered their mind pictures or mental images – e.g., understanding of a specific word, personal experience, something read previously, a movie or television show. • Confirm that individuals may have some very different pictures in their minds, based on differing personal experience. Some of those pictures will be accurate and some inaccurate, and so students should confirm their picture with other details or elements of the text, as described below. • Remind students that textbook features (such as diagrams, pictures, or a glossary) may help them create more accurate and detailed mind pictures.	• Contribute their responses to class discussion. • Take notes about the features of text that may help them create pictures in their minds from text.

Notes

Visualizing – Sample Text to Read Aloud

Text*	Think-Aloud Script
Lumbering became a way of life for many in the pioneer communities. The season began in the fall. Canoes carried the loggers and their supplies to the camps in the forests. Thousands went to live in the shanties of the lumber camps as the timber trade grew in importance.	I can picture early settlements of houses among many trees. The leaves on the trees are orange, red, and yellow because it is fall. I can see the loggers with big bundles of supplies in long, wide canoes on a river.
The axemen carefully selected the trees they would cut. The best white pine might tower 50 m. high. Considerable skill was needed to bring these trees down safely. A good axeman could drop a tree on a precise spot. His skill and power were essential to the profit of the camp.	I'm having a hard time imagining how high a 50 m. pine tree would be. I think of my own height and multiply until I reach 50. Or I compare the height to the height of a room or a building. In my mind, the axeman is a big, muscular guy because the text talks about his power.
Once the logs were felled, they were squared to fit more easily into the timber ships. Rounded edges wasted important space. Squaring was done with an adze and a heavy broad-axe which could weigh as much as 4 kg. Actually, squaring timber was very wasteful. About a quarter of the log was cut away and left on the ground. In winter the logs were hauled out of the woods with teams of oxen.	I can see the loggers working with axes to chop off the round edges of the trees. I don't know what an "adze" but I imagine it is a special tool with a sharp blade for trimming logs. I can see all that wasted wood on the ground, but at least it would decompose and be recycled into the soil as a nutrient.

*Excerpted from J. Bradley Cruxton and Robert J. Walker, *Community Canada*, (Toronto: Oxford University Press 1990), pp. 287-288.

Practise Visualizing from Text

Read and think about each of the samples below. Then record in your notebook the pictures that come into your mind based on the words you read.

#	Text Sample
1	The ocean's water is moving constantly, pushed by prevailing winds. The winds create ocean currents; that is, water moving in one direction. Ocean currents flow in circular patterns. In the northern hemisphere, currents move in a clockwise direction, and in the southern hemisphere, they move in a counter-clockwise direction. The temperature of a current depends on where it comes from. Warm currents originate in the tropics and bring warm water into cooler regions. Cold currents originate in the polar regions and bring cool water toward the equator. Excerpted from: Draper et al. *Physical Geography: Discovering Global Systems and Patterns*, (Toronto: Gage, 2000).
2	Before contact [with Europeans], there were 53 Aboriginal languages spoken across the Canadian land mass. Some speakers were so different from one another that they could be compared to Europeans trying to understand Tibetan or Japanese. The geographical diversity of Canada added to these differences. West Coast Indians, such as the Haida, fished for salmon, hunted sea mammals, and even owned slaves. Plains Indians were nomadic, hunting bison or buffalo. Eastern woodland Indians combined agriculture and hunting. Excerpted from: Jennifer Watt et al., *Civics Today* (Toronto: Irwin Publishing, 2000), p. 90.
3	The source of all energy for ecosystems is the Sun. It lights and warms the surface of our planet. It gives the energy needed to evaporate water from the oceans and lakes, to form rain and snow. Sunlight also provides the energy used by green plants to make the compounds that maintain their lives and serve as food for all other organisms. The Sun acts like a distant nuclear fusion reactor, radiating energy out into space. Of the energy released by the Sun, only about one-billionth reaches Earth – after a journey of about 150 million kilometres. Much of the energy that reaches Earth's atmosphere is filtered out before it reaches the surface. Excerpted from: Ritter et al; *Science 10* (Toronto: Nelson Thomson Learning, 2001), p. 32.

R

Engaging in Reading: Making Notes

Notes help readers to monitor their understanding and help writers and speakers to organize information and clarify their thinking.

Purpose
- Provide strategies for remembering what one reads.
- Provide a tool for summarizing information and ideas, making connections, and seeing patterns and trends in course-related materials.

Payoff
Students will:
- read course-related materials, analyze content and remember important information and concepts.
- learn a strategy for studying for a test, researching, or generating content for a writing task.
- be able to identify important information and details from a text.

Tips and Resources
- Student Resource, *Some Tips for Making Notes*. These tips can be modelled over several lessons or reading tasks.
- Student/Teacher Resource, *Shark Notes*.
- Student/Teacher Resource, *Sharks.*

Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 46-55.
Cross-Curricular Literacy; Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 38-45.
Info Tasks: Strategies for Successful Learning, pp. 17, 21.

Further Support
- Provide students with visual organizers such as a two-column T-chart, K-W-L chart or key word list to record their thinking and make notes.
- Model for students how to use charts and flow charts to organize notes into clusters or related chunks of information. For example, use a Know, Want, Learn chart, a Venn diagram, an outline, a T-chart; a simple heading with key words listed below; a web or tree chart. As a class, you could develop templates for a number of types of charts and keep blank copies of them available for students to fill in as they read or research.
- Model how to use key words and phrases to create a summary in your own words, or, for a longer reading passage, model how to reread sections and then summarize them in point form. Continue to model how to ask questions and write point-form answers, such as:
  - What part of this section is the most important?
  - What does the author want me to know about this topic?
  - What did I find really interesting about that part?
  - What other questions do I have?
- Provide students with *Some Tips for Making Notes*. Create tips as a class for future reference.
- Use sample notes to illustrate identifying important, irrelevant or missing information, and possible ways to organize notes. For struggling readers, use a two-column T-chart or a simple list of key words under a heading, on a large sheet of chart paper. Model how to choose important words or details and write them down on the chart. For example, read a sentence aloud, then ask students what the important idea or information is (what do they want to remember). Record the words and phrases from the sentence or paraphrase the important idea. Two-column notes might include headings such as facts/questions, opinion/proof, questions/answers, interesting/important, or direct quote/my thoughts. Provide students with a simple sample for practice.
  See Student/Teacher Resources, *Shark Notes* and *Sharks*.

Engaging in Reading: Making Notes

What teachers do	What students do	Notes
Before • Make an overhead transparency of a course-related reading selection to model the process of making notes. Use a blank transparency as a "notebook". • Preview the text with the class, noting features of the text and using them to form questions and responses such as: 　-What does this heading tell me? (Write down the title as the topic) 　-What form of writing is this? (Write down the form such as *magazine article* and the date) 　-What does this subheading tell me? 　-What do I already know about this section topic? (Write down some points)	• Preview the text and note strategies that others use to preview a text.	
During • Continue modelling reading and making notes. Read the text aloud, stopping after each section or paragraph to identify keywords. Ask students to suggest key words and phrases. • Model how to use keywords and phrases to create a summary or point-form notes in your own words. • Model rereading sections to clarify notes or ask questions about the text such as: 　-What part of this section is most important? 　-What does the author want me to know about this topic? 　-What did I find interesting about that part? 　-What other questions do I have? 　-Does this remind me of anything else I have read about or seen? • Model using the questions to generate the content the point-form notes or summary.	• Listen and observe the teacher modelling. Create their own notes based on the teacher's class example. • Identify key words and phrases in the reading selection, and paraphrases important information. • Ask questions about the reading selection.	
After • Ask students to read a short passage on the same topic and make notes. • Have partners or small groups share and compare notes. Students use partner's ideas to change or add to their notes. • As a class, discuss effective note-making strategies. • Create class reference materials such as visual organizers, word charts, note-making prompts.	• Read passage and use note-making strategies to record important ideas and information. • Use other's notes to add to or refine their own. • Identify note-making strategies and resources to use in the future.	

Some Tips for Making Notes

Tips	Why
Write down the date of your note-making.	• helps you remember context • if you have written the notes on a loose sheet of paper, date helps you organize notes later
Give the notes a title, listing the text the notes are about.	• helps you quickly identify information you may be looking for later
Use paper that can be inserted later into a binder, or have a special notebook for note making, or use recipe cards. Use notepad, outlining, or annotation features of your word processing software.	• you need to be able to organize your notes for easy access for use in studying, or in research reports • loose-leaf paper, a single notebook, or small cards are convenient in library research
Use point form, your own shorthand or symbols, and organizers such as charts, webs, arrows. Use the draw and graphic functions of your software.	• point form and shorthand is faster, easier to read later, helps you summarize ideas • organizers help you see links and structures, organize your ideas
Use headings and subheading in the text as a guide for organizing your own notes.	• this part of the organization is already done for you; provides a structure
Don't copy text word for word. Choose only the key words, or put the sentences in your own words. If you want to use a direct quote, be sure to use quotation marks. Don't write down words that you don't know unless you intend to figure them out or look them up. Use software's copy and paste function to select key words only.	• helps you understand what you have read • short form is much easier for studying and reading later • helps avoid plagiarism (using someone else's writing or ideas as your own)
Write down any questions you have about the topic.	• gives you ideas for further research • reminds you to ask others, clarify points • gives you practice in analyzing while reading
Review your notes when you are done.	• ensures that they're legible • enables you to go back to anything you meant to look at again • helps you reflect on and remember what you've read

Shark Notes

1. The following information about sharks has been gathered for a brief report. Read the notes. What questions do you still have about the topic? What information is missing? How might the writer fill in the information gaps?

Sharks: An Endangered Species
- Chondrichthyes class, 30 families, 400 species of sharks
- vertebrates with skeletons made of cartilage
- some species over 350 million years old, little need to evolve
- Great White Shark is one of oldest living species
- most are predators and carnivores
- Great White Shark feared among humans as "man-eating machines" (fiction and movies)
- shoes, cow's hoof, deer antlers, medieval armour, chicken coop with feathers and bones have been found inside tiger shark bellies
- skin smooth in one direction, rough in the other
- shark may grow and use 20 000 teeth in lifetime
- sharks have powerful jaws
- have tongues called basihyal
- both upper and lower jaws move
- GWS is threatened species

2. The ideas and information gathered could be sorted into two categories with the headings of "Important" and "Interesting". Read the chart below.

Important	Interesting
• Chondrichthyes class, 30 families	• 400 species of sharks
• vertebrates with skeletons made of cartilage	• have tongues called basihyal
• some species over 350 million years old	• shoes, cow's hoof, deer antlers, medieval armour, chicken coop with feather and bones have been found inside tiger shark bellies
• little need to evolve	
• sharks have powerful jaws	• skin smooth in one direction, rough in the other
• both upper and lower jaws move	
• most are predators and carnivores	• shark may grow and use 20 000 teeth in lifetime
• Great White Shark is one of oldest living species	• Great White Shark feared among humans as "man-eating machines" (fiction and movies)
• GWS is threatened species	

Reread the point-form notes. How else might you organize this information? Use a graphic organizer to illustrate how you might organize your information.

Sharks

Introduction

Before Dinosaurs wandered the earth, sharks swam and hunted in the oceans. They have survived for nearly 400 million years and adapted to many different habitats. Over 400 species live all over the world along shallow coastal areas, along the deep-water ocean floor and in the open ocean. The shark is a predator with few enemies; only other bigger sharks and people hunt them.

Sharks belong to the class of fish called Chondrichthyes or "cartilaginous fishes". They have skeletons made of flexible cartilage, like the soft bone in your nose. Their powerful jaws are loosely connected to their skulls, so that they can move both their upper and lower jaws. This means they can open their mouths very wide to catch and swallow their prey.

Shark Senses
Sharks use many senses to catch their prey. They have a keen sense of smell and hearing that helps them track the scent and sounds of injured fish and mammals. Their eyes are similar to a cat's eyes, which allows them to hunt in murky water. Sharks also have some extra-special senses. They can feel vibrations and movement in water through the fine hairs on special tubes under their skin. Around their snouts is a group of cells called electro-receptors that help them detect the signals put out by prey.

Feeding Habits
Sharks have rows of sharp teeth. If one is lost, another one moves forward from the rows of backup teeth. A shark may grow and lose over 20, 000 teeth is a lifetime. Each type of shark has its own shape of tooth, depending on what they eat. Carnivores like the Great White shark and Tiger shark have sharp, jagged teeth so they can bite and tear the flesh of large fish. The Mako shark has sharp pointy teeth that help it spear small fish and squid. Some sharks have very small teeth because they eat tiny sea creatures like plankton.

Most sharks need to eat a large meal every two or three days, but some can go without food for several weeks. Normally sharks like to eat alone, and follow their prey as they move from one place to another or travel to where their prey lives. Sometimes one feeding shark attracts other sharks. They sense the blood and movement and swim up quickly and bite at anything that gets close to their jaws. This "feeding frenzy" can be very dangerous for other sharks.

Strange things have been found inside a shark's stomach. A driver's license, cow's hoof, deer antlers, a chicken coop (with feather and bones) and a rubber tire are just a few of the items people have found inside Tiger sharks.

Sharks
Although sharks are feared by humans, sharks don't usually attack people. There are only about 100 shark attacks each year, and only 10 of those end in death. Most attacks take place off the coasts of North America, Australia, Hawaii and South Africa. People and sharks like to swim in the warm, shallow waters. Usually a shark attacks a human because it thinks the person is its prey. Sharks go to beaches to look for food. In the murky water the shark may mistake swimmers' splashing arms and legs for fish or surfers on their board for a seal or turtle. You have a greater chance of being struck by lightening than of being attacked by a shark.

Sharks

However, people kill millions of sharks each year for sport and food. Shark skins are used like leather to make shoes and belts, shark fins are made into soup, the meat is used for shark steaks, and sharks' teeth are made into jewelry. Pollution is also killing many adult sharks and their young. As a result the shark population is getting smaller, and some species are in danger of disappearing from the oceans. The Great White shark is the oldest living species on earth. In popular fiction and films, it is often the villain that terrorizes the people, so people believe that all sharks are like the shark on the screen. The movie *Jaws* kept people out of the water and off the beaches for years. This magnificent animal needs saving.

Conclusion
Sharks and people can live together. People need to learn more about sharks so that they can help protect them from extinction. Air and water pollution is a serious problem that affects all life forms. Everyone can help by asking our governments and businesses to stop polluting rivers and lakes. As well, countries could have laws that limit how many sharks can be killed each year. It would be sad to lose an animal that has managed to survive for 400 million years.

References:
Strong, Mike. *Shark! The Truth Behind the Terror.* Mankato, Minnesota: Capstone Press, 2003.
Gander Academy's Sharks Theme Page http://www.stemnet.nf.ca/CITE/sharks.htm
 Zoom Sharks: All About Sharks! http://www.EnchantedLearning.com/subjects/sharks

R

Reacting to Reading: Responding to Text (Graffiti)

Good readers 'wake up' and use the information they have about a topic in order to help them understand what they are reading. (Cris Tovani, 2000)

Graffiti is a collaborative learning strategy that can be used before or after an assigned reading. Here you can see how it might be used *after* reading. The strategy involves students working in groups to generate and record ideas on chart paper. The teacher sets up as many chart pages as there are groups. On each chart page, the teacher writes a topic related to the assigned reading. The groups travel in rotation from chart to chart, writing responses to the topic and to the comments previously written by other groups.

Purpose
• Provide an opportunity for students to make a personal connection to a topic or unit of work by expressing their opinions, demonstrating their understanding of the assigned text, and making connections to their prior knowledge and experience.

Payoff
Students will:
• connect their personal knowledge and experience with a curriculum topic or issue.
• expand their understanding of the reading by seeing and hearing the ideas and opinions of others.

Tips and Resources
• Use a *Numbered Heads* strategy to randomly assign roles in small groups. For example, if you are working with groups of five, have the students in each group "number off" from 1 to 5. After the students have numbered off, assign a particular role (e.g., recording, reporting, displaying work, etc.) to each number. Rotate the roles as the students continue with the exercise.
• For sample role descriptions designed to promote small-group discussion, see the **Group Roles** strategy in the Oral Communication section.
• In the version of graffiti described here, each group uses a different coloured marker so that everyone can identify which group made which contribution to the charts.
• After a specified period (usually no more than three to five minutes), and at a specific signal, each group rotates to the next chart page until the group has traveled full circle and arrived back at its page.
• The rotation and recording aspect of the strategy should take about 15 to 20 minutes. If groups have too much time at any chart page, there won't be anything for subsequent groups to write.
• Subsequent groups may put checkmarks beside ideas to agree with them, may write disagreements beside items already recorded, or may add new information and ideas to the chart page. They may also put question marks beside items that they feel require clarification.
• For tips on generating the topics, see Teacher Resource, *Graffiti Strategy – Topics for Geography*.
• For step-by-step instructions on leading the class through the graffiti strategy, see Teacher Resource, *Graffiti Strategy – Procedure for Groups*.

Beyond Monet, pp. 174-177.

Further Support
• Pre-teach some vocabulary related to the topic or issues, to support struggling or ESL students. Consider putting key terms on a Word Wall.
• Assign two students the role of reporter, to ensure that struggling or ESL students are supported if they are chosen as the reporter.

Reacting to Reading: Responding to Text (Graffiti)

What teachers do	What students do
Before • Assign the reading to students. • Determine how many groups of five you will have in the class, and set up that many "stations." At each station, put a chart page and a different-coloured marker. On each page, write one issue or topic related to the reading. • Define *graffiti* for the class (e.g., "scribbling on walls or in public places that represents a highly personal expression of thoughts or feelings"), or ask students for definitions. • Explain the graffiti process to students: groups of five students will begin at a chart page, choosing one student to record their information and ideas with the coloured marker. • Ask students to number off from 1 to 5 to create groups. See the *Numbered Heads* strategy on the facing page, under Tips and Resources. • Indicate that #1 will be the recorder for the first chart page. Recorders for later chart pages will follow sequentially, and other students will be designated at the end of the rotation to display and report on the original chart page.	• Read the assigned text. • Contribute to the discussion about graffiti. • Listen carefully to instructions about the process. Clarify if needed.
During • After a specified length of time, ask groups to rotate to the next chart page, taking the same coloured marker with them. At the next chart page, a new recorder will be chosen to write down ideas and information, and so on. • Monitor activity and remind students of the task and process.	• Rotate as a group to each chart page, keeping the same coloured marker. • Respond to the next topic or question using the same coloured marker they began with. • Have a different recorder for each chart page they encounter. • Take turns contributing ideas and information to the graffiti page. • Ensure that each group member has an opportunity to contribute to the graffiti. • Conclude at the original chart page.
After • Designate #s to be reporters and displayers for the chart page (e.g., #3 students will be displayers and #5s will be reporters). This keeps all students accountable until the last moment. • As each group reports, ask other students to record in their notes the top three items that interest or concern them, leaving spaces between each item. • Invite students to reread the assigned reading and add page numbers to the top three items they chose from each report, in preparation for making more complete notes.	• Review the original chart page together to ensure they can read and understand each item. • Display and report the information on their chart page, as requested by the teacher. • As other groups report, individually record the top three items of interest or concern in one's own notes. • Reread the textbook chapter and add page numbers to the three items listed from each of the other groups' reports, to prepare for making more complete notes.

Notes

Graffiti Strategy – Topics for Geography

- Subheadings from a textbook chapter often provide very useful topics for graffiti charts when you turn them into questions.

- In this instance, the topics are based on subheadings from a Grade 7 textbook.
  Chapter 5, "The Themes of Geographic Inquiry: Interaction" in *Physical Geography: Discovering Global Systems and Patterns* (Toronto: Gage, 2000.)

- Try to keep questions short so that they do not take up much space on the chart.

Questions:

1. How does weather influence people's lives?

2. Why do some crops grow really well in some places in Canada and not in others?

3. What land features may be a barrier to human settlement?

4. How have human beings overcome difficult geography in Canada and other places?

5. What are some ways human beings have damaged the landscape and the environment?

Graffiti Strategy – Procedure for Groups

1. Form groups of five students each.

2. In each group, assign each student a number from 1 to 5. (Tell the students that they will not know the role for their number until later, and that the roles will change. They are all accountable for the work in the group.)

3. Give each group a colour name (e.g., red, blue, black, green, orange, brown), and a marker of that colour. The group will keep that marker as they move to a different chart page and topic.

4. Give each group a piece of chart paper, with a topic already written at the top.

5. Tell the students that they will have about three minutes to write their group's responses to the topic on the first piece of chart paper. Number 1 will be the recorder when the group is at the first chart; Number 2 will be the recorder when they rotate to the second chart; and so on.

6. As the first three-minute time-limit approaches, tell the students, "When I give the signal, finish your last word, leave your chart page where it is, and move on to the next chart page. Be sure to take your marker and give it to the new recorder in your group. You will have two to three minutes to read the responses at the next chart page, and add comments, question marks, disagreements, or additional points."

7. As the students return to the chart page where they first started (their colour of marker will be the first one on the page), tell them, "Prepare to report on the information by reading it carefully, and deciding what is most important to tell the whole class. I will choose a reporter and a displayer when the time comes to report. Everyone should be ready to take on these roles."

R

Reacting to Reading: Drawing Conclusions (I Read/I Think/Therefore)

Readers draw conclusions based on the ideas and information that they read from one or more sources. Providing a graphic organizer *before reading* helps students to organize their thinking *during reading* in order to analyze, make inferences and draw conclusions *after reading*.

Purpose
- Actively use prior knowledge and experiences when reading.
- Read and respond to the important concepts and issues in the course, making inferences and drawing conclusions.

Payoff
Students will:
- develop content and opinions for persuasive writing.
- become thoughtful speakers during whole-class and small-group discussions.

Tips and Resources
- *Drawing conclusions* involves gathering information and deciding what the information means. For example, a report may **describe** effects on the Trans Canada Highway during the months of July to September (e.g., more injured wildlife, increased damage to roads, air pollution/smog complaints, visible litter); it may **draw a conclusion** about the information (increased vacation traffic is a local environmental concern); and it may **offer recommendations**.
- See Teacher Resource, *I Read/I Think/Therefore - Sample Response*. This annotated sample illustrates the thinking process that a reader might follow to gather information, reflect, and draw a conclusion.
- Also see Student Resource, *Template for Drawing Conclusions*. This graphic organizer helps students to organize their thinking while they are reading or conducting research that will require them to make inferences and draw conclusions. In column one (I Read), students record the relevant information from the text. In column two (I Think), students record what they know about that information and what they think it means. In the bottom row (Therefore), students record their conclusion based on all of the information gathered and their prior knowledge.

Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 60-61.
Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 50-51.
Reading in the Content Areas: If Not Me Then Who?, pp. 41-55.

Further Support
- Encourage students to use their real-life experiences as models for drawing conclusions.
- Create a wall chart to illustrate the strategy I Read/ I Think/ Therefore and post it as a reference for students.

Reacting to Reading: Drawing Conclusions (I Read/I Think/Therefore)

What teachers do	What students do
Before • Select text related to a current topic or issue in the course. Create a question or reading prompt to guide the reading (e.g., "How does light enter your eye?" "Describe the games of soccer or football."). • Prepare a scenario based on the topic or issue. Provide students with information and details about the subject. • Use a thinking strategy such as "I Read/ I Think/ Therefore" to demonstrate how to draw a conclusion based on gathered information. See Tips and Resources on the previous page. • Provide students with a graphic organizer to record their thinking as they read a course-specific text. See Student Resource, *Template for Drawing Conclusions*. • Provide students with copies of the reading selection and ask them to preview it. • Set a purpose for reading. • Use a transparency of the graphic organizer to model for students how to read and record information and inferences. Read the first two or three paragraphs to model the process.	• Read the information provided and make inferences based on the information. • Make a conclusion. • Observe the teacher's thinking process for drawing a conclusion. • Preview the text to get ready to read. • Clarify the purpose for reading (prompt or question). • Observe how to complete the graphic organizer.
During • Ask students in pairs or individually to complete the reading task and the "I Read" and "I Think" columns of the graphic organizer. • Partners may read, pause, and discuss and record the information and their thinking.	• Read the text, pausing to record important information, and make inferences.
After • Review the information gathered in the "I Read" section. Note responses and ask students to account for similarities and differences. • Compile information on the transparency of the graphic organizer. • Discuss the students' responses in the "I Think" section. Model how to make inferences, and complete the section on the transparency. • Review the information and inferences. Ask students to suggest conclusions that can be made based on the information gathered so far. Discuss possible "Therefore" conclusions. • Model how to make a conclusion based on gathered information. • Ask students to use this thinking process to read a short passage on the same topic. Ask students to share and compare their conclusions.	• Reread their graphic organizers. Identify similarities and differences among responses. • Draw a conclusion based on the information and inferences in the chart. • Compare own conclusion with those of others. • Apply their learning to a different reading task.

Notes

I Read/I Think/Therefore – Sample Response

Students are encouraged to use the graphic organizer on the following page to read and respond to a particular text. However, they can also use it to accumulate information about a topic from several sources before drawing a conclusion. For example, students may be investigating the issue of Aboriginal right to self-government, a country's responsibility for its past actions/decisions, or the challenge of diverse cultures working together. They may need to read several different sources to develop a full understanding of the topic or issue.

The *text says* that Aboriginal self-government was part of the Charlottetown Accord, but was defeated in a national referendum. *I think* I need more information about why it was defeated.

We started this section with Elijah Harper's opposition to the Meech Lake Accord in 1990. You will remember that the Accord was designed to persuade Quebec to sign the 1982 Canadian Constitution by giving the province special status. Harper opposed the Accord because he believed that Aboriginal Peoples deserved special status, too. With that status, the inherent right to Aboriginal self-government would be recognized. After the defeat of the Meech Lake Accord, the government of Prime Minister Mulroney tried again to revise the Constitution. This time, Aboriginal self-government was included in the agreement, called the Charlottetown Accord, though what self-government involved was not defined. However, this Accord was defeated in a national referendum in 1992.

The *text says* that the Meech Lake Accord gave Quebec special status. *I think* that the Constitution should recognize the unique backgrounds of all of the Provinces and Territories.

Since then, Aboriginal Peoples have made some gains. A major one was in 1998 when the federal government issued a Statement of Reconciliation. It stated that government policies had undermined Aboriginal political, economic, and social systems in the past. The federal government apologized for past mistakes and went on to state that

> In renewing our partnership, we must ensure that the mistakes which marked our past relationship are not repeated. The Government of Canada recognizes that policies that sought to assimilate Aboriginal people, women and men, are not the way to build a strong country.

The *text says* that the Nisga'a negotiated and signed a treaty for wide-powers of self-government. *I think* that this could be a model for other Provinces. *I think* there still needs to be lots of discussion about economic and political matters.

The *text says* that the government apologized for its past mistakes in a Statement of Reconciliation. *I think* this is a big step forward in trying to bring these two groups together.

Also in 1998, after 30 years of negotiations, the Nisga'a signed a treaty with British Columbia and the federal government. In 2000 the treaty was officially ratified by Parliament. In this treaty, the Nisga'a were given wide powers of self-government in matters of culture, language, and family life.

Therefore…

The issue of Aboriginal self-government is a very complex issue. There are still many concerns that have not been addressed in political and economic matters.

Civics Today, p. 100

Template for Drawing Conclusions

I Read	I Think

Therefore...

R

Reacting to Reading: Making Judgements (Both Sides Now)

Readers increase their understanding by reviewing what they have read, reflecting on what they have learned, and asking questions about the significance.

Purpose
- Assess different viewpoints or perspectives.
- Make judgements about viewpoints or opinions.

Payoff
Students will:
- think critically about course-specific materials.
- review different types of questions and how to answer them.
- summarize important ideas, concepts and information.
- develop critical thinking skills.
- develop a model for reading and thinking critically about important concepts, issues, and ideas.

Tips and Resources
- To *make judgments*, readers ask questions to help them process information, assess the importance and relevance of the information, and apply it in a new context. *Evaluating* is a skill that readers use when reading and critically thinking about a particular text. Readers make value judgments about the validity and accuracy of the ideas and information, the logic of a writer's argument, the quality of a writer's style, the effectiveness of the text organization, the reasonableness of events and actions, and more.
- See the following:
    - Teacher Resource, *Both Sides Now – Sample Response*.
    - Student Resource, Both Sides Now – *Template for Making Judgements*.
    - Student/Teacher Resource, *Clues for Finding Answers in the Text*.

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 48-51.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 60-61.

Further Support
- Review reading skills of tracking main ideas, comparing and contrasting, making inferences, and drawing conclusions.
- Encourage students to ask questions about what they are reading. For example, have students write questions based on a textbook chapter, section or topic-related resource they have read. Ask one of the students to read his or her questions to the group. Model answering the question referring the student specifically to the text where appropriate. Ask another student to ask a question, and have them select a volunteer to answer it. After the volunteer answers the question, have this student ask one of his/her questions. Continue until all students in the group have asked and answered a question.
- As an alternative, have students identify the type of question (on the lines, among the lines, between the lines and beyond the lines) before they answer or determine the type of questions to be generated. Students may require teacher modelling over several lessons of asking, identifying and answering questions.

Reacting to Reading: Making Judgements (Both Sides Now)

What teachers do	What students do
Before • Select course-related reading material that presents two viewpoints on a topic or issue. Use one selection that presents two perspectives or more than one text on the same topic. • Prepare a question or statement about the text. Write the statement on the chalkboard or an overhead transparency (title of the reading selection, a question based on the title). • Review the difference between information (fact, statistics, examples etc.) and opinion (inferences based on information, prior knowledge, experience, bias). • Ask for one idea or piece of information that supports the question/statement and record it under the statement in a T-chart. • Ask for one idea or information that opposes the question/statement and record it in the right-hand column of the T-chart. • Ask students where their responses came from (e.g., prior knowledge and experiences of other reading tasks, videos, discussions.) • Inform students that writers' may include ideas and information to support both sides of an issue or may include only the evidence to support their viewpoint. Effective readers question the ideas and information in a text to determine and develop their own opinions. • Ask students to preview the reading selection and make predictions about the content. Small groups share predictions.	• Recall what they already know about the issue or topic. • Recall what they already know about information and opinions. • Observe the teacher recording the evidence that supports or opposes the question/statement. • Recall where they learned about the topic or issue. • Use reading strategies to preview the text and make predictions. • Contribute to the group discussion.
During • Ask students to read the selection to identify the viewpoint and find evidence that supports and opposes the viewpoint. • Observe students' reading and intervene to clarify task or content, if needed. • Prepare possible viewpoint/opinion and evidence for recording on the T-chart.	• Read the selection and ask questions about the information (e.g., What is the viewpoint? Does this support or oppose the viewpoint?). • Identify the opinion or viewpoint presented in the selection.
After • Ask partners to orally summarize reading material, and identify the writer's viewpoint. • Ask students to provide an idea or information from the reading materials that supports the viewpoint. Continues recording alternatinginformation that supports and opposes the viewpoint question/statement. • Ask partners to review and discuss the evidence and make a decision based on the evidence and related inferences. • Partners share their decisions and state reasons for their decision. • Students write responses to the question/statement based on their learning.	• Listen to partner's summary and compare it to their own. Add to their own understanding. • Contribute to the discussion. • Evaluate the evidence and make a judgement based on the information provided by the text, inferences they have made, and their own knowledge and experience. • Develop an opinion based on accumulated learning.

Both Sides Now - Sample Response

Editorials, magazine articles, and reference materials often present one side or viewpoint on a particular issue, or limit one of the viewpoints. Therefore students may need to read several short selections on the same issue or topic to fully consider both sides of an issue before making a judgement based on the evidence provided.

Both Sides Now		
Evidence that Supports		**Evidence that Opposes**
help to educate people about different animals in their area	**Question or Statement**	animals show signs of stress, boredom and unhappiness
protect endangered animals		animals belong in their natural habitats
scientists can study animals up close	**Should there be zoos?**	scientists would learn more about animals in the wild
veterinarians and zoologists can learn how to care for different animals in the wild		some animals are abused in captivity
can help injured animals that couldn't survive in the wild		the natural world is for the survival of the fittest; humans shouldn't interfere
make money that can pay for animal care in the wild		do humans have right to capture animals
zoos, wildlife preserves and aquariums may be the only way for some people to see wild animals and learn about them		animals are forced to entertain people so parks make lots of money that may not be used for animal welfare

Decision

Zoos could be created so that the animals can live in their natural habitats with minimal interference from people. Wildlife preserves help to protect animals from the expansion of towns and cities, and can provide a safe haven for migrating birds and animals.

Reasons
- The welfare of the animals is important, and they don't choose to be in a zoo.
- People sometimes cause the animals' problems in the wild by invading their habitats.
- People shouldn't destroy the animals' homes or kill them for fun or for a few body parts. Zoos can help to educate people about the importance of protecting wildlife and how to live in harmony with them.
- Videos can be used to show people animals in their natural world so that we don't have to capture animals and put them on display.

Both Sides Now - Template for Making Judgements

Both Sides Now		
Evidence that Supports	**Question or Statement**	**Evidence that Opposes**
Decision		
Reasons		

Clues for Finding Answers in the Text

ON THE LINES

Some questions can be answered by "reading on the lines"; the answer is *right there* in the text. The question asks for literal information from the selection such as details, facts and information stated by the author. Some "question starters" that ask for literal knowledge are *give, list, find, describe, tell, retell,* and *what*. To answer a question "on the line":

•   Find the words used to create the question.
•   Look at the other words in that sentence to find the answer.

AMONG THE LINES

The answers to some questions are to be found by "reading among the lines." This type of question has an answer in the text, but this answer requires information from more than one sentence or paragraph. Some "question starters" that ask for literal knowledge are *list, compare, how,* and *summarize*. To answer a question "among the lines":

•   Find the words used to create the question.
•   Reread the sentences or paragraphs that contain the question words.
•   Look at the other words in the sentences or paragraphs to find the answer.

BETWEEN THE LINES

Some questions ask you to "read between the lines". This type of questions asks the reader to make inferences based on the ideas and information in the text. The answer might be found interpretively in the reader's own background knowledge, but would not make sense unless the reader had read the text. Some "question starters," that ask for inferences are *why, how might, what do you think, explain, predict,* and *what might*. To answer a question "between the lines":

•   Look for key words and clues in the question.
•   Re-read that part of the text in which the author gives the clues needed to construct the answer.
•   Ask yourself:
      -    Is this what the author meant?
      -    Does this make sense?

BEYOND THE LINES

The answers to some questions are not in the text at all: they are "beyond the lines." This means searching for the answer in the reader's own background knowledge. Some "question starters" that ask for interpretations are *what can you learn from, how might you, what if*, and *is it fair that*. To answer a question "beyond the lines":

•   Read the question and identify the key words.
•   Identify your beliefs, experiences and knowledge that relate to the question.
•   Ask yourself:
      -    Would the author agree with this conclusion?

R

Reading Different Text Forms: Reading Informational Texts

Informational text forms (such as explanations, reports, news articles, magazine articles and instructions) are written to communicate information about a specific subject, topic, event or process. These texts use vocabulary, special design elements, and organizational patterns to express ideas clearly and make them easier to read. Providing students with an approach to reading informational texts helps them to become effective readers.

Purpose
- Become familiar with the elements and features of informational texts used in any course
- Explore a process for reading informational texts, using a range of strategies for before, during and after reading.

Payoff
Students will:
- become more efficient at "mining" the text for information and meaning.
- practise essential reading strategies and apply them to different course-related materials.

Tips and Resources
- Some of the features of informational texts are headings, subheadings, questions, introductions, summaries, overviews, and illustrations. These work together to draw readers into the text at different levels. For example, in a magazine article, a heading is meant to grab your attention and give you an idea of what the article is about, while the accompanying photographs and captions might add information not included in the body of the article.
- Many informational texts are divided into sections or chapters, and are organized internally in ways that add meaning – for example, by sequence, chronology, cause/effect, comparison/contrast, classification, description, or definition. For example, news articles use a special organizational pattern called the *inverted pyramid* to answer the 5WH questions (Who, What, When, Where, Why and How), and present the facts and supporting details in order of importance.
- Many informational texts use visual elements (such as typeface, size of type, colour, margin notes, photographs and diagrams) to emphasize important words and concepts. Different texts use these features in different ways to effectively present information.
- Words such as *then, next, while, beside*, and *following* are often used to indicate a time or spatial relationship.
- How you read informational text will depend on your purpose for reading. If you want to find specific information in a textbook, you might refer to the table of contents to decide where to start reading, examine the headings and subheadings, and then skim through the section looking for key words and phrases related to the topic. Once you have located the appropriate section, a closer reading will help you to find the information and supporting details.
- See Student Resource, *Tips for Reading Informational Texts*. Focus one or two tips at a time to help the students before, during and after the assigned reading. Add tips as needed to guide the students as they read.

Further Support
- Provide students with an advance organizer to guide them as they read a particular text. This might be a series of prompts related to the reading task.
- See strategies for *before reading*, such as **Previewing a Text,** and **Analysing the Features of a Text**. Refer to these to support and reinforce the ideas described here.

Reading Different Text Forms: Reading Informational Texts

What teachers do

Before

Before reading, help students to connect new content and ideas to their prior knowledge by encouraging them to think about what they already know about the topic or the type of reading material. For example:

- Ask students to **brainstorm** related ideas, concepts and vocabulary, **recall** previous experiences and feelings related to the subject, recall what they have learned about the topic, or **list questions** they might have about the topic.
- Provide students with related experiences, discussion topics, readings, or background information to **increase background knowledge**.
- Pose questions to students before they read, to help them **determine a purpose** for reading.
- Invite students to ask questions about the content.
- Model (using a "think aloud") how to **predict** the content based on the features of text, specialized vocabulary, illustrations, introductory information or personal experiences. **Skim**, **scan** and **sample** the text to make informed predictions.
- **Identify** and pre-teach unfamiliar vocabulary and concepts that appear in the text.

During

During reading, help students to connect the information and ideas in the text to what they already know as they monitor their understanding. (*Monitoring their understanding* means recognizing when confusion occurs and identifying strategies that help to regain meaning.) For example:

- Have students describe and model the different reading strategies they might use, such as **predicting**, **questioning**, **activating prior knowledge**, **inferring**, **monitoring**, **adjusting**, **rereading**, and **decoding**.
- Model (using a "think aloud") strategies for pausing and thinking about the text. Encourage students to **chunk** the text, **read**, **pause**, **think** and **ask questions** or **make notes** about the section of text.
- Demonstrate how to **use a graphic organizer** to **categorize** and select main ideas, important details, and questions as you read. For example, comparison charts, T-charts, or Venn diagrams can help students to identify the ideas being compared and how they are similar and different.
- Invite students to **visualize** the concepts as they read. Have partners share and compare the visualizations.
- Provide students with **focus** questions, such as the following:
    - What are the main ideas?
    - How has the writer organized them?
    - How does the writer support the main ideas?
    - What is the writer's viewpoint?
    - Is this a useful source of information?

After

After reading, help students to **consolidate** and **extend** their understanding of the content. For example:

- Ask partners to **restate** or **paraphrase** what they have read, and **note similarities and differences** in the retelling.
- Model how to **summarize** the reading selection (using a "think aloud") by identifying the essence of the text, choosing the most important information, and organizing the information to convey the **key ideas** of the selection.
- Have students suggest possible diagrams or **graphic organizers** to illustrate connections among the topics, main ideas, supporting details, and prior knowledge.
- Review the process that students used for reading informational text, including strategies for before, during and after reading. See Student Resource, *Tips for Reading Informational Texts.*

R

Tips for Reading Informational Texts

Before Reading

• Set a purpose for reading. Ask yourself why you are reading this particular text.

• Look over the text to see which elements appear (such as headings, subheadings, illustrations and captions, etc.).

• Examine the titles, headings, and subheadings, and scan for words that stand out.

• Look for words and phrases that might give you clues about how the information is organized.

• Read any overviews, summaries or questions. In a shorter piece, read the opening and concluding sentences or paragraphs.

• Examine each illustration and read the titles or captions.

• Recall what you already know about the topic.

• Record some questions you might have about the topic.

During Reading

• Divide the reading task into smaller chunks (chunking the text into paragraphs, chunking sections by sub-headings, etc.). Read a chunk, pause and think about what you read, and write a brief one-sentence summary or brief point-form notes to help you remember important and interesting information.

• Read quickly, then slowly. Skim the sections you think will support your purpose for reading. When you find specific information you want, slow down and read it word by word. You may need to reread the passage several times.

• Read the selection and jot down thoughts, responses to your questions and new questions that occur to you.

After Reading

• Read the selection again to confirm the main idea and supporting details.

• Make connections to what you already know about the topic. How does the information you have read add to or alter what you knew about the topic?

• Record your thinking about and responses to the text. For example, write a summary, complete a graphic organizer, create a sketch, or orally retell to yourself or a friend.

Reading Different Text Forms : Reading Graphical Texts

Graphical text forms (such as diagrams, photographs, drawings, sketches, graphs, schedules, maps, charts, tables, timelines, and tables) are intended to communicate information in a concise format and illustrate how one piece of information is related to another. Providing students with an approach to reading graphical text also helps them to become effective readers.

Purpose
- Become familiar with the elements and features of graphical texts used in any course.
- Explore a process for reading graphical texts, using a range of strategies for before, during and after reading.

Payoff
Students will:
- become more efficient at "mining" graphical texts for information and meaning.
- practise essential reading strategies and apply them to different course-related materials.

Tips and Resources
- Sometimes a complicated idea or concept can be communicated more easily through a chart, graph, diagram or illustration. Many informational texts include graphics to supplement the main ideas and provide clues to the important concepts in the text. Some of the features of graphical texts include:
    - print features (such as typeface and size of type, bullets, titles, headings, subheading, italics, labels, and captions).
    - organizational features (such as tables of contents, legends, keys, pronunciation guides, labels and captions).
    - design features (such as colour, shape, line, placement, balance, and focal point). Design features can also include images.
    - organizational patterns (such as sequential, categorical, and explanatory).
- Each graphical text uses these elements and features in different ways to effectively present information in a condensed format. For example, a chart or table may illustrate key information and show how pieces of information relate to each other. A table uses columns and rows to organize the information and may include a title that describes the main idea or subject, and a caption to explain the purpose of the table. The information in a table can be read horizontally and vertically. An example of a common table format is a calendar that uses columns to show the days of the week, and rows to show the dates. Tables are often used in Mathematics, Science and Geography to help the reader quickly grasp key information (such as number patterns, pollution indexes, or city populations).
- Many of the strategies for reading informational and literary texts can also be used effectively to read graphical texts.
- See Student Resource, *Tips for Reading Graphical Texts*. Focus on one or two tips at a time to help students before, during and after the assigned reading. Add tips as needed to guide the students as they read.

Further Support
Provide students with an advance organizer to guide them as they read a particular text. This might be a series of prompts to guide them through the reading task.

Reading Different Text Forms : Reading Graphical Texts

What teachers do	Notes

Before

Before reading, help students to connect new content and ideas to their prior knowledge by encouraging them to think about what they already know about the topic or the type of graphical text. For example:
- Ask students to **brainstorm** related ideas, concepts and vocabulary, **recall** previous experiences and feelings related to the subject, recall what they have learned about the topic, or **list questions** they might have about the topic.
- Provide students with related experiences, discussion topics, readings, or background information to **increase background knowledge**.
- Pose questions to students before they read, to help them **determine a purpose** for reading.
- Invite students to ask questions about the graphic's purpose and the information in it.
- Model (using a "think aloud") how to **predict** the content based on the features of the graphic, specialized language, related written information, or personal experiences. **Skim**, **scan** and **sample** the graphical text to make informed predictions.
- **Identify** and pre-teach unfamiliar vocabulary and concepts that appear in the graphical text.

During

During reading, help students to connect the information and ideas in the graphical text to what they already know as they monitor their understanding. ("*Monitoring understanding*" means recognizing when confusion occurs and identifying strategies that help to regain meaning.) For example:
- Have students describe and model the different reading strategies they might use, such as predicting, questioning, **activating prior knowledge**, **inferencing**, **reading slowly**, and **rereading.**
- Model (using a "think aloud") strategies for pausing and thinking about the text. Encourage students to examine parts of the text, **read**, **pause, think,** and **ask questions** or **make notes** about how this information relates to other parts of the text.
- Demonstrate how to **paraphrase** the information presented. For example, use the sentence stem- "This means….".
- Invite students to **organize** the information in a different way. Ask students to share and compare their interpretations.
- Provide students with **focus** questions such as:
    - What is the purpose of this graphic?
    - What information is provided?
    - Is all important information included? What information is missing?
    - How is the information organized?
    - How does this information relate to what you already know about the topic?
    - Is this a useful source of information?

After

After reading, help students to **consolidate** and **extend** their understanding of the content. For example:
- Ask partners to **restate** or **paraphrase** what they have read and to **note similarities and differences** in rephrasing.
- Model (using a "think aloud") how to **make connections** between prior knowledge and what the text is saying.
- Have students suggest possible ways to **check the accuracy and reliability** of the information presented.
- Review the process that students used for reading graphical texts, including strategies for before, during and after reading. See Student Resource, *Tips for Reading Graphical Texts.*

R

Tips for Reading Graphical Texts

Before Reading

• Set a purpose for reading. Ask yourself why you are reading this particular text.

• Look over the text to determine what type it is and which elements are used.

• Examine the titles, headings, captions and images. Start with the title. The title tells you what the graphic is about. The captions may also use words and phrases from the text to show how the graphic is related to the information in the written text (e.g., "Figure 1.6").

• Recall what you already know about the topic or subject.

• Record some questions you might have about the information presented.

During Reading

• Read all the labels and examine how they are related to the graphic. Each label has a purpose. The most important labels may be in capital letters, bold type, or a larger font.

• Follow the arrows and lines. They may be used to show movement or direction, or connect to the things they name.

• Look for the use of colour or symbols to emphasize important words and information. Some graphical texts have a legend or a key to explain the meaning of specific symbols and colours.

• Study the image carefully. See if you recognize the details in the image. Read the text near the picture to find an explanation of the information in the graphic. Use the figure number or title and key words to find and read the related information in the written text.

• Identify the relationships among the visuals and information presented.

After Reading

• Interpret the information conveyed in any of the graphics (e.g., diagrams, charts, graphs, maps). Ask yourself why this information might be important.

• Rephrase information orally or in writing. Imagine that you are explaining the graphic to someone who has not read it.

• Create your own graphical text (e.g., graph, map, diagram, table, flow chart) to represent the important information.

R

Reading Different Text Forms: Reading Literary Texts

Literary texts (such as stories, descriptions, essays, biographies, dialogues, novels, scripts, and poems) are written to entertain, provide insights, or communicate a writer's ideas and viewpoints. Literary texts are sometimes incorporated into informational text forms. Providing students with an approach to reading this type of text can help them to become effective readers in other contexts as well.

Purpose
- Become familiar with the elements and features of literary texts used in the course.
- Explore a process for reading literary texts, using a range of strategies for before, during and after reading.

Payoff
Students will:
- read for information and enjoyment.
- practise essential reading strategies and apply them to different types of course-related materials.

Tips and Resources
- Literary texts come in a wide range of fiction and non-fiction, with many forms and genres. Each uses language and literary elements in particular ways to communicate something significant.
- Some of the elements of fiction are characters, plot, setting, theme (big idea), perspective (point-of-view taken by the narrator), style, language, and structure. Dramas (scripts and dialogues) use many of the same elements as novels and short stories, but may include special features such as stage directions, acts and scenes, and notations. Poems use elements such as structure, rhythm, rhyme, imagery and figurative language to communicate an idea, feeling or image.
- Non-fiction literary texts include biographies and essays. Biographies often tell the story of their subject through narrative elements. Elements of biography include setting (how it influences the events in the person's life), characterization of the subject (representation of the subject's character and motives), theme, accuracy, structure (time sequence), illustrations, graphic features, structural patterns, and organizational features (table of contents, index, references). Essays might be persuasive, personal, or descriptive but often use the same elements to communicate a significant idea or viewpoint. These elements include thesis, introduction, body, conclusion, arguments, and evidence.
- Many of the strategies used for reading informational and graphical texts can be used effectively to read literary texts.
- See Student Resource, *Tips for Reading Literary Texts*. Focus one or two tips at a time to help them before, during and after the assigned reading. Add tips as needed to guide the students as they read.

Further Support
- Provide students with an advance organizer to guide them as they read a particular text. This might be a series of prompts to guide them through the reading task.
- Have students use literacy texts of their own choosing for some course assignments.

Reading Different Text Forms: Reading Literary Texts

What teachers do	Notes

Before

Before reading, help students to connect new content and ideas with their prior knowledge by encouraging them to think about what they already know about the topic or the type of reading material. For example:

- Ask students to **brainstorm** related ideas and themes, **recall** previous experiences and feelings related to the subject or theme, or **list questions** they might have about the topic.
- Provide students with related experiences, discussion topics, readings, or background information to **increase background knowledge** about the form, author or subject.
- Pose questions to students before they read, to help them **determine a purpose** for reading.
- Invite students to ask questions about the story or subject.
- Model (using a think-aloud) how to **predict** the content based on the text features, specialized vocabulary, illustrations, introductory information, or personal experiences. **Skim**, **scan** and **sample** the text to make informed predictions.
- **Identify** and pre-teach unfamiliar vocabulary and concepts that appear in the text.

During

During reading, help students to connect the information and ideas in the text with what they already know as they monitor their understanding. (*Monitoring understanding* means recognizing when confusion occurs and identifying strategies that help to regain meaning.) For example:

- Have students describe and model the different reading strategies they might use, such as **predicting**, **questioning, activating prior knowledge**, **inferencing**, **monitoring**, **adjusting**, **rereading**, and **decoding**.
- Model (using a "think-aloud") strategies for pausing and thinking about the text. For example, demonstrate how to **pause**, **think**, and create *thinkmarks* (quick comments, questions, personal connections or interesting phrases) as you read. Have students write a sentence at intervals while reading the text.
- Demonstrate how to **use a graphic organizer** to select and organize main ideas, important details, and questions as you read. For example, timelines, story maps, flow charts, or thought webs can help students identify and track the main ideas or events and make connections.
- Invite students to **visualize** the concepts as they read. Have partners share and compare their images.
- Provide students with focus questions to help them **make inferences** and "read between the lines." For example:
    - What details are included?
    - Why did the author tell you that?
    - What details have been left out?
    - Why didn't the author tell you this?

After

After reading, help students to consolidate and extend their understanding of the content.

- Ask partners to **retell** or **paraphrase** what they have read, and to **note similarities and differences** in the retellings.
- Model (using a "think-aloud") how to **summarize** a narrative by identifying the theme, main characters, setting and events, then **organize** the information to show how the characters, setting and plot develop throughout the story.
- Have students **suggest** possible diagrams or graphic organizers to illustrate connections among the topic, main ideas, supporting details, and prior knowledge.
- Review the process that students used for reading literary texts, including strategies for before, during and after reading. See Student Resource, *Tips for Reading Literary Texts*.

Tips for Reading Literary Texts

Before Reading

- Read the title and think about what might happen in the story or what the essay might be about. Does the title suggest any connections to your own life or raise any questions?

- Recall other selections you may have read by this author.

- Look at any illustrations. What do they tell you about the story or subject?

- Look the text over and sample the text to note its length, organization, level of language, and structure. Pay attention to punctuation.

During Reading

- As you read, ask questions about what is happening. Make predictions about what might happen next.

- Form opinions about what is going on. Think about your responses and reactions to what you are reading. Making notes can help you focus your thinking as you read.

- Picture the setting, events or images in your mind. Sketch them. As you read, imagine how the words will be spoken and see the action.

- While reading a narrative selection, try the following:

  - Read the first page and pause. What do you know so far about the people (characters), setting, conflict, and point of view? Where do you think the storyline is going? Make connections to what you already know.

  - Who are the people and how are they related to each other? Put yourself in their place. What would you say or do?

After Reading

- Write down favourite quotations from the text. Share and compare them with a partner.

- Create a visual interpretation of the text, such as a web, story map, or timeline, to show the relationships among the major characters and their feelings and attitudes.

- Create a sensory web of the setting. Use a graphic organizer to illustrate the story's plot or sequence of events (situation, complications, climax, resolution).

- Retell/summarize the content in your own words, orally or in writing.

Reading Different Text Forms: Following Instructions

Students are expected to read and follow instructions in every subject area. This strategy asks students to examine different types of instructions, their features and elements, and how the features, language and organizational patterns can be used to help the reader understand and complete a task.

Purpose
- Provide students with strategies for reading, interpreting and following instructions to complete a specific task.
- Learn how instructions are organized.

Payoff
Students will:
- identify purposes for reading instructions.
- develop a process for reading and following instructions.

Tips and Resources
- Instructions give detailed step-by-step information about a process or a procedure (e.g., directions recipes, experiments, manuals, tests). They are sometimes called procedures or how-tos.
  Most instructions use organizational patterns, language, and features (diagrams and illustrations, bold or italic type, headings, numbers, lists) to help the reader identify the task and the best way to complete it; however, some instructions are complicated without any features to help the reader determine the sequence of steps.
- Student/Teacher Resource: *Instruction Analysis 1* and *2*.

Reading and Writing for Success: Senior, pages 143, 283.

Further Support
- Provide students with a list of typical signal words and task prompts and suggestions/strategies for responding to them in your subject area (e.g., *explain, list, summarize, give reasons for, select, choose, support*).
- Provide students with flow charts and timelines to help track successful completion of oral or written instructions.
- Create a class framework for reading instructions such as:
  - Preview.
  - Highlight and annotate.
  - Think aloud and visualize.
  - Reread.
  - Go step-by-step.
  - Read the diagrams.
  - Ask questions.
- Have students read a set of instructions that has irrelevant or repeated information, or is poorly organized (you can create this by inserting sentences into or omitting sentences from a sample you already have). Have students identify the irrelevant or repetitious information and sentences, and highlight the important information. Ask students to determine what information is missing. Ask students to rewrite the instructions. Compare the original, the modified example, and the students' work. Note similarities and differences, and suggest reasons for the writers' decisions. Have students determine the most effective set of instructions and identify the elements that made the instructions easy to follow.
- Provide students with opportunities to follow oral instructions, and discuss how they were able to complete the instructions and what was challenging, confusing or frustrating.

Reading Different Text Forms: Following Instructions

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What teachers do

Before

- Select a set of instructions typical for the subject area related to a current topic or process. See Student/Teacher Resources, *Instruction Analysis 1* and *2*.
- Ask students to recall an important occasion when they had to follow a set of instructions (e.g., driver's test, an exam, making a table, fixing a bike). Discuss what was challenging and easy about following the instructions.
- Ask students to **recall** what they know about effective instructions.
- Make a list of the elements and features of instructions with the class.
- Make copies of another set of instructions and cut them into slips of paper with a step on each slip (unnumbered). Place one set of jumbled instructions in as many envelopes as there are groups or pairs. Provide partners or small groups with an envelope, and ask students to **recreate** the instructions and talk about the clues they used to **reconstruct** the instructions.
- **Compare** the groups' reconstructions and discuss the decisions they made. Identify the strategies they used to determine the task and the sequence.
- Provide students with a copy of the selected instructions. Model for students how to **preview** the instructions (e.g., looking at title, organization, some of the signal words [sequence of steps and process verbs], graphics, illustrations, summary, materials list).

During

- Model reading the introductory material and the first 2 or 3 steps aloud, noting the **signal words** and what they tell the reader to do.
- Ask students to continue reading the instructions to **identify** the task to be completed. Suggest that students imagine themselves completing the instructions.
- Ask small groups to **discuss** the **strategies** they used to read the instructions and determine what they were expected to do.

After

- **Clarify** any confusing sections of the instructions. Use a flow chart to **outline** the steps, if necessary.
- Have students individually or in pairs **complete** the instructions. **Compare** the completed tasks.
- Discuss how students figured out what to do.
- **Identify** confusing or challenging parts and suggest additional strategies.

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Notes

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Instruction Analysis 1

How to Mix Concrete by Hand

Concrete mixing is hard work. Power mixers do most of the work on the job site; however, sometimes the concrete is mixed by hand for a smaller job. Concrete is a combination of sand, gravel or other aggregates, and portland cement mixed with water to form a semi-fluid mixture. This mixture is then poured into a form to harden. There are special tools and materials that are needed to make a good mixture that is easy to use and finishes well.

First you need good quality materials. Choose the best type of cement for the masonry work you are doing. The **aggregate** (sand, gravel and stones) should contain large and small particles to make the strongest concrete. Measuring a litre of water will help you use the correct proportion of dry to wet materials.

The tools that you need to mix concrete by hand are:

- a wheelbarrow to mix up and move the mixture to the form,
- a mortar hoe to mix the concrete,
- a concrete hoe or square-end shovel to place the mixture in the form,
- a concrete rake to tamp down the mixture, and
- floats and darbies to smooth and finish the concrete.

Mixing the concrete takes time and patience. Chose a clean, flat surface or a mortar box. Measure the ingredients carefully for the amount that you need. First layer the dry ingredients starting with the gravel, then sand, then cement. Use a hoe or rake to thoroughly mix the dry ingredients. Next make a shallow depression in the centre of the dry ingredients and pour in a little water. Mix this thoroughly, then add more water and mix again. Continue adding water and mixing until all of the dry ingredients are wet and the mix is an even colour.

Finally test to see if you have mixed the concrete to your satisfaction. This is called a settling test. First, smack the concrete with the back of a shovel. Next, jab it lightly with a hoe to make some ridges. If the surface is smooth and the ridges keep their shape, then the mix is right. Now you are ready to pour your mix into the prepared form. Once it is in the form you will need to smooth or finish the surface and let it harden.

Adapted from Mike Markel, *Technical Communications.* (Toronto: Nelson Thomson Learning), pp. 76-79.

Instruction Analysis 2

Magic Books Product Display

Procedures for Setting Up the Display

1. Check with the conference coordinator to ensure that our supplier, Better Displays has delivered and set up bookshelves, a display table, and chairs at our booth. If there is a problem with the delivery or the equipment, phone Jim on his cell phone at 244-7179 immediately.

2. Unpack the boxes that have been sent by the publisher to the display area. Unpack the box marked with a large purple X first. It is the supplies box, containing items you will need to set up the display. Use the checklist inside to ensure that you have all supplies and resources for the display.

3. Place ten copies of each of *Easy Magic Tricks, Magic for Kids* and *More Amazing Magic* on the bookshelves behind the display table. Display all titles with their covers facing out, and their spines to your left, assuming you are facing the bookshelves behind the display table. Follow these directions when placing the titles on the shelves.
    - Place *Easy Magic Tricks* in the bookshelf to your left.
    - Place *Magic for Kids* in the central bookshelf.
    - Place *More Amazing Magic* in the bookshelf to your right.
    - See diagram of a Magic Books Product Display.

4. Place the posters advertising the three new titles on the wall of the booth, above the bookshelves. Situate the posters above the titles they advertise. For example, place the poster for *Easy Magic Tricks* above the bookshelf displaying *Easy Magic Tricks*. Attach the posters to the wall with the poster glue that is in the supplies box.

5. Place the brochures for the three new titles on the display table in front of the bookshelf. Make sure that you put each brochure in front of the book that it is advertising. See the diagram of a Magic Books Product Display.

6. Place the small poster advertising the draw for the magic costume toward the back of the display table, in the centre. Prop it up with a display stand. Place the jar (which will hold the ballots for the draw) in front of the poster. Both the jar and display stand are in the supplies box.

7. Keep our catalogues in an accessible spot behind or under the display table.

8. Ask the conference coordinator to ensure that empty boxes are removed.

Janice Adams et al. *Reading and Writing for Success: Senior,* (Toronto: Harcourt Canada, 2001), p. 143.

Posters for Instruction: Reading

The communication posters included in this resource document are intended to provide reminders for students when they are reading, writing or engaged in discussion in class. The reading posters focus on before, during, and after reading strategies. The word "text" is used to refer to a reading selection of any length in any subject (paragraph, chapter, section, or textbook). Posters can be displayed during instructional time or when students are practising the skills. While the posters appear as 8 ½ x 11" size in this document, they can be enlarged to legal or ledger size using a commercial photocopier.

— Before Reading —

Ask Questions

What can I ask myself BEFORE reading
to help me understand this text?

- What do I already know?
- I wonder if...
- What do I need to know?

— Communication —

— During Reading —

Ask Questions

What can I ask myself as I read
this text to help me understand?

- Does this make sense?
- How does this information connect to what I already know?
- What does the writer say about...?
- What does the writer mean by...?
- I still need answers to the question...

— Communication —

— During Reading —

Understand the Text

At a tricky part in the text, I...

- pause to think about...
- take a closer look at...
- break the text into "chunks".
- summarize as I read.
- discuss what I have read.

— Communication —

— During Reading —

Make Inferences

How can I read between the lines?

- Based on what I have just read, I now realize...
- The evidence that supports my thinking is...
- I can now conclude...
- I think... because ...

— Communication —

— During Reading —

VISUALIZE

To better understand while
I was reading...

- I pictured what ... might look like.
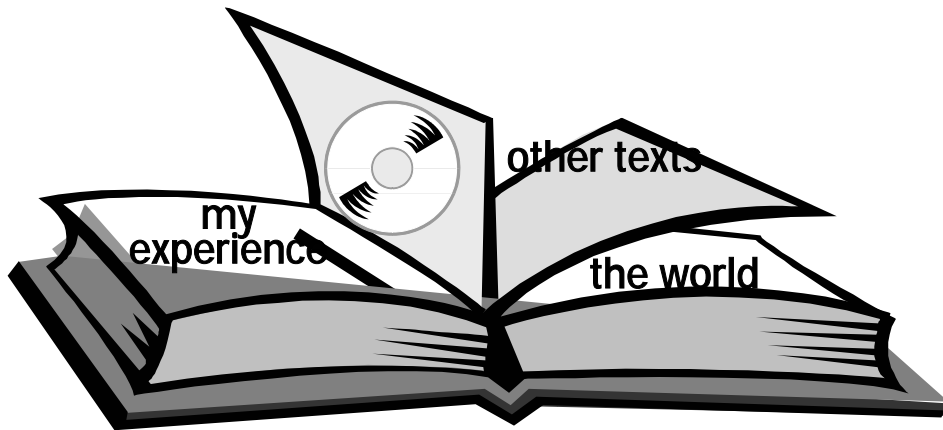- I created a mental image of...
- I used the images to help me...

— Communication —

— During Reading —

Make Connections

How can I use what I already know
to help me understand this text?

- I already know about...
- This text reminds me of...
- This compares to...
- This text is different from... because...
- This section made me think about...

— Communication —

— During Reading —

THINK TO READ

When I get to an unfamiliar word
or section, I...

- look at photographs, diagrams, tables, or charts.
- reread for meaning.
- use context and clues for hints.
- skip and return.
- pause and ask questions.

— Communication —

GOOD NOTES
— During Reading —

To take good notes I...?

- look for the main idea(s).
- use words I understand.
- limit the number of words – restate, delete, combine.
- organize with headings.
- use symbols, colours, and webs to organize.
- review, add, and revise.

— Communication —

— After Reading —

Ask Questions

What can I ask to help me
better understand this text?

- What does the writer mean by...?
- Why did/didn't...?
- What have I learned?
- I wonder if...

— Communication —

— After Reading —

Find the Main Idea(s)

What is/are the main idea(s)?
What is important?

- The most important thing I remember about this text is...
- The main message is...
- The text was mainly about...
- Clues, words and features that helped me understand the text were...

— Communication —

— After Reading —

Think About the Text

How do I put all the pieces together?

- The message of this text is ...
- The purpose of this text is ...
- These ideas relate to... because...
- This text may be biased because ...
- This text doesn't deal with ...

— Communication —

Before Reading

Ask Questions

What can I ask myself BEFORE reading to help me understand this text?

- What do I already know?
- I wonder if...
- What do I need to know?

Communication

Ask Questions

What can I ask myself as I read this text to help me understand?

- Does this make sense?
- How does this information connect to what I already know?
- What does the writer say about...?
- What does the writer mean by...?
- I still need answers to the question...

During Reading
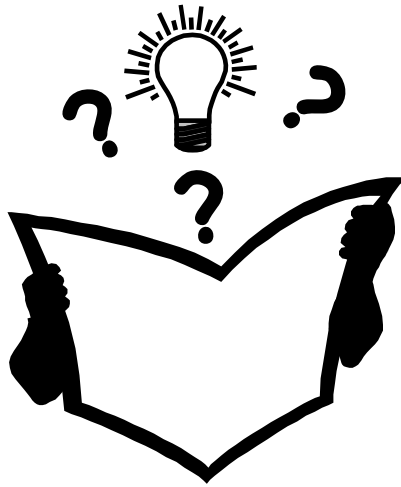
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- break the text into "chunks".
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- discuss what I have read.

Communication

Make Inferences
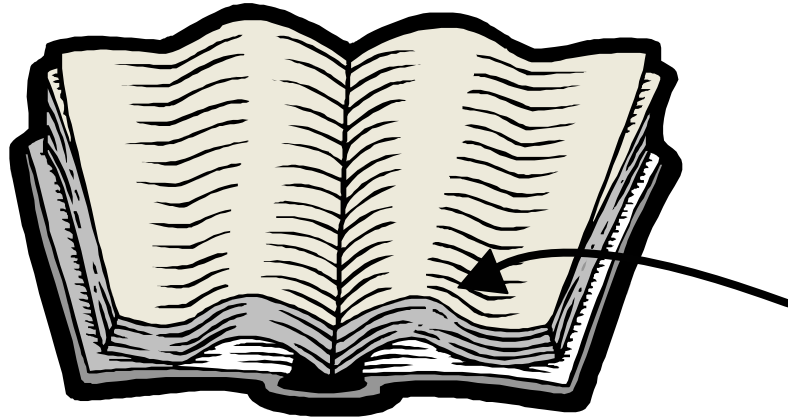
How can I read between the lines?

- Based on what I have just read, I now realize...

- The evidence that supports my thinking is...

- I can now conclude...

- I think... because ...

During Reading

VISUALIZE

*To better understand while
I was reading…*

📌 I pictured what … might look like.

📌 I created a mental image of…

📌 I used the images to help me…

Communication

During Reading

Make Connections

other texts
my experience
the world

How can I use what I already know to help me understand this text?

- 📌 I already know about...
- 📌 This text reminds me of...
- 📌 This compares to...
- 📌 This text is different from... because...
- 📌 This section made me think about...

Communication

During Reading

THINK TO READ

*When I get to an unfamiliar word
or section, I…*

- 📌 look at photographs, diagrams, tables, or charts.
- 📌 reread for meaning.
- 📌 use context and clues for hints.
- 📌 skip and return.
- 📌 pause and ask questions.

Communication

TAKE GOOD NOTES
During Reading

To take good notes I…?

- look for the main idea(s).

- use words I understand.

- limit the number of words – restate, delete, combine.

- organize with headings.

- use symbols, colours, and webs to organize.

- review, add, and revise.

Communication

After Reading

Ask Questions

What can I ask to help me better understand this text?

- What does the writer mean by...?
- Why did/didn't...?
- What have I learned?
- I wonder if...

Communication

Find the Main Idea(s)

What is/are the main idea(s)?

What is important?

- 📌 The most important thing I remember about this text is...

- 📌 The main message is...

- 📌 The text was mainly about...

- 📌 Clues, words and features that helped me understand the text were...

After Reading

Think About the Text

How do I put all the pieces together?

- The message of this text is …
- The purpose of this text is …
- These ideas relate to… because…
- This text may be biased because …
- This text doesn't deal with …

Communication

Writing Strategies

Introduction to Writing Strategies

Generating Ideas:

Rapid Writing
Setting the Context (What Do My Readers Want to Know?)
Adding Content (Pass It On!)

Developing and Organizing Ideas:

Webbing, Mapping and More
Supporting the Main Idea
Adding Details

Revising and Editing:

Reorganizing Ideas
Asking Questions to Revise Writing
Peer Editing
Proofreading Without Partners

Writing for a Purpose:

Using Templates:
Writing a Procedure
Writing an Information Report
Writing a Business Report
Writing an Explanation

Posters for Instruction: Writing

Generate Ideas
Organize Writing
Revise and Edit

Introduction to Writing Strategies

Students learn to write by writing. They need regular opportunities at school to write in all subjects. A consistent approach to the writing process in all subject areas and explicit instruction on the writing process by the subject teacher help students become better writers. Models of good writing in the subject area, and feedback that is constructive and formative, are critical to students' growth as writers.
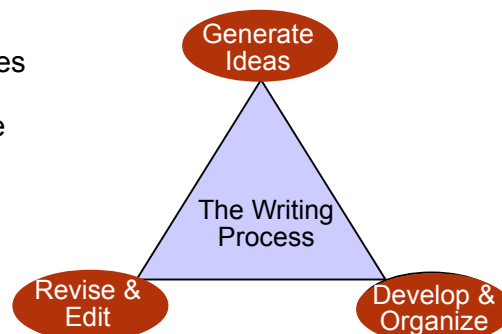
Struggling writers need:
- regular, meaningful opportunities to practise writing in subject-specific contexts.
- teachers who model the writing process and demonstrate its usefulness.
- opportunities to talk about their writing.
- prior knowledge about language, subject content, and the world.
- knowledge of different writing forms and their characteristics.
- expanded sight vocabularies for subject-specific writing.
- strategies to become independent writers in any context.

Promoting Consistency

Students are sometimes confused by differences in writing requirements from subject to subject within the same school. Although different subjects require different types of writing assignments, all writing can follow the same process. By adopting a consistent writing process across all subject areas, teachers ease some of the stress associated with writing, and help students build confidence and skill as writers.

The Writing Process

The writing process involves generating ideas, developing and organizing the ideas, and revising and editing them. Effective writers cycle through these stages until they are satisfied that the writing achieves its purpose.

Generating Ideas

In all subject areas, students need to develop skills for getting what they know about a topic down on paper, and generating ideas or finding additional facts. They also need skills to check whether their writing is on-topic and fulfills its purpose. Further, they need to be able to explain the writing assignment and the process they are following to effectively complete the assignment.

Developing and Organizing Ideas

Students need to know how to organize what they have learned about any topic or assignment into a well-structured whole. In longer writing assignments, they need to know how to create a strong, focused introduction that catches the reader's interest; how to link ideas in logically connected paragraphs that contain enough supporting detail; and how to conclude with a strong ending.

Revising and Editing

Students need individual and group skills to assess their own work and the work of others for content, clarity, form and style, and for errors in grammar, punctuation and spelling. Ultimately, students have individual responsibility for the accuracy of their work, but they need to know how to help each other improve.

Generating Ideas: Rapid Writing

When students engage in *rapid writing* at the beginning of a writing assignment, they access their prior knowledge, engage with content, review and reflect, and begin to set direction for writing letters, essays, and other subject-based assignments.

Purpose
- Help students to start writing and ultimately to produce more writing.
- Encourage fluency in generating ideas for writing on any topic, in any subject area.
- Help students begin organizing ideas.

Payoff
Students will:
- rapidly generate fresh ideas about topics in any subject area.
- write down ideas without self-editing.
- generate raw material for more polished work.
- complete writing activities on time, overcome writer's block, and improve test-taking skills.

Tips and Resources
- This strategy may be used in a number of ways, including: prewriting; brainstorming for a specific question; or writing for reflection, learning logs, mathematics journals, work journals, etc.
- This strategy may also be used as a pre-reading strategy, similar to a KWL.
- Use this strategy to review what students remember about classroom work.
- Use rapid writing regularly in the classroom, and have students select the day's topic. Possible topics might include analyzing a science hypothesis, discussing proof for a mathematics word problem, or developing an opinion on a history or geography topic.
- Students can apply this strategy when writing tests or examinations, by "scribbling down" information they are afraid of forgetting just before they begin responding to the questions.
- Use the rapid writing drafts to give students practice in proofreading and reviewing their writing for flow of ideas. When students use this strategy at the computer with the monitor turned off, they will be amused by how many errors in proofreading they have made. Be prepared for some laughter in the classroom when using this approach.
- See Student/Teacher Resource, *Tips for Rapid Writing*.

Further Support
- Write the topic on the board, and do not repeat it orally if a student comes in late. Instead, point at the board. This also reinforces the topic for visual learners and for students who have poor aural memory.
- Encourage students to use the rapid writing strategy to overcome anxiety for tests or assignments.
- Use timed writing for parts of a task - e.g., as many words as possible in three minutes, then as many more as possible in the next three min, etc.
- Vary criteria: some students may need to work in point form, or stop and break after three minutes.
- Save completed rapid writing samples to use later to teach writing conventions or organization of ideas.
- Vary the amount of time you give to students.
- Post the topic-related vocabulary in the classroom as an aid for struggling students.

Generating Ideas: Rapid Writing

What teachers do	What students do
Before • Plan a topic for rapid writing or invite the students to suggest topics. • Explain that the purpose of rapid writing is to allow students to record what they know about the topic, subject, or activity, without worrying about repetition, spelling, grammar, or any other errors. • Give directions for rapid writing. See Student/Teacher Resource, *Tips for Rapid Writing*.	• (Optional) Suggest topics for rapid writing that are related to the subject of study.
During • Give directions. See Student/Teacher Resource, *Tips for Rapid Writing*. • Give the signal to begin. • Time the students. • Give the signal for students to stop writing. (You may want to give them a one-minute warning.)	• At the starting signal, write or type as quickly as possible without stopping or making any corrections.
After • Debrief. • Ask students to count the number of words they have written. • Ask who has at least ___ words, until only one or two hands remain up. • Discuss the topic, based on what the students have written. Encourage students who don't usually participate. • Focus the students' attention on how their rapid writing can be the starting point for more polished pieces. • **Alternatively,** as a follow-up direct students to begin classifying and organizing their ideas. • **Alternatively,** organize students into small groups to share their rapid writing and to compose a short collaborative paragraph on the topic.	• Count and record the number of words. • Discuss the topic by reading aloud parts of what they have written. • In pairs, explain the thinking behind the categories used. • One student from each group reads the paragraph to the class.

Notes

Tips for Rapid Writing

- **Write as fast as you can.**

- **No corrections or erasing allowed.**

- **Write until your teacher says "STOP" – do not stop before!**

- **Don't lift your pen/pencil from the paper or remove your hands from the computer.**

- **If you get stuck, jumpstart your brain by writing the topic title and extending it to a sentence.**

- **When your teacher says "STOP," count and record the number of words you have written.**

- **Be prepared to discuss your topic: use the writing you have done to start you off.**

W

Generating Ideas: Setting the Context (What Do My Readers Want to Know?)

Good writers anticipate the information and ideas that readers may want or need to know about the subject. Imagining and considering the possible questions that the intended audience may have about the topic help to generate possible content for the writing, suggest a writing form, and provide a direction for research.

Purpose
- Generate possible topics and subtopics for a writing task.
- Identify important ideas and information to include in the writing.
- Identify the audience and purpose for the writing.

Payoff
Students will:
- clarify the writing task (purpose, audience, form).
- consider the audience and the purpose for the writing.
- generate questions and use them to focus the writing.

Tips and Resources
- *Purpose* refers to the reason for the writing and the results that writers expect from the writing. Some writing is intended to communicate information to the reader. These purposes include *to inform*, *to explain*, *to review*, *to outline*, and *to describe*. Other purposes convince the reader of a particular viewpoint. These include *to request*, *to persuade*, *to assess*, *to recommend*, *to propose*, *to forecast,* and *to entertain*. The purpose for the writing will affect the selection of content, language, and form.
- ***Audience*** refers to the intended readers of the writing. Defining the audience is important because it will affect the content (what is said), and the form and features (how it is said). The intended audience may vary in age, background knowledge, experience and interest.

Cross-Curricular Literacy: Strategies for Improving Secondary Students' Reading and Writing Skills, pp. 64-79.
Cross-Curricular Literacy: Strategies for Improving Middle Level Students' Reading and Writing Skills, Grades 6-8, pp. 72-91.
Info Tasks for Successful Learning, pp. 35-36, 90-91.

Further Support
- When students are working in pairs, have each partner generate questions for the other's topic.
- To generate ideas, ask questions about the topic from the point of view of the intended audience. Provide support for asking rich questions.
- Review the 5W + H questions (who, what, when, where, why, how).

W

Generating Ideas: Setting the Context (What Do My Readers Want to Know?)

What teachers do	What students do	Notes

Before
 	
 • Write a topic on chart paper or the chalkboard and describe the audience and purpose for this piece of writing (e.g., to inform community members about environmental concerns related to a new manufacturing plant in the area; to explain to Grade 8 students how geometry is used in different occupations; or to promote a company's new computer network system).
 • Model for students the process of imagining the readers and the possible questions they would ask about the topic, and record these questions under the topic heading. For example, on the topic of the music industry for a teenage audience, the reader may want to know:
  - What is the most popular type of music?
  - How many CDs do top artists sell?
  - How much money do they get for each CD?
  - What types of jobs are in the music industry?
  - How much do they pay?
 • Ask students to contribute questions that they think the audience would need/want answered. If needed, use prompts such as:
  - Who are my readers?
  - What background information about the topic do they need?
  - What do my readers need to know first?
  - What other things will my readers need to know?
	• Recall what they already know about the topic.
	
	 • Imagine the questions they would ask as readers of a piece of writing on this topic.
	 • Make connections to other students' questions, noting similarities and differences.
	
	 • Imagine that they are the readers and generate possible questions.	

During • Ask students to review their selected topics for a subject-related writing task, to identify purpose and audience. • Have students (in pairs, small groups, or individually) create possible questions that the readers may have about the topic. • Have students share and compare the questions for similar topics. Students may wish to add to or refine their list of questions.	• Recall what they already know about their topic and imagine what their reader may want to know. • Contribute to the discussion. • Work in pairs or groups, using chart paper to record questions. • Post chart pages or report on questions that the pairs or groups generated.	
After • Model for students how to organize the questions into a possible outline for their writing, and use the questions to focus their first draft writing or research. • Ask students to use their questions to create a writing outline. • Ask students to use their writing outline questions to begin writing about their topic.	• Listen to the teacher's thinking process for organizing the questions. • Working individually, use an initial writing technique (such as rapid writing) to respond to the questions in order to get started on the writing assignment.	

103

W

Generating Ideas: Adding Content (Pass It On!)

This strategy provides feedback to students *before* they start their first draft. Students exchange their *brainstorming* and *notes* for any project-paragraphs, research, process, lab reports or summaries, and develop questions designed to help them draw out more details for their first draft.

Purpose
- Identify ideas and information that may have been omitted.
- Reconsider and revise initial thinking (such as brainstorming) *before* writing the first draft.
- Teach students how to question others and themselves.

Payoff
Students will:
- ask who, what, where, when, why and how (5W+H), and predict questions while writing.
- add and support ideas, with the help of others and then on their own.

Tips and Resources
- This activity is a good follow-up to *Rapid Writing* and *What Do My Readers Want to Know?*
- This strategy may be used before and during writing, especially if students are sharing research.
- See Teacher Resource, *Adding Content – Annotated Student Sample* and Student Resource, *Instructions for Adding Content (Pass It On!)*.
- Provide stick-on notes if students find it too confusing to have other students writing on their work.

Further Support
- Teachers should model the process of asking questions about a piece of writing. Alternatively, teachers may post a piece of personal writing and invite students to ask questions about various parts of the piece.
- Students may use brainstorming or first drafts of any assignment they are working on (e.g., research/planning, paragraphs, summaries, lab reports, essays, answers to questions).

W

Generating Ideas: Adding Content (Pass It On!)

What teachers do	What students do
Before • Assign a topic based on class content. • Distribute Student Resource, *Instructions for Adding Content (Pass It On!)*. • Review who, what, where, when, why and how (5W + H questions), using the handout. • Suggest other possible questions, depending on the type of assignment (narrative or informative). • Remind students about the purpose of this activity – to ask questions (based on what's already there) that they would like the writer to answer. • Create groups of 4 to 6 students.	• Individually brainstorm or make notes for the topic. • Read the instructions with the teacher.
During • Time the students – have them pass their work to the person to their left and add questions to the work that is handed to them. In 3 to 5 minutes, depending on length of the work, call "time" and have the students pass their work to the left again. • Have students continue until the work has been returned to the original author. • (Optional) Ask students to begin answering the questions or making suggestions regarding the questions they see on the papers in front them, once work has been passed to at least two others in the group.	• Within their group, pass work left and quickly skim the work handed to them. • As they read, ask questions based on the 5Ws and how. • Work silently. • Use stick-on notes and write comments and questions in margins. • (Optional) Start answering some of the questions others have written on the work, once they have questioned the work of at least two of the people in the group – even if it is not theirs.
After • Use the edited work and the answers to the questions as the basis for a written assignment.	• Try to answer as many of the questions as possible when they get their own work back. • Use the questions and answers as the basis for responding to the written assignment.

Notes

Adding Content – Annotated Student Sample

Topic: Why people are violent

-violence-- many causes

What kind of violence?

What types of violence are we talking about here?

-some violent because they have been desensitized

what does desensitize mean?

-don't have social skills

I think it means that people see so much violence that they don't notice it!

-our society fosters violence

Why do we need social skills?

-no protection for victims

Do you mean we cause it or we encourage it?

-some people excuse violence—say we make too big a deal out of it

Give me an example of this.

-some don't know laws

-low self-esteem contributes

-sometimes society blames the victim

Instructions for Adding Content (Pass It On!)

When you build a fire, you need just enough wood to get it started. Usually we start with small pieces and then add the larger ones after the fire gets going. That's what we are going to do with your initial ideas or drafts for writing your _____ assignment.

The assignment you have written is like a small flame – it's an idea, and you may need to add more ideas to it. Here's an easy way to learn the questions you need to ask in order to add fuel to your fire. You are going to trade work with people in your group and ask questions without talking.

When you are in your group, you will each pass your work to the person on your left. You will work within a time limit, so work quickly.

Don't worry if you don't finish all of the assignment you are looking at – the next person will probably deal with parts that you don't.

Here's how to add the fuel…

In your groups:

1. Pass your work to the person on your left. Quickly skim the work that *you* have received from the person to your right.

2. As you read, ask questions based on the 5W's and How. Some of your questions might be:
   · What's this all about?
   · What happened?
   · Where did this happen?
   · When did this occur?
   · Who was involved?
   · Why did this occur?
   · What happened as a result?
   · What other choices were possible?
   · How does this affect others?

3. Do not talk until you have passed around all of the work. If you can't read or understand something, don't ask the person. Just write down a question or comment, such as "I don't get this" or "I can't read this."

4. Write in the margin, or at the top of the page, or in the lines – just don't write on top of someone else's writing!

5. Once you have questioned the work of at least two of the people in your group, you may want to start answering some of the questions others have written on the work – even if the work is not yours.

6. When you finally get your own work back, try to answer as many of the questions as you can. The information you give will add to whatever you are writing.

W

Developing and Organizing Ideas: Webbing, Mapping and More

Effective writers use different strategies to sort the ideas and information they have gathered in order to make connections, identify relationships, and determine possible directions and forms for their writing. This strategy gives students the opportunity to reorganize, regroup, sort, categorize, classify and cluster their notes.

Purpose
- Identify relationships and make connections among ideas and information.
- Select ideas and information for possible topics and subtopics.

Payoff
Students will:
- model critical and creative thinking strategies.
- learn a variety of strategies that can be used throughout the writing process.
- reread notes, gathered information and writing that are related to a specific writing task.
- organize ideas and information to focus the writing task.

Tips and Resources
- Strategies for webbing and mapping include:
   - *Clustering* – looking for similarities among ideas, information or things, and grouping them according to characteristics.
   - *Comparing* – identifying similarities among ideas, information, or things.
   - *Contrasting* – identifying differences among ideas, information, or things.
   - *Generalizing* – describing the overall picture based on the ideas and information presented.
   - *Outlining* – organizing main ideas, information, and supporting details based on their relationship to each other.
   - *Relating* – showing how events, situations, ideas and information are connected.
   - *Sorting* – arranging or separating into types, kinds, sizes, etc.
   - *Trend-spotting* – identifying things that generally look or behave the same.
- See Student/Teacher Resource, *Webbing Ideas and Information*.

Info Tasks for Successful Learning, pp. 23-32, 87, 90, 98.

Further Support
- Provide students with sample graphic organizers that guide them in sorting and organizing their information and notes- e.g., cluster (webs), sequence (flow charts), compare (Venn diagram).
- Have students create a variety of graphic organizers that they have successfully used for different writing tasks. Create a class collection for students to refer to and use.
- Provide students with access to markers, highlighters, scissors, and glue, for marking and manipulating their gathered ideas and information.
- Select a familiar topic (perhaps a topic for review). Have students form discussion groups. Ask students to recall what they already know about the topic, and questions that they still have about the topic. Taking turns, students record one idea or question on a stick-on note and place it in the middle of the table. Encourage students to build on the ideas of others. After students have contributed everything they can recall about the topic, groups sort and organize their stick-on notes into meaningful clusters on chart paper. Ask students to discuss connections and relationships, and identify possible category labels. Provide groups with markers or highlighters to make links among the stick-on notes. Display the groups' thinking.

Developing and Organizing Ideas: Webbing, Mapping and More

What teachers do	What students do
Before · Select a current subject-specific writing task. · Prepare an overhead transparency sample or chart-paper sample of possible ideas and information gathered on the topic (e.g., point-form notes for a report on the uses of lasers in the medical field). · Using a marker, model for students how to make connections among the ideas and information (e.g., number, circle, colour-code, draw arrows). · Using a strategy such as webbing or map ping makes it easier to see connections and relationships. Writers often create a graphic organizer to manipulate and group their information into meaningful clusters. · Use a web to demonstrate the process of rereading notes and arranging key points to show the connections and relationships. See Student/Teacher Resource, *Webbing Ideas and Information*.	· Recall what they already know about the topic and writing task. · Make connections to own notes. · Note the links and connections that the teacher makes among ideas and information. Consider the similarities and differences of their own thinking. · Recall past use of a webbing strategy to record or organize thinking.

During
 	
· Ask students to contribute to the web by identifying important ideas and key infor-mation and by suggesting how to place the points to create a web.
· Ask students questions to clarify the decisions. For example:
  – What does this mean?
  – Is this important? Why?
  – Is there another way to sort my notes?
· Model for students how to use the web to create a possible outline or template for writing a first draft. Consider the generali-zations and/or categories that emerge from the connections and relationships, to help identify subtopics, headings and structure.
	· Contribute to the discussion.
	· Note the similarities and differences in responses.

After · Have students refer to their notes for the writing task. · Ask students to create a web by sorting and organizing their ideas and informa-tion. · If appropriate, consider having students who are writing on a similar topic work in pairs to create a web for their combined notes. Some students may prefer to use scissors to cut-and-paste their web. · Ask students to reread their webs and use them to create an outline for writing.	· Reread notes and identify important informa-tion and ideas. · Use the question prompts to re-phrase notes, identify key points, and group the ideas and information to create a web. · Share and compare webs. · Make the connection between the web and possible ways of organizing the information and ideas into a template for writing.

Notes

Webbing Ideas and Information
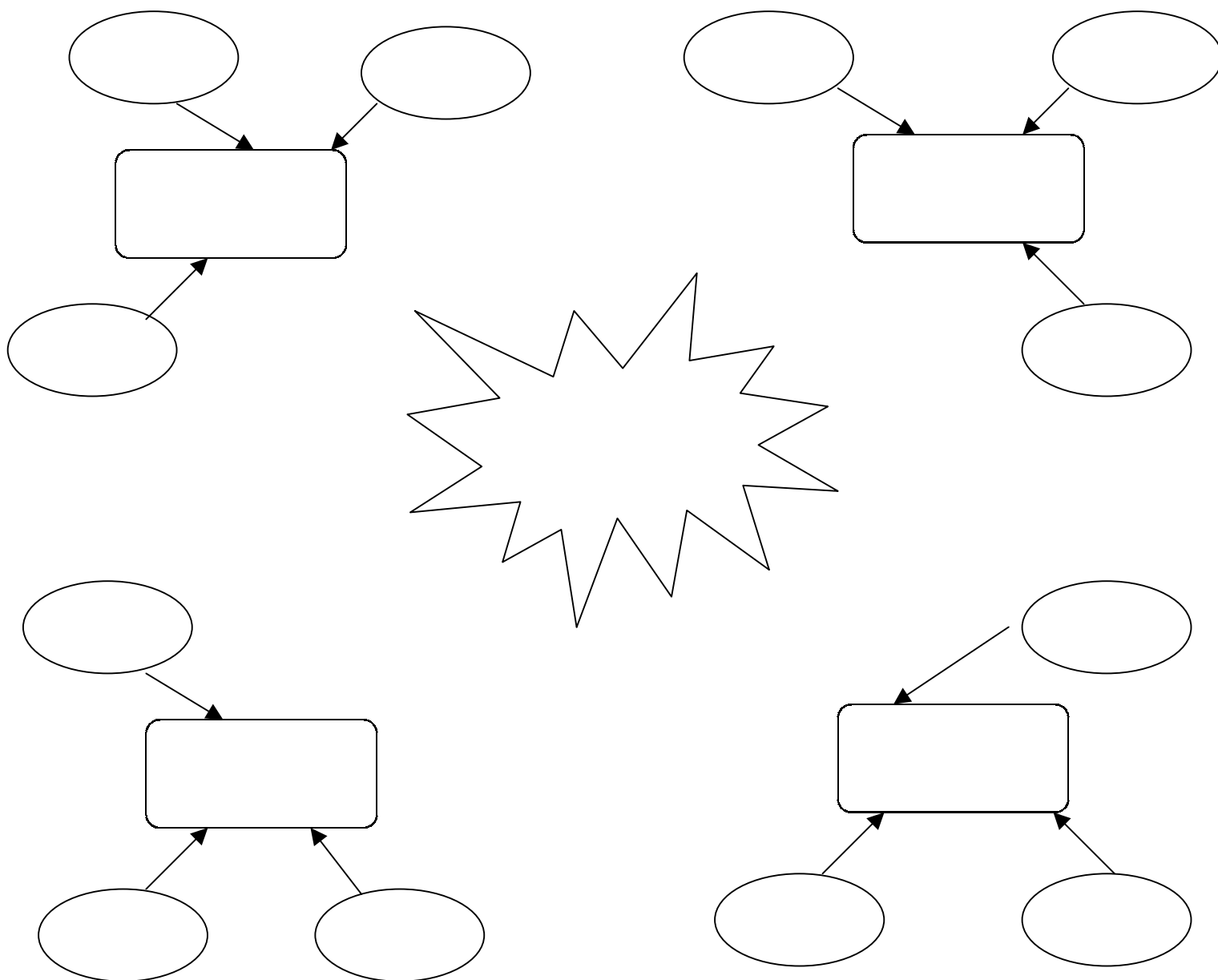
What are the big ideas?
Can you identify any patterns and trends?
How are the ideas and information connected?
What evidence or information is missing?
Is a particular viewpoint suggested?
Does the web suggest a writing outline?

W

Developing and Organizing Ideas: Supporting the Main Idea

In this strategy, students learn how to select the better of two possible main ideas to use as a topic sentence in an information paragraph, and then learn how to choose details to support it. Student samples are selected from a variety of subject areas. Samples may also be used to teach summary writing.

Purpose
- Distinguish main ideas and supporting details for a paragraph.

Payoff
Students will:
- write well-organized paragraphs for different subject areas, with supporting details.
- demonstrate a clear understanding of the topic.
- improve reading comprehension by spotting main ideas and supporting details.

Tips and Resources
- Write the sentences into a paragraph, starting with the most general and writing the remaining sentences in order of importance (most to least or least to most).
- Use this strategy in mathematics to deal with word problems, or in law and history to argue a point.
- See **Finding Organizational Patterns** for a follow-up activity.
- "Main Idea": a broad statement that includes a topic that can be expanded. It usually begins a paragraph.
  - *e.g.* Studying mathematics organizes the mind.
    Art appreciation opens the mind.
- See the following resources:
  - Student Resource, *Finding and Supporting the Main Idea.*
  - Student/Teacher Resource, *Finding and Supporting the Main Idea – Sample Exercise*.
  - Student/Teacher Resource, *Finding and Supporting the Main Idea – Answer Key*.
- This strategy can help students to understand how to do the task on information paragraphs in the Ontario Secondary School Literacy Test.

Further Support
Alternative methods:
- Complete the activity on paper.
- Work either individually or in pairs.
- Read groups of sentences.
- Look for the best-supported general statement.
- Cross off statements that do not fit the general statement selected.

W

Developing and Organizing Ideas: Supporting the Main Idea

What teachers do	What students do
Before · Use the sample *Finding and Supporting the Main Idea* to create similar sets specific to your content area. · Enlarge each set of statements and cut up into their separate statements. · Place each set of statements into a separate envelope. · Divide the class into groups of three or four and give each group one set of statements. · Model the strategy on the board or overhead using the set that was given to the students. · Teach how to find the main ideas in the statements (see Tips and Resources). · Hand out a second set of envelopes to each group for them to complete independently. · **Alternatively**, have the students complete this activity directly on paper, without cutting up the groups of statements.	· Read through the set of statements with the teacher. · Annotate statements while the teacher models.
During · Circulate through the class. · Ask students how they know which statement is the best-supported generalization. · Point out that if students have more sentences crossed out than they have left to work with, they have probably selected the wrong generalization.	· Work individually or in pairs or small groups. · Read the group of sentences. · Look for the best-supported general statement. (If there is more than one main idea: choose the one that has the most supporting statements.) · Place statements to the side if they do not fit the selected main idea. · Place the selected main idea or generalization at the top. · Place the supporting statements directly under the generalizations.
After · Review and discuss the second set of sentences. If needed, have students move on to another set of sentences. · When work is complete, review work with students and discuss answers. · Model how to use the sentences to write a paragraph – using the paragraph template. · Demonstrate how to write a concluding sentence. The basic style is to reword the first sentence/generalization. · **Alternatively**, assign topic and have students write a generalization and supporting details.	· Review the statements with the teacher. · Write sentences into a paragraph. · **Alternatively**, write own generalization and supporting details in answer to a teacher-assigned topic (e.g., write instructions for how to find the area of a circle; explain effects of gravity; discuss the impact of a current event).

Finding and Supporting the Main Idea

1. Look at the scrambled statements in paragraph one.

2. Identify two main ideas in paragraph one.

3. Choose which main idea is best supported by the other statements given – this will be your main idea for the paragraph.

4. Cross off or remove the statements that do not belong in the paragraph (that do not support your main idea).

5. Order the statements in the paragraph.

6. Share and compare your ideas with others.

7. Write your final paragraph.

Repeat the process for paragraphs two and three.

Finding and Supporting the Main Idea

Sample Exercise

Paragraph one:

Time capsules describe everyday life.
Make a list of items you would like to include in the capsule.
Time capsules tell us how people lived in past generations.
Time capsules tell us what was important to past generations.
People put objects from their everyday life into time capsules.
Garbage bags, videos, pictures, and diaries are some of the items that could be included in the capsule.
Decide how to make your capsule interesting.
The time capsule should be a weatherproof container**.**

Paragraph two:

Saliva is the fluid that helps us digest broken-down food.
The sticky mucous in our mouth is called saliva.
Saliva plays an important role in food digestion.
Saliva dissolves food pieces.
We can taste food because saliva allows the food to penetrate cells in our mouths.
Dry your tongue and place sugar on it.
You cannot taste the sugar until the sugar dissolves.
Food tastes good.

Paragraph three:

Always check the Internet.
Technology has improved our lives in many ways.
Computers help make it easier to communicate.
New forms of technology make new sources of fuel less expensive.
Modern technology has used science to develop new forms of transportation.
Less expensive fuel and new transportation forms make the world seem smaller.
People have more technological know-how than ever before.

Finding and Supporting the Main Idea – Answer Key

> **Legend:**
> ➔ main idea
> ✓ statement belongs in the paragraph
> ✗ statement should be crossed out or removed; does not belong.

Paragraph one:

➔ Time capsules tell us what was important to past generations.
✓ People put objects from their everyday life into time capsules.
✓ Garbage bags, videos, pictures, and diaries are some of the items that could be included in the capsule.
✓ Time capsules describe everyday life.
✗ Make a list of items you would like to include in the capsule.
✗ Time capsules tell us how people lived in past generations.
✗ Decide how to make your capsule interesting.
✗ The time capsule should be a weatherproof container.

Paragraph two:

➔ Saliva plays an important role in food digestion.
✓ Saliva is the fluid that helps us digest broken-down food.
✓ Saliva dissolves food pieces.
✓ We can taste food because saliva allows the food to penetrate cells in our mouths.
✗ Dry your tongue and place sugar on it.
✗ You cannot taste the sugar until the sugar dissolves.
✗ Food tastes good.
✗ The sticky mucous in our mouth is called saliva.

Paragraph three:

➔ Technology has improved our lives in many ways.
✓ Computers help make it easier to communicate.
✓ New forms of technology make new sources of fuel less expensive.
✓ Modern technology has used science to develop new forms of transportation.
✓ Less expensive fuel and new transportation forms make the world seem smaller.
✗ People have more technological know-how than ever before.
✗ Always check the Internet.

Developing and Organizing Ideas: Adding Details

In this strategy, students ask questions to support and elaborate on the main ideas from their first draft of a piece of writing. A structure for asking questions is provided.

Purpose
•   Provide additional specific and supportive detail in the writing.

Payoff
Students will:
•   add depth and breadth to writing by including appropriate details.

Tips and Resources
•   Make sure the paragraph composed for this activity is "bare-bones," leaving out most details and many unanswered questions. (For example, see Teacher Resource, *Adding Details – Geography Sample*.)
•   For an annotated sample, see Teacher Resource, *Adding Details – Spam Sample*.
•   As a next step in the writing process, consider following this activity with *Peer Editing*.

Further Support
•   Encourage students to use anecdotes and examples, as well as facts.

W

Developing and Organizing Ideas: Adding Details

What teachers do	What students do
Before · Compose a brief paragraph that explains or describes something you know well, but about which the students are likely to know little. This paragraph can be related to the specific subject content, or a personal anecdote.	· Bring a first draft for a writing assignment to class.
During · Begin by reading the paragraph to the class. (Provide them with a visual copy, either on paper or on a transparency.) · Distribute or display the *Stretching Ideas* handout. See Student/Teacher Resource. · Ask students to reread the paragraph and identify all the places where more information is needed. · Respond to student questions by adding more details, examples, or anecdotes. · Guide students in discussion to see how additional supporting detail improves the quality of the writing. · Direct students (individually or in pairs) to use the *Stretching Ideas* handout to guide revision of their own first drafts.	· Read the paragraph and the *Stretching Ideas* handout and identify places where more information is needed. · Volunteer questions from the handout for the teacher to answer. · Begin revision of own work, using questions from the handout.
After · (Optional) Assign revision of the first draft as homework for a subsequent class. · (Optional) Have students work with the handout and the revised draft to identify further areas for revision.	· May complete revision of the first draft as homework. · May use the handout and the revised draft (individually or in pairs) to identify further areas for revision.

Adding Details - Geography Sample

Cities are created in former natural areas. Some cities are so large and concentrated that very little which is natural remains in them. People have created totally artificial environments in cities, but some people try to make them more natural. Today, many cities are "naturalizing" their surroundings to provide animal habitat.

Adding Details – Spam Sample

What does spam look like?

Who did the studies?

When does most spam arrive in your e-mail?

What's a network?

Why do you start with one word sentences?

Delete. Delete. Delete. Does this sound like you when you open your e-mail inbox only to find countless junk mail messages, or spam, as they are more commonly known? You are not alone if such is the case. According to studies that measure the amount of e-mail that travels through networks around the world, the amount of spam grew by 340% over a six-month period from September 2001 to April 2002-more than triple the rate for e-mail overall. Estimates suggest that 20% of all e-mail is spam, which is enough to seriously affect the efficiency of most e-mail networks due to its overwhelming volume.

Who sends spam?

How do I know if it is spam? Do you have any examples?

So what should we do about it?

Why is it so serious?

How does e-mail travel?

Spam sample excerpted from L.E. Pinto and J.L. Ellerby, *Business Connections: Information Technology in Action* (Toronto: Pearson, 2003), p.222.

Stretching Ideas

Expand

How is this so?

Extend

Such as? For example?

Elaborate

And an example is….
This looks like…. Tell me more about….

When you write –
always remember the three Es:
EXPAND…EXTEND…ELABORATE.

Revising and Editing: Reorganizing Ideas

Writers revisit their writing as they draft to add, delete and change ideas and information. There are specific strategies writers use to revise their writing. One strategy writers use is ARMS (add, remove, move, substitute). (Faigley and Witte, 1981)

Purpose
- Identify different strategies for reorganizing content.
- Examine and determine effectiveness of sentence and paragraph order.

Payoff
Students will:
- organize writing effectively for different purposes in different subject areas.
- organize ideas and information for clarity and emphasis.

Tips and Resources
- Revising is the process of making sure that the writing says what the writer wants it to say. Most writers look for the biggest problems first and then tackle the smaller ones. For example, a writer may begin with the completeness of the content, accuracy and depth of supporting details and evidence, and the way the writing is organized, then look at style, grammar, spelling and usage. Sometimes it is helpful to consider reviewing the writing by looking at paragraphs, then sentences, and finally words and phrases.
- See Teacher Resource, *Paragraph Compare*.

 "Analysing Revision*" College Composition* 32: 400-410.

Further Support
- Have students select a section of a current writing task that they want to revise, and read it aloud to another student. The partner summarizes/paraphrases the content. The student author notes changes, misunderstandings, and omissions, and then clarifies the partner's paraphrase. The partner asks questions about the content and the elements of style to clarify the writing's content and organization. The student author uses the feedback to revise his or her writing.
- Provide students with opportunities to use the computer cut/paste/copy/delete functions to demonstrate their skills in using electronic technology to revise their writing.
- Encourage students to read their writing aloud, and then circle ideas that are confusing, put arrows where information or evidence is missing, and cross out repetitious information or words. This process can also be used to edit writing by circling words and phrases that they wish to improve or that have been overused.

W

Revising and Editing: Reorganizing Ideas

What teachers do	What students do

Before
• Prepare two paragraphs on a subject-related topic (see Teacher Resource, *Paragraph Compare*).
• Have groups read the paragraphs and discuss which is more effective. Ask students to share responses and justify their reasoning (each version has strengths and weaknesses).
• Have students make suggestions for improving the writing (e.g., Add, Remove, Move, Substitute) and determine possible revising questions such as:
  - Does it make sense?
  - Is the topic clear?
  - Is the main idea clear?
  - Are there enough reasons/details to support the main idea?
  - Are there examples to support the reasons/details?
  - Are there details not connected to the topic and main idea?
  - Is there a closing sentence or conclusion?
• Record the revision prompts.
	• Read the paragraphs and summarize the main idea and details.
	• Contribute to discussion by identifying the strengths and weaknesses of each paragraph (e.g., "strong topic sentence," "supporting details are logical," "uses evidence to support main idea," "uses strong words to convince me," "not enough facts and examples").
	
	• Reread the revision prompts and ask questions about the prompts.

During
• Prepare a copy (overhead transparency, chart paper) of a draft-writing task on a current topic. Include revision notes such as cross-outs, scribbles, stick-on notes, margin notes, arrows, and inserts.
• Use a revision strategy to demonstrate revising and reorganizing ideas in a piece of writing; e.g.:
  - Add something to the writing.
  - Remove something that confuses or repeats.
  - Move a section of the text.
  - Substitute a word, phrase, sentence or example.
• Note that some writers reread their writing and then use numbers to indicate how they want to reorganize their writing. Other writers use scissors to cut up their draft writing to reorganize the ideas and information, then tape it together as a new draft. You may wish to demonstrate this strategy for reorganizing ideas and information.
	• Recall writing that they have revised or wanted to revise. Identify the sorts of changes they wanted to make.
	• Make connections between their revising strategies and the strategies demonstrated by the teacher.
	
	• Decide which strategies they might try using to revise their writing.

After • Have students refer to a draft writing task that they want to revise. • Ask pairs to read their drafts aloud, and use the revision question prompts to provide feedback to their partner's writing. • Ask students to use the feedback and the ARMS or cut-and-paste strategy to revise their draft.	• Listen to partner's writing and paraphrase or summarize the content. • Note changes, misunderstandings, and omissions, and then clarify the partner's paraphrase. • Decide which revision strategies to use to improve own writing.

Paragraph Compare

Read the two paragraphs below. Identify the strengths and weaknesses in each paragraph. Which paragraph do you think is more effective? Justify your decision.

Sample Paragraph 1

Save the Sea Turtle

Sea Turtles need our protection; they are our link to the past. Although sea turtles have many natural enemies such as sharks and hurricanes, humans are their greatest threat. All five species of sea turtles found on the shores of North America are in danger of dying out and disappearing forever. Beachfront buildings are invading their nesting grounds, and the unfamiliar lights have confused their nesting instincts. Beachcombers disturb their nests. Motorboat propellers are more dangerous than sharks. As well, commercial fishers accidentally catch and kill many turtles in their nets and hooks. Volunteer organizations such as the World Wildlife Federation can educate the public about endangered species and help organize groups to patrol and protect the nesting grounds of these big prehistoric creatures.

Sample Paragraph 2

The Cry of the Sea Turtle

You can hear their cries all along the North American shoreline. They're dying. Soon they will disappear forever and only we can save them. Although sea turtles have many natural enemies such as sharks and hurricanes, humans are their greatest threat. Big beachfront homes and resorts are invading their nesting grounds, and the unfamiliar glaring lights and blaring noises have confused their nesting instincts. Beachcombers destroy their nests looking for treasures, ignoring the treasure of this endangered animal. Motorboat propellers are like dangerous sharks attacking them in supposedly safe waters. As well, commercial fishers carelessly catch and kill many turtles in their nets and hooks. Someone has to educate the public about endangered species and help organize groups to patrol and protect the nesting grounds of the Sea Turtle.

Revising and Editing: Asking Questions to Revise Writing

Students ask other students questions and provide specific feedback about other student's writing. Students gain a sense of taking personal responsibility for their writing.

Purpose
· Discuss the ideas in a piece of writing, in order to refine and revise the ideas.

Payoff
Students will:
· engage in meaningful discussion and deepen understanding about the subject content.
· develop over time into supportive writing partners for peers.
· recognize that the writer owns the writing, but that collaboration helps other students to recognize their audience and to focus their purpose in writing.

Tips and Resources
· The writer Nancie Atwell explains that "the writer owns the writing." This means that the writer should always be given the first opportunity to amend or add ideas, rather than having another person suggest a solution. When other students ask questions or provide open-ended prompts, they give the writer an opportunity to think deeply about a piece of writing and to gain a better sense of how to tailor it to meet the writing's purpose and engage the audience.
· *Revising* is a term that refers to making changes to the ideas in a piece of writing. It may involve adding details, deleting ideas, or amending the order or wording to clarify ideas and point of view.
· See the handout of suggested prompts and questions, Student Resource, *Asking Questions to Revise Writing*.

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Further Support
· Create groups of three or four that will work together to support each other. Ensure that each group has an "ideas" person, a "skills" person (who has good knowledge of organization and the conventions of writing, such as spelling and grammar), and a person who needs strong support.

Revising and Editing: Asking Questions to Revise Writing

What teachers do	What students do
Before • Prepare an overhead or a paper copy of a writing sample based on the subject-area assignment (e.g., a report, an explanation, a procedure, a letter to the editor, or an essay). Note: It may be necessary to excerpt a piece if the assignment is lengthy. • Read the sample aloud, asking students to listen carefully (to hear "how it sounds") while following with their eyes. • Ask students to identify areas of concern or confusion. • Model the use of questions and prompts to the writer, asking students to consider the purpose of these questions and prompts.	• Look and listen for areas of confusion or concern in the writing sample. • Offer suggestions for areas of concern or confusion. • Suggest the purposes or effects of the questions and prompts.
During • Give students the Student Resource, *Asking Questions to Revise Writing,* and take a few minutes to read it over with them**.** • Put students in conferencing groups of three or four to read each other's writing. • Ask students to share their piece of writing with at least two people in their group. • Encourage students to use one or two of the prompts or questions. • Provide 20 to 30 minutes for this exercise.	• Exchange writing drafts with another group member. Take turns reading the writing aloud to each other and asking questions or providing prompts. • Exchange writing drafts with a different group member, and repeat the procedure in the preceding point.
After • Engage students in whole-class discussion about the process. How did they feel about using the questions or prompts? How helpful was the process in helping them to set direction for revising their writing draft? • Direct students to revise their writing draft.	• Revise own writing drafts based on the prompts and questions from their partners.

Notes

Asking Questions to Revise Writing

Your job as a revising partner is a very important one. You can help the writer by:

- giving the writer a sense of how completely the task has been accomplished
- praising parts of the piece that are well expressed or well explained
- identifying areas of confusion
- targeting statements or arguments that may not be well supported with details
- suggesting new avenues of approach.

However, the writer owns the writing, and should not feel that your suggestions or ideas are being imposed as the solution. The best way to help your writing partner is to phrase your comments as open-ended prompts, as questions, or as a combination of an observation and a question. Some suggestions are below.

- Begin by using any "praise" statements that you can.
- If you can't use the "praise" suggestion, you should use the "questions."

Praise	Questions
• This work seems very complete.	• Your writing doesn't seem to be finished. What are your plans for finishing it?
• I really like the way you wrote.... [Be specific!]	• This part confuses me. What could you do to make it more clear?
• Your point of view is very clear.	• What is your point of view here?
• Your supporting details are very strong in this paragraph.	• How can you support this argument with more strength? • What is your evidence in this paragraph?
• Your introduction (or conclusion) is very strong.	• How could you make your introduction (or conclusion) stronger?
• Your introduction really gives me a clear picture of where this piece of writing is going.	• What could you add to your introduction to give me a "road map" of the direction of this piece of writing?
• You've organized your arguments in a very convincing way.	• How could you organize this piece to really persuade your reader to agree with your point of view?
• Your topic sentences state the main idea of each paragraph very clearly.	• How could you rearrange the ideas in this paragraph to have a clear topic sentence?
• Your word choices are very suitable for this assignment and topic.	• Your language may be too casual for this type of assignment. How might you change some of the words to be a bit more formal?

W

Revising and Editing: Peer Editing

Peer editing gives students an opportunity to engage in important conversations about how a piece of writing for an assignment in any subject area has been constructed and whether it achieves its purpose, considering the audience. By reading each other's work, asking questions about it, and identifying areas of concern, students learn a great deal about how to put information together and express ideas effectively.

Purpose
- Encourage students to look at their own and others' writing with a more knowledgeable, critical eye.

Payoff
Students will:
- have an audience for the writing, other than the teacher.
- develop skills in editing and proofreading.
- receive peer input about possible errors and areas of concern, in a "low-risk" process.
- have positive, small-group discussions.

Tips and Resources
- Peer editors should not be expected to correct all of the writer's errors, since the writer is responsible for the piece's clarity and correctness. Rather, the teacher and other students should provide support for the writer to make corrections; e.g., refer to the **Word Wall** strategy in Reading.
- Peer editing is a skill that must be built and practised over time. Begin with a single focus (such as writing an interesting and effective introduction), then add elements *one at a time*, such as:
    - appropriate paragraphing
    - detail and support for topic sentences
    - appropriate subject-specific vocabulary
    - sentence variety
    - conventions of writing (grammar, punctuation, and spelling)
- This strategy may be used more intensively where time permits or where the writing assignment is particularly significant (e.g., an independent study essay or a major report). In these cases, student work may be edited by more than one group, so that each student receives feedback from a larger number of peers.
- This strategy can also be used within a group of three or four students (as in the *Reaching Higher* example) or with pairs of students, where each edits the other's work.
- However the time or students are organized, each student should have the opportunity to get feedback from two other students.

Reaching Higher – Making Connections Across the Curriculum, pp. 17-18.
Reading and Writing for Success, "Writing Power Tools", pp. 189-193.
Reading and Writing for Success Senior, "Writing Power Tools", pp. 303-309.

Further Support
- Consider balancing each group with students who have varying skills and knowledge to bring to the peer-editing process. More capable peer editors will act as models for the students who haven't yet consolidated the concepts or skills.
- Explain to students that you have designed the triads or groups to include a very creative person, a person with good technical skills, and one or more persons who would provide a very honest audience for the writing.
- Consider turning some of the questions into prompts (e.g., The best piece of writing is . . . ; I'd like more information about . . . ; I was confused by . . .).

Revising and Editing: Peer Editing

What teachers do	What students do
Before • Ask students to bring a completed draft of a writing assignment to class on a specified date. • Divide students into groups of three or four. • Distribute a peer-editing checklist (see Student Resource, *Sample Peer-Editing Checklis)*. Discuss the characteristics of good writing, modelling questions students may ask. • Make an overhead of the Teacher Resource, *Being a Good Audience for Writing*, to share the questions with students.	• Bring a completed draft of a writing assignment to class on the specified date.

During
• Give directions for the peer-editing process:
  - One group exchanges writing pieces with another group.
  - Group members read the writing pieces, making notes about reactions, questions, and concerns.
  - One group member passes a finished piece.
• Remind students that they are not responsible for correcting all the writer's errors, but that they can underline areas of concern, or circle words that should be checked for spelling or usage.
• Monitor and support the group processes.
	• Exchange their pieces of writing with another group.
	• Individually read and annotate all 3 or 4 pieces from the other group (circling, underlining, and writing questions or comments) as the pieces pass from person to person.
	• Remember that the writer owns the writing; therefore, the reader is not primary responsibility for correcting all the writer's errors.
	• *As a group*, discuss each piece and complete a peer-editing checklist, arriving at consensus (through discussion) about judgements, suggestions, and comments.
	• Sign or initial the peer-editing checklists when the group is done, and return the writing pieces to the original owners.

After
• Give each student time to look at the peer-editing checklist that accompanies the writing pieces.
• Debrief the activity with the class, asking questions such as:
  - What were the strengths you noticed in the best pieces of writing in various areas (e.g., in the introduction, supporting details or examples, or conclusion)?
  - What were some typical weaknesses?
  - What types of things will you have to do to improve your work?
• (Optional) Assign another draft, or a completed final draft, of the same assignment.
• (Optional) Provide time for each student to engage in a brief conference with a student who peer-edited his/her piece of writing, to get more complete feedback and a deeper understanding of the comments and suggestions.
	• Read the peer-editing checklists that they receive with their work.
	
	• Take part in the class debriefing discussion.
	
	• Complete subsequent draft, if assigned.
	• Confer with one other student to provide more complete feedback and comments or suggestions.

Notes

Being a Good Audience for Writing

Ask Yourself (and the Writer) These Questions

·   **Was the piece interesting to read?**

·   **Were the purpose and audience clear?**

·   **Did the opening sentence or paragraph hook the reader?**

·   **Were the ideas clearly expressed and logically organized?**

·   **Were the paragraphs and sentences easy to understand and follow?**

·   **Were there enough ideas, examples, or supporting details?**

·   **Did the piece end in a satisfying or logical manner?**

·   **Did the writer achieve the purpose of the assignment?**

Sample Peer-Editing Checklist

Name:			Grade:	

Assignment:		Yes	No	Suggestions / Concerns / Problems
1	The ideas are clearly stated, and there are enough of them.			
2	The purpose of the piece is clear.			
3	The message is clear for the intended audience.			
4	The beginning, middle, and end are clearly indicated and tied together.			
5	Details, proofs, illustrations, or examples support the main idea.			
6	The words used are appropriate and clear.			
7	The level of language is appropriate for the subject and audience.			
8	The sentences vary in length and structure.			
9	The sentences flow, moving logically from one to the next.			
10	There are only a few minor errors in grammar, punctuation, or spelling.			

Other helpful comments:

Signed

_____

Revising and Editing: Proofreading Without Partners

Students can build independence as writers when they develop strategies for proofreading their own work. Reading backwards one word at a time is a classic journalist's strategy for being able to see individual words and identify spelling errors. Reading backwards sentence by sentence will help students identify syntax and punctuation errors. Finally, reading from front to back slowly will help students read for meaning.

Purpose
- Help students find their own errors.
- Turn student writing into isolated ideas and sentences so that students recognize their own errors.

Payoff
Students will:
- check work before it is submitted for assessment.
- find mistakes without a partner.

Tips and Resources
- Reading backwards can be used as an answer-checking strategy on tests in any subject area.
- See the Teacher Resource, *Proofreading Without Partners* and Student Resource, *Proofreading Without Partners: Instructions for Reading Backwards*.

Further Support
- Start with small 2- to 3- sentence answers before moving to paragraphs and then essays.
- Put students in pairs to read each other's work backwards, matching a stronger student with a struggling student or an ESL student.

Revising and Editing: Proofreading Without Partners

What teachers do	What students do
Before • Explain to students that "reading backwards" is a strategy used by many journalists to enable them to look at the spelling and that reading backwards sentence by sentence helps them check punctuation in their work without getting too involved in the ideas. • Make an overhead of the top part of Teacher Resource, *Proofreading without Partners*. • Display the overhead to the students. • Model the technique of reading backwards, using the sample and a think-aloud. (Cover the top part of the sample, and move the cover sheet down as the think-aloud continues from sentence to sentence.)	• Provide a sample of own writing, double-spaced, without having used a spell-checker or grammar-checker.
During • Make an overhead of Student Resource, *Proofreading without Partners: Instructions for Reading Backwards*. • Provide directions on the overhead. • Circulate through the room, checking student progress.	• Read the last sentence of own writing from start to finish, noting any errors. • Read the second-last sentence from start to finish, and note any errors. • Continue until they have reached the first sentence. • Read from the beginning of the work to the end, checking for meaning.
After • Engage students in a whole-class discussion about some of the most common errors or problem areas they discovered. • List the most common problem areas or errors on the board or an overhead, adding a checkmark for each student reporting each particular problem or error. • Teach one correction strategy based on one of the most common problem areas- e.g., common uses of the comma, approaches for spelling or usage errors, or how to use a variety of sentence structures. • Remind students of the assignment expectations as they begin to re-draft their piece of writing.	• Contribute problem areas to the whole-class discussion. • Make corrections as needed to own draft, and double-check with assignment expectations.

Notes

Proofreading Without Partners

Sports involve people in healthy activity. sports such as swimming and tennis help you to use all of your major muscle groups the fast movements required to run across a tennis court or to swim the length of a pool increases your heart rate and improve the blood flow throughout your body. All of your muscles including your heart get stronger. You will feel better, and you will look more healthy if you exercise several times a eek through sports.

Sports involve people in healthy activities. Sports such as swimming and tennis help you to use all of your major muscle groups. The fast movements required to run across a tennis court, or to swim the length of a pool, increase your heart rate and improve the blood flow throughout your body. All of your muscles, including your heart, get stronger. You will feel better, and look healthier if you exercise several times a week through sports.

Proofreading Without Partners

Instructions for Reading Backwards

Unless directed otherwise, work quietly to proofread your own work. Follow these instructions:

1. To proof for spelling…

    •   begin with the last word of your draft .

    •   read backwards word by word, checking each for correct spelling.

2. To proof for sentence structure, punctuation, grammar and phrasing…

    •   begin with the last sentence of your draft and read that sentence from start to finish to find any errors.

    •   read the second-last sentence from start to finish and note any errors.

    •   continue reading each sentence until you have reached the beginning of your piece of writing

3. To proof for overall tone and meaning…

    •   read from the beginning to the end, checking for meaning and flow.

4. Correct your errors.

     * Ask another student or the teacher for help if you have a problem you can't solve yourself.

W

Writing for a Purpose: Using Templates

When students can get the "picture" of a form of writing in their heads, they feel more confident about creating the final product. A *template* or framework is a skeletal structure for a writing form that allows students to organize their thoughts and researched information in order to write a first draft. Essay maps are another type of template.

Purpose
- Provide students with a template to scaffold their understanding of a form of writing and help them organize information before drafting the piece.

Payoff
Students will:
- learn the common expectations for the form and components of a particular writing assignment.
- organize their writing and ensure that it meets the requirements of the assignment.

Tips and Resources
- To help students understand how to construct a writing assignment, they may first need to deconstruct an example of that assignment. The same template that is used for structuring student writing can be used initially to analyze examples of a writing form. For instance, before having students use the template to write in a specific form, give them an example of the same kind of writing and have them use the template to identify the example's main idea, supporting details, transitional sentences, etc.. Using the template to deconstruct a piece of writing before writing their own version gives students an exemplar from which to work when they begin their own writing. This activity can also be done in pairs or in small groups.
- Use examples from the Ontario Curriculum Exemplars.
- See the explanations and templates for writing in various forms, in the following resources:
  - *Writing a Procedure*.
  - *Template for Writing a Procedure*.
  - *Writing a Report*.
  - *Information Report Template*.
  - *Information Report Template-Blank*.
  - *Business-Style Report Template*.
  - *Writing an Explanation*.
  - *Template for Writing an Explanation*.

Cross-Curricular Literacy: Strategies For Improving Middle Level Students' Reading and Writing Skills, pp.72-91.
Cross-Curricular Literacy: Strategies For Improving Secondary Students' Reading and Writing Skills, pp.64-79.
Reading and Writing for Success Senior, Chapter 12.
Adolescent Literacy, Part III, Cross Curricular Connections, pp. 24-33, York Region District School Board.

Further Support
- The template for any individual writing assignment can be revised to make the modifications or accommodations necessary for students with special needs. For example, reduce the number of paragraphs or supporting details, create differing expectations for research, or for the complexity of the main idea, etc.

Writing for a Purpose: Using Templates

What teachers do	What students do

Before
• Find or prepare a template appropriate to the writing assignment that students are expected to complete. (See samples of templates that accompany this strategy.)
• Find an example (consider using samples from the Ontario Curriculum Exemplars) of the writing form that students can deconstruct. Make photocopies, and distribute the example to the students.
• Model the method for deconstructing the piece of writing using the first paragraph or part of the example:
  - Tell students the name of the form of writing- e.g., a report, procedure, or opinion piece.
  - Ask aloud, "What happens in this paragraph/part of this piece of writing?"
  - Answer that question: "This first paragraph of the report is called a summary. In a few sentences, it gives me a sense of what this report is all about and provides two major recommendations."
• Ask students to work in groups of four to deconstruct the rest of the example.
• Engage students in a whole-class discussion following their group work, and record responses about what happens in each part or paragraph of the example.
	• Read the example, following the teacher's oral deconstruction of the first paragraph or part of it.
	
	• Work in groups to determine what happens in each subsequent paragraph or part of the example by asking, "What happens in this paragraph/part of the piece of writing?"
	• Contribute responses to the whole-class discussion.

During • Distribute the template to students to help them consolidate their understanding of what happens in each part of the assigned piece of writing. • Share a sample of a temp*late that has been partially completed. (See Information Report Template,* with instructions and examples*)* • Direct students to use this template to organize the information they have prepared/ researched for this assignment. • Monitor students' work as they begin completing the template.	• Begin completing the template by adding (in the appropriate places) the information they have researched or prepared for it- e.g., results of data gathered through a survey, or background information searched on the Internet.
After • Assign a completion date for the template. • Use peer, self, or teacher assessment of the completed template in a subsequent class, before students begin drafting their report, procedure, etc.	• May complete the template as a homework assignment. • May participate in peer or self-assessment of completed templates in a subsequent class.

Notes

Writing a Procedure

Writing a Procedure

What is a procedure?

A procedure is a form of writing that informs the reader about how to do something. A procedure gives detailed instructions that the reader should be able to translate into action. Procedures could be written in science class to outline the steps taken in an experiment, or as a step-by-step explanation about how to play a game created in response to a language activity.

In a procedure, you can do the following:

- Begin by identifying the topic or issue and the relevance or importance of knowing how to do the thing that is being explained. For example, writing a procedure for programming a VCR will help you make full use of the various features your VCR offers.
- Proceed by identifying the intent or goal of the procedure. What is it that will be accomplished if the reader follows the steps identified?
- Make a prediction or create a hypothesis about what will happen if the steps are followed.
- Identify any equipment or materials you will need in order to complete the procedure.
- Write step-by-step instructions related to the procedure. Write in time sequence and provide as much detail as the reader will need to be able to follow the instructions and actually do what it is you are describing.
- Let your readers know how they will know if they have been successful.

How do you write a procedure?

1. Use an organizer such as a flow chart to plan the sequence you will describe. Make a list of the equipment or materials you will need.

2. When writing your instructions, think of who your audience might be. The age and interests of the audience will determine your tone and choice of language. For example, if you are writing instructions for building a cabinet for a carpenter, they would be very different from instructions you would write if the reader had never built anything before.

3. In your conclusion, provide your readers with an indication of how they will know whether or not they have been successful.

Template for Writing a Procedure

Topic: _____

Introduction:
- Topic/issue
- Relevance/importance/real-world connections

Aim/Goal (be brief - one sentence):
- What do you intend to do?
- What will you accomplish?

Hypothesis: A suggested answer or reason why one variable affects another in a certain way – useful for scientific investigations. You make a prediction based on past observations, logic, and some elements of scientific theory. (*Science 9*, Nelson Canada, 1999.)

Materials/Equipment/Ingredients:
What do you need to perform this task?

Procedure/Method:
What steps must you follow? What is the appropriate order for these steps?

Analysis/Confirmation/Testing:
Did your process work? What did you learn from your procedure?

Writing a Report

What is a report?

A report is a form of writing that provides information. There are different types of reports, and they can be organized in different ways depending on the purpose and audience. However, a report is usually based on **researched facts** or on **accurate details** of a situation or event, not just on the writer's own knowledge. You might write a report for Health class on the effects of second-hand cigarette smoke, or you might write a report for Science class on the increasing uses of lasers as tools in industry and medicine. You might also write a report detailing the organization, costs, participation, and success of a certain event such as a concert or banquet. In business situations, or in science or medical journals, reports are organized with a summary (or abstract) at the beginning. The purpose of this summary is to give the person reading the report a sense of the main content. The rest of the report fills in the background information, the process by which the information was obtained, and makes recommendations.

How do you write a report?

1.   Research your information, finding it in several different sources - e.g., books, magazines, the Internet.

2.   Take notes from your sources of the key details that you need. Be sure to record which information comes from which source so that you can give credit to your sources.

3.   Use an organizer such as a chart, web, or sub-topic boxes to sort and classify your information into different areas for sub-topics.

4.   When writing your introduction, think of who your audience might be. If your report is to be made orally to your classmates, you will want to catch their interest somehow, perhaps by referring to some personal experiences. If your report is for the teacher or for an "expert" on your topic, you should be more formal and to the point, avoiding the use of "I" and being more objective.

5.   Develop each sub-topic paragraph with an appropriate topic sentence that shows how the sub-topic links to the topic.

6.   Make sure that your sub-topic paragraphs have a logical order and that they flow smoothly. Use sub-headings to guide your reader through a lengthy report with many sub-topics.

7.   Write a conclusion that summarizes two or three of the main points you wish to make about your topic. Depending on the type of report, write several recommendations.

8.   Give credit to your sources by acknowledging them. List the sources alphabetically by the author's surname, following the pattern below:

Bentley, George. *Laser Technology*. Toronto: Porter Books, 1998.
Lawrence, Anita. "The Laser Revolution." *Maclean's*. March 6, 2000: 52-57.

Information Report Template

Introduction: Introduce topic and classify it or put it in a category - e.g., "Lasers are an exciting new tool in industry and medicine."

In two or three sentences, give the reader a "map" of what you plan to do with the topic. Essentially you are naming your sub-topics; - e.g., "In industry and manufacturing, lasers are revolutionizing both the design process and the production of goods. In medicine, lasers are changing surgical procedures with some remarkable results. The future possible uses for lasers are very exciting."

First sub-topic: Define your topic and give some general information about it -e.g., say what a laser is, and give some brief history. You may also choose to provide this information in your introduction.

Make several key points with information from your research.

Write a transitional sentence or question - e.g. "While lasers may be a marvel of physics, they have some very practical applications."

Second sub-topic-e.g., "Lasers in industry and manufacturing"

Make key points from your research.

Write a transitional sentence.

Third sub-topic- e.g., "Lasers in medicine"

Make key points from your research.

Write a transitional sentence.

Conclusion: Re-state some of your key points - e.g., key use of lasers in manufacturing, or key use in medicine, such as reducing blood loss in surgery.

Write an emphatic concluding sentence - e.g., "It is likely that many more uses will be found for lasers as we learn the capabilities of this powerful tool."

Information Report Template

Introduction:

First sub-topic:

Key points from your research:

Transitional sentence:

Second sub-topic:

Key points from your research:

Transitional sentence:

Third sub-topic:

Key points from your research:

Transitional sentence:

Conclusion: Re-state some of your key points.

Write an emphatic concluding sentence.

Business-Style Report Template

Summary:
Provide a three- to five- sentence summary of the facts and findings of your report.

Key recommendation:

Introduction:
Summarize the background to the situation investigated.

First subtitle:
Explain the investigative process: How did you find the facts and information?

Second subtitle:
What key information and facts were discovered?

Third subtitle:
Compare the situation under investigation to similar situations and explain the solutions in the comparisons that may work in this situation.

Conclusion:

Write several recommendations.
1.

2.

3.

Writing an Explantion

What is an explanation?

An explanation is a form of writing that explains how things are or why things are. The focus is on general processes involving non-human participants. Explanations often provide information in a cause-and-effect format.

How do you write an explanation?

Prepare a plan. Notes and diagrams will help to organize the necessary information. In the plan, consider the following elements:

- definition of what is being explained
- description of the component parts, if applicable
- explanation of the operation in a cause-and-effect sequence
- description of the application
- interesting comments, special features or evaluation.

Template for Writing an Explanation

Topic: _____

Introduction:
- What is the topic? Why is it of interest to us?

Definition:
- What is it?

How it works:
- causes and effects

Applications:
- other examples/illustrations
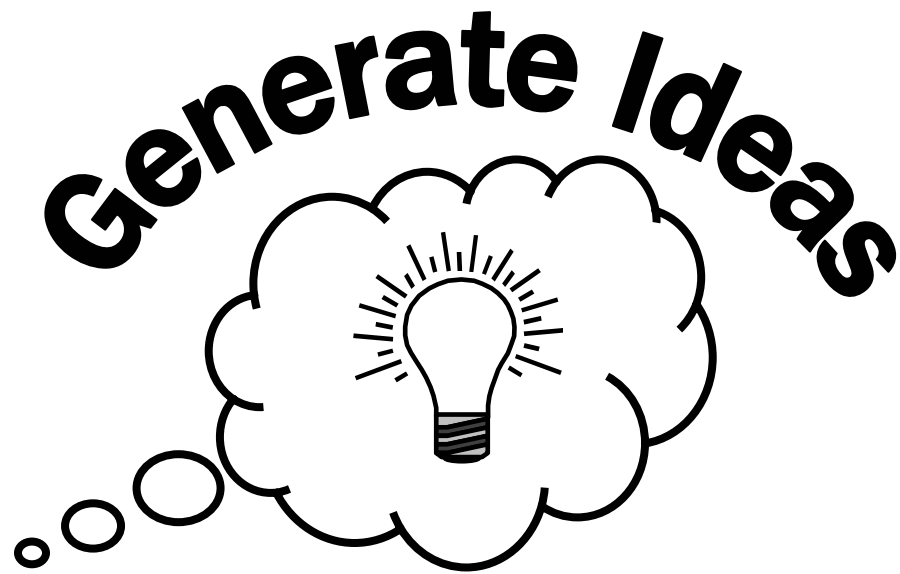- variations

Comments/Evaluation of topic/issue/problem:

Posters for Instruction: Writing

A series of communication posters is included in this resource document. They are intended to provide reminders for students when they are reading, writing or engaged in discussion in class. These posters can be displayed during instructional time or when students are practising the skills. While the posters appear as 8 ½ x 11" size in this document, they can be enlarged to legal or ledger size paper using a commercial photocopier.

In writing, the posters focus on generating ideas, organizing writing, and revising and editing.

Writing	Writing	Writing
Generate Ideas	**Organize Writing**	**Revise & Edit**
Before I begin to write, I...?	*To make sure my writing makes sense I check that...*	*Before my final draft, I check that...*
∕ jot down everything I know about this topic.	∕ my introduction and conclusion make sense.	∕ I have written about what was requested.
∕ look at other texts and resources.	∕ each paragraph stays on topic.	∕ the ideas are connected (to one another).
∕ ensure that I understand everything I'm supposed to do.	∕ the connections between sentences and paragraphs are clear.	∕ my verb tenses are correct and consistent.
∕ add additional details or supporting ideas.	∕ my choice of words suits the audience and the topic.	∕ my point of view is consistent.
∕ check to see if everything is on topic.		∕ my spelling is double checked.
		∕ my punctuation is effective.
—— Communication ——	—— Communication ——	—— Communication ——

Writing

Generate Ideas

Before I begin to write, I…?

- 🖊 jot down everything I know about this topic.
- 🖊 look at other texts and resources.
- 🖊 ensure that I understand everything I'm supposed to do.
- 🖊 add additional details or supporting ideas.
- 🖊 check to see if everything is on topic.

Communication

Writing

Organize Writing
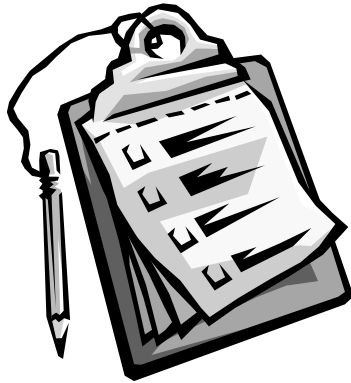
To make sure my writing makes sense I check that…

- my introduction and conclusion make sense.
- each paragraph stays on topic.
- the connections between sentences and paragraphs are clear.
- my choice of words suits the audience and the topic.

Communication

Writing

Revise & Edit

Before my final draft, I check that…

- I have written about what was requested.
- the ideas are connected (to one another).
- my verb tenses are correct and consistent.
- my point of view is consistent.
- my spelling is double checked.
- my punctuation is effective.

Communication

THINK LITERACY: Cross-Curricular Approaches, Grades 7-12

Oral Communication

Introduction to Oral Communication

Pair Work:

  Think/Pair/Share
  Take Five
  Timed Retell

Small-group Discussions:

  Group Roles
  Place Mat
  Determining Key Ideas
  Jigsaw
  Discussion Web

Whole-class Discussions:

  Discussion Etiquette
  Four Corners
  Triangle Debate

Presentations:

  Presentation Modelling

Posters for Instruction: Oral Communication

  Listen and Speak
  Present

Introduction to Oral Communication

Oral skills – both speaking and listening – are at the very foundation of literacy. Classroom talk helps students to learn, to reflect on what they are learning, and to communicate their knowledge and understanding. The strategies in this section provide simple but powerful tools for improving communication in every classroom and all subject areas. Whatever you teach, these tools can help you to obtain more precise information about what your students know and can do. This, in turn, can help you to provide better feedback and guidance. Students need authentic opportunities to learn how to listen and speak effectively in a variety of situations – in pairs, and in small and large groups.

Students are sometimes assigned an oral activity (e.g., working in small groups) without a clear understanding of what is expected and how to be most effective. By taking the time to teach specific oral strategies in the context of your subject area, you will boost your students' confidence and performance.

> *Struggling students need:*
> - encouragement and explicit instruction to build their strengths and address their needs.
> - a safe and encouraging environment to practise oral skills, if English is not their first language.
> - extra practice, a peer to work with, and support from the teacher before presenting.
> - well-chosen partners or team members who can model knowledge, skills and strategies at a level that is accessible and not intimidating.

Pair work
Working in pairs provides students with an opportunity to "think aloud" about what they know, and a process for acquiring and reflecting on information. For many students, pair work is a comfortable starting point to practise the skills they will need to participate in larger groups.

Small-group discussions
As with pair work, the strategies for small-group discussion give students the opportunity to develop critical thinking skills, build positive relationships, work cooperatively, and participate actively in their learning. You can put your students at ease by modelling effective skills for small-group discussion and by providing many opportunities to practise these skills in a safe environment.

Whole-class discussions
Students learn more readily in a class where they experience cooperation and a sense of belonging. By involving the whole class in shared activities, and by teaching students how to be good listeners, to respect each other and to participate without fear, you can maximize participation and minimize anxiety for all students.

Presentations
Presenting in front of a class can be a terrifying experience. Most students dread the class presentation, especially if they have not had enough instruction or practice before evaluation. By taking time to teach effective presentation skills before such an assignment, you free the student to focus on the content instead of the "performance." The quality of presentations improves with effective instruction, practice and support.

Pair Work: Think/Pair/Share

In this strategy, students individually consider an issue or problem and then discuss their ideas with a partner.

Purpose
Encourage students to think about a question, issue, or reading, and then refine their understanding through discussion with a partner.

Payoff
Students will:
- reflect on subject content.
- deepen understanding of an issue or topic through clarification and rehearsal with a partner.
- develop skills for small-group discussion, such as listening actively, disagreeing respectfully, and rephrasing ideas for clarity.

Tips and Resources
- Use Think/Pair/Share in all subject areas for almost any topic. For example: in Business, discuss ethical business practices; in Math, solve a word problem together to better understand the task; in Science, exchange hypotheses before conducting an experiment.
- Use it to help students with their in-class reading. Ask them to read a chapter, think about the ideas, and then take turns retelling the information to a partner.
- Use it at any point during a lesson, for very brief intervals or in a longer time frame.
- Increase the amount of time devoted to Think/Pair/Share, depending on the complexity of the reading or question being considered. This strategy can be used for relatively simple questions and for ones that require more sophisticated thinking skills, such as hypothesizing or evaluating.
- Take time to ensure that all students understand the stages of the process and what is expected of them.
- Review the skills that students need to participate effectively in Think/Pair/Share, such as good listening, turn-taking, respectful consideration of different points of view, asking for clarification, and rephrasing ideas.
- After students share in pairs, consider switching partners and continuing the exchange of ideas.
- See other strategies, including **Take Five** and **Discussion Web** for ways to build on the Think/Pair/Share strategy.

Teaching Reading in Social Studies, Science, and Math, pp. 266-269.
Beyond Monet, pp. 94, 105.

Further Support
- Some students may benefit from a discussion with the teacher to articulate their ideas before moving on to share with a partner.

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Pair Work: Think/Pair/Share

What teachers do	What students do
Before • Have students read a selection or pre-pare a topic, question, or prompt for a planned Think/Pair/Share activity. OR • Choose a "teachable moment" during the class where the process of reflection and shared discussion would bring deeper understanding, and insert a brief Think/Pair/Share activity into the lesson at that point. In either case: • Consider the social and academic goals for the Think/Pair/Share activity, and plan for pairing of particular learners that would further those goals.	• Read the chapter or section, if the Think/Pair/Share is based on information and ideas from a reading selection.
During • Ask students to spend several minutes thinking about and writing down ideas. • Set clear expectations regarding the focus of thinking and sharing to be done. • Put students in pairs to share and clarify their ideas and understanding. • Monitor students' dialogue by circulating and listening.	• Formulate thoughts and ideas, writing them down as necessary to prepare for sharing with a partner. • Practise good active listening skills when working in pairs, using techniques such as paraphrasing what the other has said, asking for clarification, and orally clarifying their own ideas.
After • Call upon some pairs to share their learning and ideas with the whole class. • Possibly extend the Think/Pair/Share with a further partner trade, where students swap partners and exchange ideas again. • Consider adding a journal writing activity as a productive follow-up to a Think/Pair/Share activity.	• Pinpoint any information that is still unclear after the pair discussion, and ask the class and teacher for clarification.

Notes

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Pair Work: **Take Five**

In pairs, students take five minutes to orally review a concept and present it to the class, usually at the beginning or end of a class period.

Purpose
- Briefly consolidate or reinforce learning.

Payoff
Students will:
- develop a strategy that can be used to review content material in all areas.
- share responsibility for teaching and reviewing with each other.
- "talk" their way into meaning and understanding through verbal rehearsal.
- perceive continuity with content from class to class, especially when a lot of material is being covered quickly.

Tips and Resources
- Use this review-and-share strategy on a regular basis to reinforce the learning of subject-specific vocabulary.
- Have the take-five pairs present their reviews on sheets of chart paper, which you can then post in the classroom for ongoing review.
- Try not to pair students who are too far apart in their ability or understanding of the material.

Further Support
- ESL students may benefit from pairing with a partner who speaks the same first language so that they can clarify the concepts in their first language and build more confidently on their prior knowledge.

Pair Work: Take Five

What teachers do	What students do
Before • Decide on a concept from the previous day's lesson for review and consolidation • Arrange students in "take five" buddies, with a designated student A and student B in each pair.	
During • Invite students to engage in a Think/Pair/Share with their partner on a concept, formula, term, etc., from the previous day's work, assigning a different task to the A and B students. (For example, student A recalls or checks notes to find the formula for the volume of a cone, while B does the same for the formula for the volume of a sphere. Each shares the formula with his/her partner. Or student A reviews the process of photosynthesis, while B checks the meaning of all the words/terms in the process.) • Let students know that one pair will be responsible for reviewing the concept with the whole class.	• Review notes, texts, and other materials relating to the concept being discussed. • Consolidate learning through sharing, discussing, and clarifying the concepts together. • Plan how to present the concept to the class if called upon to do so.
After • Ask one pair to write the formula/process or concept on the board and review it with the class. • Repeat the process, if appropriate, by rearranging the pairs and setting another Think/Pair/Share task for review and discussion.	• Support each other as a team in recalling and explaining the details to the class. • Practise and develop the skills of explaining, rephrasing, and clarifying for the class.

Notes

Pair Work: Timed Retell

In this strategy, students practise their listening and speaking skills. Students divide into pairs and take turns speaking, listening, and retelling information in timed steps.

Purpose
- Enhance critical thinking skills.
- Create an argument and be concise in its delivery.
- Develop attentive listening skills while sharing viewpoints on an issue.
- Make connections between written and oral skills.

Payoff
Students will:
- share ideas.
- develop listening skills.
- apply skills in different ways – in pairs, small groups, and with the whole class.

Tips and Resources
- Timed Retell can be informal or more formal, as described here. In the more formal approach, students require more confidence.
- Students may make notes during the brief presentations given by their partners.
- It is possible to use this activity with more extensive subject matter. In that case students will need time to properly research the topic and devise their arguments.
- Additional information about peer editing is found in *Writing Strategies: Revising and Editing*.

Further Support
- The struggling student may feel uncomfortable speaking in front of the whole class. Students should be given other opportunities to share and practise speaking skills before this assignment.
- As always, consider pairs carefully.

Pair Work: Timed Retell

What teachers do	What students do
Before • Choose a relevant question or issue that might invite debate. • Make sure that students have the appropriate background knowledge on the issue.	• Individually brainstorm and jot down ideas about both sides of the question or issue.
During • Put students in pairs, facing each other. • Direct all partner A students to begin by speaking on the "for" side of the issue. Partner A will talk for one minute, while partner B listens. • Ask partner B to retell the talk for one minute. • At the end of one minute, ask partner B to present the opposing side of the argument. • Direct partner A to then retell partner B's argument.	• Decide who will be partner A and who will be partner B. • Partner A speaks for one minute, convincing partner B as much as possible. • Partner B listens carefully and retells partner A's argument. • Partner B wraps up the retell and then gives the opposing argument. • Partner A listens carefully and retells partner B's argument.
After • Invite students to write each other's side of the issue into a paragraph or letter to the editor. • Put students into groups of four. Each group should contain students who all argued from the same point of view in their paragraph. • Ask students to read their paragraphs to the other members of their group. • Organize the class in a circle to discuss the group findings.	• Write a carefully constructed paragraph from the partner's point of view. • Read the paragraph to the partner to ensure that no important details have been omitted. • Peer-edit paragraphs for sentence structure, grammar and mechanical errors. • Read their paragraph to the other members of the group. • Comment on the points discussed in each reading. • List the common points. • Present the list of common points to the class, ensuring that all group members have a chance to speak.

Notes

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Small Group Discussions: Group Roles

Students are divided into groups of a certain size – for example, five members. Each student is assigned a specific role and responsibility to carry out during the small-group discussion.

Purpose
- Encourage active participation by all group members.
- Foster awareness of the various tasks necessary in small-group discussion.
- Make students comfortable in a variety of roles in a discussion group.

Payoff
Students will:
- all speak in small groups.
- have specific roles to fulfil, clearly defining their role in the small group.
- receive positive feedback that is built into the process.
- participate actively in their learning.

Tips and Resources
- It is important to vary the composition of small groups, allowing students the opportunity to work with many classmates of various abilities, interests, backgrounds, home languages, and other characteristics.
- It is a good idea to repeat this activity throughout the year. This will allow students the opportunity to experience different roles and to improve their skills.
- Time the exercise to keep students focused on the task.
- If research is required, involve all students in the process, regardless of their role. This activity provides an excellent way for students to share research and come to a consensus about important information.
- For role ideas, see Student/Teacher Resource, *Sample Role Cards.*
- To encourage students to reflect on their learning, use Student Resource, S*mall-group Discussion Reflection Sheet.*

Further Support
- Although it's important to vary the composition of groups, it is also important to consider the particular needs of struggling students.

Small Group Discussions: Group Roles

What teachers do	What students do
Before • Choose the task or topic for discussion. • Decide how many students will be in each group. • Decide on the roles for each group member. • Prepare role cards for each student. See Student Resource, *Sample Role Cards*. • For example: *Leader:* defines the task, keeps the group on task, and suggests a new way of looking at things. *Manager:* gathers and summarizes materials the group will need, keeps track of time, and collects materials the group used. *Note maker:* records ideas generated by the group, and clarifies the ideas with the group before recording. *Reporter:* reports the group's ideas to the class. *Supporter:* provides positive feedback for each speaker, makes sure everyone gets a turn, and intercepts negative behaviour.	• Understand the question/task. • Understand their roles and responsibilities.
During • Divide the class into groups. • Present the parameters of the task. • Explain time limits and keep track of time. • Circulate around the room, ensuring that all students are fulfilling their roles. • Comment constructively on the group process.	• Fulfil the roles to the best of their abilities. • Use active listening skills. • Act positively and encourage other group members. • Participate fully in the discussion. • Adhere to the time limits set by the teacher.
After • Ask students to individually complete an evaluation of the discussion. See Student Resource, *Small-group Discussion Reflection Sheet*. • Put students in groups. • Debrief with the whole class, asking students to comment on the success, benefits of the exercise. • Plan to repeat this activity, allowing students to try each of the other roles.	• Complete the *Small-group Discussion Reflection Sheet*. • Discuss the successes and benefits of using structures/ rules in small groups.

Notes

Sample Role Cards

LEADER
- Does everyone understand what we're doing?

- Have you thought about this in another way?

- We're getting off topic; let's get back to the task.

MANAGER
- Here are the materials we'll need. This is what I think we should look at.

- We have _____ minutes left.

- Now that we're finished, let me gather the materials.

NOTE MAKER
- Would you repeat that so I can write it all down?

- What do you mean by that?

- Let me read to you what I've written so far.

REPORTER
- Let's review the secretary's notes.

- Does anyone have anything to add before I report to the class?

- Does anyone have any suggestions on how to report to the class?

SUPPORTER
- Really good point.

- We haven't heard from _____ yet.

- Please don't interrupt; you'll get a turn.

Small-group Discussion Reflection Sheet

Name:_____

Role: _____

Topic:_____

Comment on **your group's ability** to work together in a positive manner. Consider cooperation, listening, and organization.

What are your group's strengths?

What are your group's areas for improvement?

Comment on y**our own ability** to work in a positive manner. Consider cooperation, listening, and organization.

What are your strengths?

What are your areas for improvement?

Comment on your success in fulfilling the role you were assigned.

Small Group Discussions: Place Mat

In this easy-to-use strategy, students are divided into small groups, gathered around a piece of chart paper. First, students individually think about a question and write down their ideas on their own section of the chart paper. Then students share ideas to discover common elements, which can be written in the centre of the chart paper.

Purpose
• Give all students an opportunity to share ideas and learn from each other in a cooperative small-group discussion.

Payoff
Students will:
• have an opportunity to reflect and participate.
• have fun interacting with others and extending their learning while accomplishing the task.

Tips and Resources
• The strategy can be used with a wide variety of questions and prompts.
• Use the place mat strategy for a wide range of learning goals, for example:
  - to encourage students to share ideas and come to a consensus on a topic
  - to activate the sharing of background knowledge among student
  - to help students share problem-solving techniques in mathematics and science
  - to take group notes during a video or oral presentation.
• Groups of 2 to 4 are ideal for place mat, but it can also work with up to 7 students in a group.
• You may choose several questions or issues for simultaneous consideration in a place mat strategy. To start, each group receives a different question or issue to work on. Once they have completed their discussion, the groups rotate through the various questions or issues until all have been explored.
• Place mat also works well as an icebreaker when students are just getting to know each other.
• For a sample place mat, see Teacher Resource, *Place Mat Template and Example.*

Beyond Monet, pp. 172-173.

Further Support
• Give careful consideration to the composition of the small groups, and vary the membership according to the students' styles of learning and interaction, subject-matter proficiency, and other characteristics.
• Some students may benefit from being able to "pass" during group sharing.

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Small Group Discussions: Place Mat

What teachers do	What students do
Before • Divide students into groups of 4 or 5. • Decide on a question for the students to answer. • Distribute chart paper to each group. • Ask the students to divide the chart paper into sections equal to the number of students in the group, leaving a circle or square in the centre of the chart. Note: This middle section can be omitted, depending on the learning task involved.	
During • Direct each group member to think about, then write silently about a question or topic in their personal area of the chart paper for a determined amount of time.	• Gather their thoughts about the chosen question or topic and write silently in their own area of the paper, respecting the space and silence of all members of the group.
After • Give a signal for students in each group to discuss their ideas and experiences and find the common elements or ideas. • Have students post the charts to share their group's thinking with the class.	• Take turns sharing ideas with the group. • Engage in discussion with all group members to arrive at common elements or ideas. • Record common ideas in the centre of the place mat. • Use oral skills, such as active listening, requesting clarification, and coming to consensus. • Circulate around the room to look at the ideas on the charts of other groups.

Place Mat Template and Example

Write quietly on your own in your section of the border for several minutes.

> Through group sharing of ideas and experiences, gather common concerns, concepts, and ideas in this section of the place mat.

Example: Take a few minutes to think about and then individually write down what you know about the Charter of Rights and Freedoms.
(***activating students' background knowledge***)

it protects people's rights

all people should be equal

federal
government

Ottawa

equality for
all Canadians
people have rights

freedom to protest against the gov't

guarantees equality of men & women
freedom of religion
freedom of the press

equality for
the people with
disabilities

it affects our
laws

gives everyone the right to practise
their religion
federal or provincial – I'm not sure

> **Religious Freedom**
> **EQUALITY**
> **All people have rights**

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Small-Group Discussions: Determining Key Ideas

In this strategy, students work individually to identify three to five key ideas. In pairs, they then share ideas and streamline their list of key ideas down to two to four. Finally, two pairs of students combine to share and reduce further to one or two key ideas.

Purpose
- Share and consolidate learning when reading new material.

Payoff
Students will:
- understand a topic more deeply.
- share learning with peers.
- sharpen skills in small-group discussion, especially in listening and persuading.
- learn to focus on the "big ideas."
- practise how to summarize ideas.

Tips and Resources
- Use this strategy at the end of a chapter or series of readings to help students summarize the key ideas of the unit.
- Vary the pairing of students so that they learn to work with different partners.
- To help students visualize the process, use Student/Teacher Resource, *Steps for Working Together to Determine Key Ideas.*

Reading Strategies for the Content Areas, pp. 361-364.

Further Support
- For ESL/ELD learners, pair students of the same first language so that they can help each other in their native language.
- Post a chart of expressions related to the language of polite negotiation and persuasion so that students can refer to it. For ideas, see Student/Teacher Resource, *Speaking Out* in **Discussion Etiquette**.

Small-Group Discussions: Determining Key Ideas

| What teachers do	What students do
Before • Provide students with blank cue cards or stick-on notes. • Assign a reading selection. • Have students complete an initial summary of the reading in class or for homework before beginning the strategy. • Direct students to write three to five key ideas from their reading, one per cue card or stick-on note.	• Read and keep notes of main ideas. • Make judgements on what the three to five key ideas of the reading might be. • Summarize the key ideas on three to five separate cards or stick-ons.
During • Instruct students to form pairs to discuss their key ideas and to narrow these to two to four cards per pair. • Then, have two pairs of students then work together to further negotiate and refine their key ideas to one or two entries only. • If appropriate, review the language of negotiation and polite persuasion with students, in preparation for the negotiation process (e.g., *Do you think…? Would you agree that…? I don't agree with that because…*).	• Discuss the key ideas in pairs. Through negotiation, streamline them to two to four ideas per pair. Write the two to four combined ideas on cards. • Combine with another pair to further engage in give-and-take to condense the key ideas to a maximum of two. • Continually evaluate their own understanding of the material and its main ideas as they engage in the negotiation process.
After • Call upon each group to report their summaries of the most important ideas to the whole class.	• Share the selected most important ideas with the whole class.

Steps for Working Together to Determine Key Ideas

On your own, summarize three to five key ideas on cue cards or stick-on notes.

In pairs, share your key ideas and, through discussion, streamline them to two to four ideas between you.
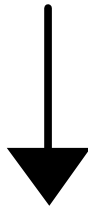
In a group of four, discuss and further trim your list of key ideas to one or two, to be shared with the class.

Small-Group Discussions: **Jigsaw**

Jigsaw is a complex form of cooperative learning and it is important that students have experience with small group learning skills before they are involved in jigsaw. Jigsaw is a cooperative learning technique that provides students with an opportunity to actively help each other in their learning. Each student is assigned to a "home groups" of three to five, and an "expert group" consisting of members from different home groups. Students meet in their expert group to discuss specific ideas or solve problems. They then return to their home group, where all members share their expert knowledge.

Purpose
- Encourage group sharing and learning in a particular task.
- Provide struggling learners with more opportunities to comprehend meaning and ask for explanations than they would normally get in a whole-class situation with the teacher as leader.

Payoff
Students will:
- increase their comprehension and have a compelling reason for communication.
- receive support and clarification from other students.
- share responsibility for each other's learning as they use critical thinking and social skills to accomplish the learning task.
- gain self-confidence through their contributions to the group effort.

Tips and Resources
- Create mixed-ability expert groups so that students of varying skills and abilities have the opportunity to learn from each other as they become experts on the material.
- As students enter the classroom, hand out cards with the expert group numbers or symbols on them, in order to manage the logistics of breaking off into expert groups. The various readings can also be coded in this manner for easy distribution.
- Provide a question sheet or chart to help the expert groups gather information in their particular area.
- Prepare a summary chart to guide students in organizing the experts' information into a cohesive and meaningful whole.
- As another option, have the expert groups make presentations to the entire class on their section of the reading material. During the presentations, each student takes cumulative notes or fills in an information organizer, resulting in a complete picture of the reading when all of the presentations have been done.

Beyond Monet, pp. 158-159.
Reading, Writing, and Learning in ESL, pp. 337-338.
Teaching Reading in Social Studies, Science, and Math, pp. 264-266.

Further Support
- Give students a framework for managing their time on the various parts of the jigsaw task.
- Circulate to ensure that groups are on task and managing their work well. Ask groups to stop and think about how they are checking for everyone's understanding and ensuring that everyone's voice is heard.

Small-Group Discussions: Jigsaw

What teachers do	What students do
Before • Choose an entire textbook chapter or article and divide it into smaller segments, or pick a series of readings on the same topic. • Assign each student to a "home group" of three to five students. • Assign each student to an "expert group," with a focus on a particular segment of the task.	• Meet briefly in the home groups before breaking off into the expert groups.
During • Establish guidelines for the information that students should include in their summaries (e.g., for a series of readings on chemical compounds, identify the following: the types of compounds, how they are formed, what reactions are caused, etc.). • Have expert groups meet to read a selection or work on a task, review and discuss what was read, and determine essential concepts and information, using a question sheet or graphic organizer to guide them. • Remind students that the experts will have to consider how they will teach the material to the home group members. • Convene home groups so that each student can share his or her expertise with all members of the home group.	• Work together to make sure that all group members become "experts" on their particular part of the reading task, and help each other to decide how to report the learning to the home group (e.g., as a series of questions and answers; in chart or template form; or some other way). • Use small-group discussion skills to share "expert" knowledge with the home group until all members have arrived at a common understanding of the entire task. • When presenting information, monitor the comprehension of the group members by asking questions and rephrasing until it is clear that all group members understand the points. • If appropriate, fill out a graphic organizer in the home group to gather all the information presented by each expert.
After • If appropriate, convene the class as a whole group to review and share learning or to enable expert groups to present to the entire class. • Have students reflect on the communication they used to help all group members understand the material.	• Ask the teacher to clarify any information or ideas that are still unclear or confusing. • Discuss what communication helped them to understand the material explained by others.

Notes

Small-Group Discussions: Discussion Web

In this strategy, students begin sharing their ideas in pairs, then build to a larger group. The discussion web provides practice in speaking, reading, and writing.

Purpose
- Give students the opportunity to develop their ideas about opposing sides of an issue and share them with classmates in a situation that requires critical thinking.

Payoff
Students will:
- be involved in discussion and critical thinking.
- take responsibility for developing and sharing their ideas.
- reflect on their own developing discussion skills.

Tips and Resources
- The discussion web works well in a variety of contexts (for example: "Should the composting of household organic waste be mandatory?" or "Should patents be granted on living organisms?") The strategy guides students to think about an issue and gather evidence for both sides of the issue. It is important to choose an issue that has well-defined positions "for" and "against" a proposition.
- Model the process thoroughly to show how the discussion web works before having the class engage in the discussion web activity.
- Prepare a T-chart graphic organizer for students to organize their supporting arguments. For an example, see Teacher Resource, *Discussion Web T-chart Example*.

Teaching Reading in the Content Areas, pp. 160-162.
Teaching Reading in Social Studies, Science, and Math, pp. 269-273.

Further Support
- Some students may need support with notetaking while they read, or clarification about arguments that support each side of the issue.
- Have students fill out the Yes/No T-chart together in pairs.

Small-Group Discussions: Discussion Web

What teachers do	What students do
Before • Use before-reading strategies to prepare students before assigning a reading selection on a relevant topic. • Target a particular position or point in the reading selection and explain that students will read the selection and construct support for and against the point or position in the reading (e.g., genetically modified crop growing should be expanded; cities should offer free public transportation on smog days). • Present the discussion web question to the class.	• Read the selection chosen by the teacher. • Think about the point made or position stated in the reading selection, and individually try to construct support for both sides of the issue.
During • Explain to students that they will have to develop support for both viewpoints by citing specific reasons. • Allow enough time for students to contemplate and write down reasons for each viewpoint. • Put students in pairs to share their written ideas. • Combine two pairs of students and have them compare their ideas and form a conclusion on which viewpoint to support. • Call on a representative from each group to share the group's conclusion with the class.	• Think about and individually record ideas on both sides of the issue, using a T-chart format. • Share ideas with a partner, adding any missing ideas to their T-chart. • Move on to sharing ideas in a group of four, adding any additional points to the T-chart; the larger group must then decide which side of the issue to support, based on both the quantity and quality of the arguments on each side. • Reach a conclusion as an entire class about the viability of each position.
After • Follow up by asking students to individually write a paragraph about their own position and the reasons for taking it. • Provide time and a framework for students to reflect on the discussion skills they used during the activity, their strengths, and how they can improve.	• Write about their position and reasons for it. • Reflect on the discussion skills they used and how they can improve their participation and effectiveness in small-group discussions.

Notes

Discussion Web T-chart Example

Should composting of organic waste be mandatory?

YES	NO
• it protects our environment	• it's too hard to enforce
• it will cut down on landfill	• people would need too much training to learn how to compost
• it produces rich soil	• it takes too much time and effort – people won't buy in
• it's the natural way	
• it will make people more aware of taking care of the environment	• the cost of supplying a compost bin to every household would be too high
• we should enforce a limit of one small garbage bag per house hold each week	• what about people in apartment buildings – how would they manage it?
• it will make people more aware of how much food they are wasting	• it would cost the municipality or city a lot of money to collect all the compost

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Whole-class Discussions: Discussion Etiquette

In this strategy, students and teachers work together to create a list of rules for discussion etiquette to ensure shared ownership of the classroom environment.

Purpose
- To lay the groundwork for respectful and purposeful whole-class and small-group discussions.
- To create an environment in which students feel their contributions are valued.

Payoff
Students will:
- feel their contributions are valued.
- understand the expectations for appropriate behaviour which are clearly set out.
- participate in class- and small-group discussions.

Tips and Resources
- Negotiate classroom discussion etiquette early in the year or semester. When students understand and participate in framing the rules at the outset, the result in all subject classrooms will be more respectful and productive discussions.
- Provide multiple opportunities for a range of classroom and small-group discussions on a variety of topics.
- Model the rules for class discussion behaviour and the use of inclusive and respectful language at every opportunity in your daily instructional practice.
- Seize upon the moments in the classroom when you can point out the differences between the kind of informal, colloquial speech appropriate in a casual conversation among adolescent friends, and more formal speech required in a class discussion.

Reaching Higher: Making Connections Across the Curriculum, pp. 19-21.

Further Support
- The teacher and students need to be aware of the variety of cultural norms which may affect conversation patterns, such as physical proximity and eye contact.

Whole-class Discussions: Discussion Etiquette

What teachers do	What students do
Before • Think about expectations for respectful and productive discussion behaviour in your subject area. See Teacher Resource, *Discussion Etiquette* for generic suggestions. • Prepare a sheet of chart paper with a heading such as, *In our biology class discussions, we will…*	
During • Set the stage for the brainstorm by telling students that this is an opportunity to jointly come up with a list of appropriate behaviours for class discussions that should be adhered to by all. • Facilitate a joint brainstorming session with the entire class. • Write on the chart those expectations that are agreed upon by the class. • Give examples of appropriate and inappropriate language in class discussions, and write a list of these on an additional chart.	• Actively participate in framing the rules of appropriate behaviour during class discussion. • Talk through the differences between appropriate and inappropriate discussion behaviour and why they are important. • Focus on the differences between colloquial language they may use with peers outside the classroom, and more formal language required in a classroom.
After • Post the discussion etiquette list and accompanying language examples prominently in the classroom and take opportunities to refer and/or add to them throughout the year/course. • Ask students to make connections between the classroom discussion etiquette list and the school's code of conduct.	• Continue to take part in the joint negotiation of class discussion behaviour as the year progresses.

Notes

Discussion Etiquette

These are some of the etiquette rules that you may wish to have on your class list. Although this list should be created by students, you may want to guide them to ensure your class list is complete.

1. Participate fully.

2. Take turns speaking - one person speaks at a time.

3. Let others know that you have not finished speaking by using phrases such as *I have one more thing to add, furthermore, in addition,* etc.

4. Wait for your turn – don't interrupt.

5. Use supportive gestures and body language:
    - Maintain eye contact with the speaker.
    - Nod to show you are listening.
    - Use encouraging facial expressions.
    - Don't use inappropriate gestures.

6. Use respectful phrases when disagreeing with another speaker.

7. Listen carefully and attentively to other speakers.

8. Encourage and support those around you.

9. Avoid sarcasm and put-downs.

10. Stay on topic.

11. Remain open to new ideas.

12. Use inclusive language.

13. Ask questions when you don't understand.

14. Don't monopolize the conversation.

Speaking Out

Phrases for respectful disagreement include:
I disagree with… because…
I can't agree with… because…
On the other hand…
I doubt that because…

Examples of inappropriate disagreement include:
You're wrong.
No way!
Come on!
What!
That's crazy/stupid/ridiculous.
Are you kidding?
I hate that.
_____ doesn't know what he/she's talking about.

Phrases for politely expressing an opinion include:
In my opinion…
I believe…
I think…
Personally, I feel…
Not everyone will agree with me, but…

Phrases for politely making suggestions include:
Why don't you/we …
How about…
Why don't we/you try…
One way would be…
Maybe we could…
I suggest we…

Tips for Enhancing Student Discussions

Create a respectful, positive, comfortable classroom climate.

Add wait time to allow students to gather their thoughts.

Rephrase and restate questions for students.

Encourage students to elaborate and give them time to do so.

Ask pointed questions.

Restate the students' points to confirm and clarify them.

Call on other students to extend their classmates' responses.

Use praise that gives specific feedback.

Give students many opportunities to practise speaking.

Limit teacher talk to maximize participation by students.

Students who are struggling may need:
- the option to "pass" in whole-class discussions
- one-to-one coaching and support from the teacher if they do not participate regularly
- yes/no or short-answer questions if they are in the early stages of learning English
- discussion points noted on the blackboard or chart paper to keep track of the discussion and to clarify understanding

Whole-class Discussions: Four Corners

In this strategy, students individually consider an issue and move to an area in the room where they join others who share their ideas. The beauty of this strategy is that it is flexible and can be used for many topics, questions, and subject areas.

Purpose
- Allow students to make personal decisions on various issues; encourage critical thinking.
- Encourage an exchange of ideas in small groups.
- Facilitate whole-class discussion of these ideas.

Payoff
Students will:
- make up their own minds on an issue.
- speak freely in a relaxed environment.
- think creatively and critically.

Tips and Resources
- Encourage students to make up their own mind concerning the issue.
- Possible variations:
    - Consider using more than four areas for response - even six responses can work well with various questions.
    - Try using only two responses; draw a line dividing the room and ask students to stand on one side of it, depending on their decision.
    - Vary the approach by creating a value line. Ask students to rank themselves by lining up in a single line of a continuum, from strongly agree to strongly disagree. This will make student exchanges a necessity so that students can discover exactly where they fit on the line.
    - History: Ask students to make an interpretation about a particular historical event (e.g., Who was responsible for WWII? German people, Hitler, signatory countries of the treaty of Versailles).
    - This strategy would work well as a forum in which students could share a product they have created. In this case students would take their work to one of the corners to share, compare and discuss with other students. This is a very helpful option for students prior to handing work in to the teacher.

Further Support
- The teacher may need to encourage some students and promote equal responses in groups.

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Whole-class Discussions: Four Corners

What teachers do	What students do
Before • Create a statement or question for students to ponder that has the potential for varying degrees of agreement or preference. • Organize the room into four areas (corners) and label with: strongly agree, agree, disagree or strongly disagree or with four descriptors/categories. • Give students ample opportunity to think about the question and take a stance. Students need to be encouraged to make their own choices. • A minute or two should be ample time; ensure that this time is spent quietly so that students make their own choices.	• Fully understand the question posed. • Carefully ponder the question, making a personal decision as to the position they will take.
During • Ask students to move to the corner that best represents their stance on the issue. • Direct students to get into groups of three (if possible) to discuss the reasons for their choices. In cases where the groups are not large enough, pairs may be formed. In cases where only one student is in a group, the teacher could act as the other member of the pair.	• Move to the corner that best describes their personal views on the issue. • Engage in an exchange of ideas with other members of their group, remaining open and communicative. • Ensure that everyone is heard and that everyone in the group shares equally. • Prepare to speak to the class about the group's discussions, noting common reasons and differing opinions.
After • Call upon various groups to share information gathered in small-group discussions with the whole class.	• Highlight their group's main points with the class, pointing out commonalties and discrepancies. • Ensure that each member of the group has something to share with the class.

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FOUR CORNERS

1		2
Strongly agree		**Agree**

Testing new products on animals should be banned.

3		4
Disagree		**Strongly disagree**

Whole-class Discussions: Triangle Debate

In this strategy, all students are involved in an informal, whole-class debate. It is a flexible tool that allows students to debate in a comfortable setting.

Purpose
- Encourage students to get involved in whole-class discussion.
- Create a comfortable atmosphere for students to share ideas and debate.

Payoff
Students will:
- participate in an informal debate.
- practise cognitively-demanding speaking skills in a comfortable environment.
- benefit from the research process.
- learn to process ideas and reach conclusions.

Tips and Resources
- This is not a formal debate - it is intended to facilitate whole-class discussion and critical thinking. Refer to Student/Teacher Resource, *Triangle Debating Tips.*
- It may be appropriate to divide the class in half, create two different questions, and prepare for two presentation days. The *Triangle Debate Organizer*, has space for up to 15 students per group; the maximum number of students suggested to ensure that there will be enough time for the presentation of the debate.
- It may be beneficial to do Triangle Debate three times in order to allow students the opportunity to work in all three groups.
- Spread debating over the term/semester/year to give students time to improve.
- If time is an issue, simplify the exercise by creating easier questions that do not require research.

Further Support
- Students who are uncomfortable about this process may benefit from working with a partner, sharing the research process and dividing up the debating process.
- Some students may require extra practice time in order to feel more comfortable with this process.

Whole-class Discussions: Triangle Debate

What teachers do	What students do
Before • Decide on the topic or issue for the debate (e.g., in a Civics class teachers could suggest the Canadian government). • Brainstorm with students to arrive at a statement that can be debated. • Divide students into three groups: group 1 will argue for the issue, group 2 will argue against the issue, and group 3 will prepare comments and questions about the issue. • Give students ample time to prepare - this will vary and may or may not include research. • Review procedures for the debate so that students may properly prepare. Refer to Teacher Resource, *Triangle Debate Procedures*. • After all research is complete and students are prepared to present arguments, make a final draft of the *Triangle Debate Organizer* and photocopy for students.	• Understand the issue. • Create statement to be debated (e.g., Canada should become part of the United States). • Students in groups 1 and 2 will prepare their debate speeches. • Students in group 3 will prepare insightful comments and questions for each side of the debate. • Students will understand all procedures for the debating process. • Groups 1 and 2 will make decisions as to the order of their speakers and fill in their section in the *Triangle Debate Organizer*. • Group 3 decides the order in which each member will ask a question.
During • Arrange chairs in the classroom to reflect the three-group structure, enabling all members to see each other (a triangular shape works well). • Act as timer or choose a student from group 3 to perform this function. • Act as moderator, calling on students to speak. • Act as judge, ensuring that students avoid negative comments.	
After • Photocopy Student Resources, Triangle Debate *Groups 1 and 2- Reflections,* and *Group 3 - Observations*. Distribute to each student, according to his/her group. • Give students ample time to reflect on their experience. • Lead whole-class debriefing session about the experience.	• Fill in the appropriate handout, focusing on both the group and individual roles. • Participate in whole-class debriefing session.

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Triangle Debating Tips

Here are some questions to think about while you prepare to present your ideas.

1. **Make sure you gather enough evidence to back up your argument:** Do I have proof to back up what I want to say?

2. **Organize your thoughts clearly and logically:** Will my audience be really clear about what I have said?

3. **Use strong, convincing language**: Do I sound confident? Have I used too many over-used words like *good*, *very*, *really*, *like*, etc.?

4. **Repeat, rephrase key ideas:** Will my audience hear what I want to say? Will my main points stick with them?

5. **Make eye contact with *everyone* in the room:** Do I make everyone in my audience feel as if I am talking directly to them?

6. **Vary your voice:** Do I sound monotonous? Have I varied the pace? Have I varied the volume, saving my loudest voice for the points I really want to drive home?

7. **Use appropriate gestures:** Does my body language emphasize what I want to say?

8. **Prepare for rebuttal:** Have I considered what the opposition will say; am I prepared to argue against it?

9. **Prepare for questions:** Have I considered what questions will be asked of me? Am I prepared to answer them convincingly?

10. **Practise, practise, practise:** Am I really prepared?

WORK TOGETHER TO ENSURE YOUR ENTIRE GROUP'S SUCCESS!

Triangle Debating Procedures

Topic:_____

These procedures are intended to act as a guide. Refer to them throughout the process to ensure that you are on the right track.

STEP ONE: The class is divided into three groups

STEP TWO: Each group is given a different task to complete:
Group 1 will argue in favour.
Group 2 will argue against.
Group 3 will comment on remarks made by a speaker and pose questions to groups 1 and 2.

STEP THREE: Groups will get together to create a plan of attack, decide on their main argument and how they will organize their speeches. It is important, at this stage, to refer to the *Triangle Debate Organizer* handout and begin to make choices concerning the order of speakers.

STEP FOUR: Students work individually to prepare speeches. Everyone in groups 1 and 2 is required to speak for 2 minutes. Everyone in group 3 is required to comment for one minute on points made by the two previous speakers and to prepare two insightful questions to ask of group 2 and two insightful questions to ask of group 2.

STEP FIVE: When all individuals have created their speeches, each group comes together to listen to their arguments as a whole. It is important to follow the order set in the *Triangle Debate Organizer* so that they have a clear impression as to how their argument will sound. At this point, groups may offer suggestions, make changes and polish their arguments.

STEP SIX: Practise, practise, practise and be ready to go.

Remember - you are a team! Stay positive and support each other throughout the process.

Triangle Debate Organizer

The following is the order in which each speaker will speak. Simply follow the numbers to see when it is your turn.

Group 1 Speaks for 2 min.	**Group 2** Speaks for 2 min.	**Group 3** Comments on last two speakers for 1 min.
1._____	2._____	3._____
4._____	5._____	6._____
7._____	8._____	9._____
10._____	11._____	12._____
13._____	14._____	15._____

WHEN THIS IS FINISHED, EACH MEMBER OF GROUP 3 WILL POSE ONE QUESTION TO GROUP 1 AND ONE QUESTION TO GROUP 2.

THESE QUESTIONS MAY BE ANSWERED BY ANYONE IN GROUPS 1 AND 2.

Triangle Debate Groups 1 and 2 - Reflections

Name:_____**Group: 1   2   (circle one)**

Topic:_____

Comment on your group's ability to work together in a positive manner. Consider cooperation, listening, and organization.

What are your group's strengths?

What are your group's areas for improvement?

Comment on your own ability to work in a positive manner. Consider cooperation, listening, and organization.

What are your strengths?

What are your areas for improvement?

Triangle Debate Group 3 – Observations

Name_____

Debate Observed_____

What were the strongest arguments made by group 1? Why?

What were the strongest arguments made by group 2? Why?

Identify some of the excellent debating strategies used by the debaters.

List some ideas that you learned about this topic.

What skills will you try to remember to use when it is your turn to debate?

O

Presentations: Presentation Modelling

Many students are hesitant to give presentations in class; they are uncomfortable or nervous and do not clearly understand what an effective presentation looks like. By demonstrating an ineffective presentation, modelling an effective presentation, and facilitating student collaboration, teachers will ease student stress and clearly define an effective presentation.

Purpose
- To clearly define exemplary presentation skills.
- To create a comfortable, safe environment in which students may be successful in presentations.

Payoff
Students will:
- collaborate with each other and the teacher to improve the teacher's ineffective presentation.
- experience, first hand, examples of ineffective and effective presentations.
- observe their suggestions for improvement in action.

Tips and Resources
- Teachers may consider modelling only the effective presentation. Teachers need to be cautious when demonstrating the ineffective presentation - a sense of humour goes a long way to help your students be comfortable.
- It may be helpful to videotape both the teacher's first presentation and the improved presentation so that students may re-examine the changes.

Further Support
- Give careful consideration when determining pairs of students who will present together.

Presentations: Presentation Modelling

What teachers do	What students do
Before • Prepare a brief presentation for the class that demonstrates ineffective presentation skills.	• Observe teacher's first presentation and prepare to comment on areas in need of improvement.
During • Ask students to write down all of the things that needed improvement in the presentation. • Divide class into small groups. • Facilitate whole-class discussion about the areas needing improvement. • Discuss how these improvements might take place. • Prepare a new presentation for the class, making improvements suggested.	• Write down all areas needing improvement. • Discuss ideas with small group, compiling one list to be presented to the class. • Present ideas for improvement to the class. • Observe improved presentation. • Write down further suggestions. Discuss with the class how these suggestions may improve their own presentations.
After • Distribute *Effective Presentation* S*kills*. • Facilitate class discussion - is anything missing that needs to be added? • Give students a topic for their presentations. • Divide class into pairs - these pairs will give each other constructive criticism as they prepare to present.	 • Add any new ideas to their handouts. • Prepare presentations. • Practise presentations. • Work in pairs throughout practice sessions to give each other constructive criticism and helpful hints. • Before presenting, use handout as a checklist to ensure their presentations are effective • Present to class.

Notes

Effective Presentation Skills

	✔
Is the topic presented clearly and logically?	
Is the presentation clearly organized with an introduction, middle, and conclusion?	
Does the speaker have a thorough knowledge of the subject?	
Did the speaker gather information from a variety of sources?	
Did the speaker use visual aids to support the presentation?	
Did the speaker use appropriate tone and language for a classroom presentation?	
Did the speaker use effective eye contact with the audience?	
Did the speaker talk fluently without false starts?	
Did the speaker vary the volume of speech?	
Did the speaker vary the rate of speech?	
Did the speaker articulate clearly?	
Did the speaker use conjunctions effectively? (e.g., *and*, *then*, *because*)	
Did the speaker explain unfamiliar terms to others?	
Did the speaker talk for the appropriate amount of time?	
Did the speaker avoid unnecessary movements such as shuffling, toe tapping and shaking?	
Did the speaker involve the audience in the presentation?	
Did the speaker engage and inspire the audience?	

Posters for Instruction: Oral Communication

A series of communication posters is included in this resource document. They are intended to provide reminders for students when they are reading, writing or engaged in discussion in class. These posters can be displayed during instructional time or when students are practising the skills. While the posters appear as 8 ½ x 11" size in this document, they can be enlarged to legal or ledger size paper using a commercial photocopier.

In oral communication, the posters focus on listening, speaking and presenting.

Listen & Speak

To be an effective communicator, I ...

- focus on what is being said.
- keep an open mind.
- let the speaker finish before adding ideas.
- respond with a question.
- avoid sarcasm and put-downs.

——Communication——

Present

How can I improve my presentation skills?

- Understand and explain your content.
- Organize with a beginning, middle, and end.
- Emphasize key ideas (repeat, rephrase).
- Use strong, convincing language.
- Use visual aids.
- Repeat, rephrase key ideas.
- Practise.
- Prepare for questions.

——Communication——

Listen & Speak

## *To be an effective communicator, I …*

- focus on what is being said.

- keep an open mind.

- let the speaker finish before adding ideas.

- respond with a question.

- avoid sarcasm and put-downs.

Communication

Present

How can I improve
my presentation skills?

- Understand and explain your content.
- Organize with a beginning, middle, and end.
- Emphasize key ideas (repeat, rephrase).
- Use strong, convincing language.
- Use visual aids.
- Repeat, rephrase key ideas.
- Practise.
- Prepare for questions.

Communication
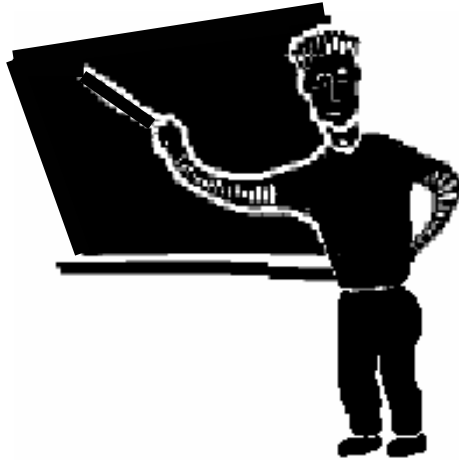
Annotated Bibliography

On the Same Page:
Shared Reading Beyond the Primary Grades
Janet Allen
Pembroke, 2002. ISBN 1-57110-332-5

Classroom Strategies Described:

- Strategic reading strategies across subject areas (Chapter 5, pages 96-116)
- Three instructional approaches to learning new words - incidental, mediated, explicit (Chapter 4, pages 77-95)
- Assessment strategies with observable indicators are described for 8 knowledge areas as observable evidence of effective reading habits (pages 171-174)
- Selecting classroom texts and how to judge the "considerateness" of textbooks (p. 181)
- Determining whether students have internalized thinking strategies when reading independently (pages 182-196)

Key Messages:

- Shared reading helps students read and understand increasingly difficult and specialized texts and acts as a bridge to students' independent reading.
- Readers use many strategies to make sense of what they are reading and develop skill once the strategy becomes automatic.
- It is essential to use a variety of texts for shared reading.
- Shared reading furthers and supports content learning by helping students: make content connections; build back ground knowledge for inquiry; understand textbook structures; internalize and apply content vocabulary; and extend and synthesize content knowledge.

Notable Quote(s):

"Many students move from one grade to the next unable or unwilling to read. . . ."

"When we are all on the same page, all readers have access to information and knowledge - all readers have the opportunity to develop skills and strategies to create and shape the events of their own lives."

Strengths:

- Chart of the purposes and benefits of strategic and connected reading (page 56)
- Appendices with practical templates and supports for teacher use
- Literature References
- Professional References
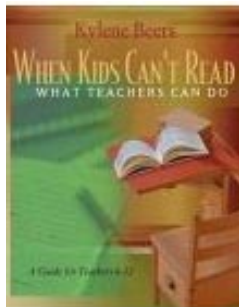
Annotated Bibliography

When Kids Can't Read: What Teachers Can Do
Kylene Beers
Heinemann, 2003. ISBN 1-893476-05-7

Classroom Strategies Described:
- Reading comprehension strategies:
  - Think Alouds
  - Anticipation Guides
  - K-W-L
  - Say Something
  - Double Entry Journals
  - Scales
  - Text Reformulation
- Strategies for vocabulary instruction:
  - Assign word study not word memorization
  - Teach students how to use context as clue
  - Teach word parts
  - Teach specific roots and affixes
- Strategies for improving fluency:
  - Improve student's knowledge of high frequency words and sight words
  - Teach phrasing and intonation directly
  - Prompt, don't correct

Key Messages:
- Dependent readers may lack cognitive competence, social and emotional competence or text confidence.
- There is no single template to move a dependent reader to an independent reader.
- The goal of reading is the complex activity of making meaning / comprehension. Teachers are key to student success.
- Have students thinking about the selection and how they will read the selection before they begin reading.
- Show students how skilled readers build meaning while they are reading a text.
- View comprehension as a process and after- reading help students focus on constructing meaning.
- Fluent readers know words automatically and spend their cognitive energy on constructing meaning.

Notable Quote(s):
"Teachers have a choice. We can choose to cover the curriculum or we can choose to teach students to inquire. It is our obligation to renew our students' curiosity and guide them toward inquiry."

"Teachers don't have to be reading special-ists to teach comprehension strategies. They simply have to be aware of their own processes as readers. They can notice their own thinking as they read, determine what they do to make meaning, and pass these techniques to their students."

Strengths:
- Clear table of contents and useful index
- Detailed instructions, examples, and debriefings of all strategies
- Classroom examples of the strategies in action
- Examples of student work included
- Strategies and examples focus on the adolescent student
- Specific information on vocabulary development

Annotated Bibliography

Reading Strategies for the Content Areas
Sue Beers
ASCD, 2003. ISBN 0-78120-757-5

Classroom Strategies Described:

- Variables (learner's ability, attitudes, perceptions, classroom environment, research-based instruction) interact to determine how well a reader understands text
- The components of the reading process: reading task and purpose, text features, processing strategies for reading and understanding (page 5)
- Instructional strategies and tips aligning with each type of reader are in charts (pages 20-26)
- Sample reading assignment plans for content areas (pages 11-17)
- 8 strategies used by independent strategic readers (pages 20-25)
- Reading tools, linked to one or more of the 8 strategies, organized into 3 categories:
  1. pre-reading (pages 53-172)
  2. during-reading (pages 175-334)
  3. post-reading (pages 337-388)

Key Messages:

- Reading becomes increasingly complex in the middle and secondary grades.

- The skills required to comprehend demanding text in a variety of subjects vary and need to be learned and practised in context.

- In every classroom, there is a continuum of readers (non or poor / good / strategic / independent) and each type requires specific strategies.

Notable Quote(s):

"Each subject area requires students to use specific types of reading skills to comprehend text. Students need to learn and practice using reading strategies in the context of the subject they are studying. . . they need to understand the unique text features and construction of their reading assignments . . . the content-specific vocabulary. Reading science chapters differs from reading fiction or understanding instructions and problems in a math textbook. By helping students practice effective reading strategies and providing them with tools they can use to process content-area text, you will help them read the ultimate goal: becoming independent, strategic readers."

Strengths:

- Comprehensive set of reading tools for pre-reading, during-reading and post-reading strategies (pages 41-48)

- Each reading tool uses a 4-page spread that includes clear information about use, tips/variations, a blank template and a sample filled in with subject content.

- Examples are provided for geography, health, history, mathematics, and science.

Annotated Bibliography

Teaching Reading in the Content Areas: If Not Me, Then Who?
Teacher's Manual 2nd Edition
Rachel Billmeyer and Mary Lee Barton
ASCD, 1998. ISBN 1-893476-05-07

Classroom Strategies Described:
- Activities to activate prior knowledge: brainstorming, asking questions, discussing the topic, providing analogies
- Specific strategies outlined: K-W-L; DR/TA; Pre-reading Plan; Anticipation Guides; and Problematic Situations (pages 92-93, 104-5, 116-7, 122-3)
- Ideas for fostering conditions affecting learning climate, including physical conditions and affective dimensions (pages 13-15)
- Teaching text features - reader aids, vocabulary, text structure (pages 17-39)
- "Think-alouds" to promote metacognitive processing, questions to promote metacomprehension, ideas for reflective questioning, writing-to-learn activities and discussion (pages 47-55)
- Framework for Strategic Learning – PAR: Preparation and Planning (before) / Assistance and Association (during) / Reflection and Readiness for Application (after) (pages 57-60)
- Reading strategies are organized with definitions and samples in 4 categories: vocabulary development, narrative text, informational text, and reflection (page 69)

Key Messages:
- Research on learning has important implications for reading instruction.
- Interactive elements of reading are the reader, the text and the context.
- Reader's role in comprehending text is dependent upon inner resources (mental disposition, prior knowledge).
- Lower-achieving students may not realise that their attitudes and habits of mind affect their learning and that they have the power to regulate them.

Notable Quote(s):
" Effective readers are *strategic* in the way they attack text material. They consciously plan for their reading. . . As they read, they *monitor* their reading process . . . After they read, they *evaluate* how well they understood the text ... In addition to being strategic about their reading process, ideal readers are *reflective* . . . Acquiring these metacognitive skills requires *instruction* and *practice*. Ineffective readers often are not aware of their thinking or their level of comprehension as they read . . ."

Strengths:
- Use of graphic organizers to describe reading strategies, including:
  - a model for teaching reading in the content areas (vi)
  - a model for metacomprehension strategic processing (pages 42, 44)
- A chart outlining reading strategies in 4 categories for the 3 phases of cognitive processing (page 69)

Annotated Bibliography

Even Hockey Players Read
David Booth
Pembroke, 2002. ISBN 1-55138-147-8
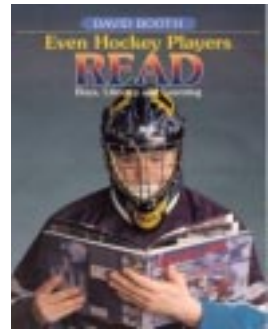
Classroom Strategies Described:
Examines the different ways in which boys and girls learn, read and write and offers suggestions on recognizing and dealing with these differences.
- Collaborative ventures that celebrate diversity and allow boys and girls to create something together ("Snow White in Toronto", page16)
- Use of computers, magazines, CD-ROMs, videos, comics (page 21)
- Use of non-fiction texts (page 98)
- Spelling improvement strategies (pages 82-83)
- Reading buddies (page 85)
- Preparing for tests (page 94)

Key Messages:
- Educators need to understand the effect of gender issues on the learning behaviour of boys in a variety of literacy situations.

- Build upon background knowledge to engage boys in text; connect what boys write and talk about with what they read; let boys write about adventure and humour.

- Reading journals should start with authentic questions and allow for dialogue between teacher and student.

Notable Quote(s):

"As educators, we do want equality in our classrooms; resources that are bias-free; inclusive or gender-neutral language; and disciplines that welcome the strengths of different individuals. Men and women have experienced the world in different ways for a long time, and the boys and girls we meet in our classrooms come with different life experience, knowledge and sets of skills."

Strengths:
- Classroom examples accompany teaching strategies.
- Information and research on different literacy behaviours in boys and girls provides helpful insights for teachers in all subject areas.
- "Bullet" summaries with practical suggestions at the end of each chapter
- Recommended list of books for boys
- Although most suggestions relate to English/ Language Arts in Grade 7-8, the book offers valuable suggestions on understanding and helping all males who are struggling with literacy.
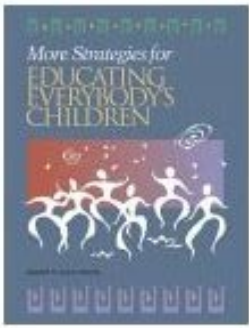
Annotated Bibliography

Classroom Strategies Described:
- Addresses concerns of subject area teachers in working with students at risk due to many factors
- Individual chapters identify critical teaching strategies for increasing all students' performance in Civics, Geography, History, and Science.
- One chapter deals with teaching immigrant students and includes strategies for:
  - Cooperative learning
  - Jigsaw
  - Activating background knowledge
  - Teaching students to monitor their own learning
  - Celebrating linguistic and cultural diversity
  - Making connections from reading to other texts
  - Developing students' self-esteem

Key Messages:
- Teachers can identify a variety of concrete solutions that offer *all* students greater opportunity to succeed in school.
- This "pedagogy of plenty" includes:
  - helping students to make connections between what they learn in school and their daily experiences
  - providing students with a rich literacy environment
  - affirming and incorporating home cultures and languages into the school experience
  - engaging students in substantive discussion in a variety of group formats to help them learn, understand and apply knowledge from a content area
  - exposing students to an inquiry-based approach that makes meaning, not just getting the right answer, the essence of instruction

Notable Quote(s):
"The challenge of this millennium is the advancement of a new kind of teaching, one that is very different from what we have known for most of the last century. We need to understand how to teach in ways that respond to students' unique starting points, and then carefully build a supporting framework aimed at increasing *all* students' achievements."

Strengths:
- Specifically geared for teachers of geography, history, science and civics

- Sections on working with economically disadvantaged and homeless students, as well as with students who have limited prior schooling

- Classroom examples are provided for every teaching strategy.

Annotated Bibliography

I Think, Therefore I Learn!
Graham Foster, Evelyn Sawicki, Hyacinth Schaeffer, Victor Zelinski
Pembroke, 2002. ISBN 1-55138-1486

Classroom Strategies Described:
- Offers strategies for encouraging metacognition, the self-regulation of one's learning. Communication and thinking strategies for four core curriculum areas:

  Language Arts:
  - Activating prior knowledge
  - Visualizing
  - Predicting and questioning
  - Summarizing
  - Checking to refine interpretation
  - Exploratory writing
  - Drafting strategies
  - Vocabulary building activities

  Mathematics:
  - Problem solving
  - Reasoning
  - Communication- writing about math ideas

  Science:
  - Graphic organizers
  - Concept maps
  - Brainstorming
  - Journals
  - Problem solving, decision making

  Social Studies:
  - Inquiry models
  - Writing a position paper
  - Interpretive approach to History
 - Article review

Key Messages:
- Metacognition is thinking about thinking, monitoring effectiveness of choices, and setting goals for future learning.

- Benefits of metacognitive learning include:
  - develops an important life skill for academic success, workplace, citizenship, personal development
  - challenges students to take responsibility for their own learning
  - teaches a repertoire of skills
  - facilitates differentiated instruction in classrooms with varied student needs
  - complements process-based learning
  - increases learner confidence

Notable Quote(s):
"The message to teachers is clear… students benefit when they understand themselves as learners and when they are able to employ their strengths."

Strengths:
- Checklists, rubrics
- Cross- curricular strategies and references are subject-specific.
- Language Arts strategies are communication skills applicable to all subjects.
- Persuasive approach
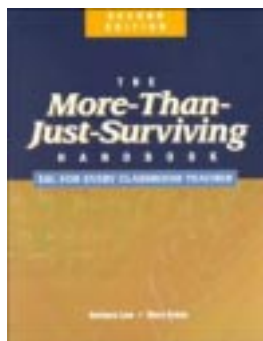
Annotated Bibliography

Classroom Strategies Described:
Contains many strategies for supporting ESL and ELD learners in every subject classroom. Presents strategies under topic headings as follows:
- First Days – helping the brand new learner of English as a second language
- Testing and Placement – strategies for assessing   the English skills of newly arrived students and placing them in classes appropriately
- Language Learning – the basics for teachers regarding how people learn a second language and how they can apply this knowledge in classroom practice
- Literacy and the Four Skills: Reading, Writing, Speaking and Listening – strategies for developing these skills with ESL/ELD learners
- Content Area Instruction – how content area teachers can approach their curriculum and make it accessible to ESL/ELD learners
- Resources – how to make the most of people and resources in the school and community to help ESL/ELD students

Key Messages:
- Students learn a second language best when the classroom is welcoming and supportive of linguistic and cultural diversity.

- Language is learned best when skills are integrated.

- Language is learned best when the focus is on meaning and on using language to communicate for real purposes.

- All teachers, not just the ESL/ELD teacher, have an important role to play in helping students develop their skills in English.

Notable Quote(s):
"This book has been written for those of you who are regular classroom teachers, both elementary and secondary, to give you a place to start, and enough knowledge and strategies to help you cope and to help your ESL students learn. There *are* things you can do, using the resources you have in the classroom and the community to help."

Strengths:
- Examples from a range of content classrooms to illustrate good teaching practices with ESL/ELD students

- Many authentic examples of ESL/ELD students' reading and writing

- Focuses on practical strategies that teachers can immediately apply in the classroom

Annotated Bibliography

The Ontario Curriculum Unit Planner, 2002
Teaching and Learning Companion-CD ROM
http://www.ocup.org

Classroom Strategies Described:
- Organizes strategies into the following categories:
  - Activity-Based Strategies
  - Arts-Based Strategies
  - Cooperative Strategies
  - Direct Instruction Strategies
  - Independent Learning Strategies
  - Inquiry and Research Models
  - Learning Styles
  - Technology/Media-Based Applications
  - Thinking Skills Strategies

Key Messages:
The Teacher Companions database was compiled by Ontario educators and field-tested for use in Ontario schools. It is intended to help the collaborative and reflective practitioner plan, develop, implement, and evaluate curriculum units that:
- meet the needs of all students in the classroom;
- provide a balance in the range of learning experiences;
- recognize the interrelated phases in the learning process;
- create a consistent understanding to support effective teaching and learn ing;
- incorporate effective instructional strategies and assessment strategies;
- supports the implementation of the Ontario curriculum.

Note:
While every effort has been made to provide appropriate information for educators, this database is not intended to be a definitive treatment of the topics it includes. Its contents should be read as suggestions, not prescriptions.

Strengths:
- Exhaustive list of possible instructional strategies and models
- Extensive selected bibliography, organized on the same basis as the strategies and models
- Packaged on the CD with the other Guides from the *Curriculum Unit Planner*, including:
  - *Assessment Companion*
  - *ESL/ELD Companion*
  - *Special Education Companion*
  Updated versions of these databases are available from the Ontario Curriculum Unit Planner website www.ocup.org

Annotated Bibliography

Classroom Strategies Described:
- Offers many strategies in areas of teaching and learning strategies and cross-curricular communication skills.
- Strategies for developing reading, writing and oral communication skills in subject areas: reading comprehension; comparing fiction and non-fiction; writing skills -peer editing (Section 3)
- Learning and cognitive styles: student inventories; multiple intelligences; varied approaches -Visual spatial- use pictures; Linguistic- debates; Kinesthetic- hands-on; Interpersonal-co-operative group activities (Section 4)
- Communication skills: listening skills; non-verbal communication; written communication (Section 4)
- Reading comprehension (Section 4)
- Organizational supports (Section 4)

Key Messages:
- Teachers of all content areas are responsible for addressing student needs and ensuring learning of literacy skills.

- Resource stresses a cross-curricular approach.

- Teachers need to recognize different learning styles to help students use learning strengths effectively.

- Package is designed to help teachers support student learning.

Notable Quote(s):
"Literacy knowledge and skills are best developed in all areas of curriculum by a consistent combination of intensive instruction, teachable moments, and student practice".

Strengths:
- Handy resource package; easy to put in binder
- Strategies support development of literacy skills in all areas
- Additional resources/ websites are cited
- Literacy inventories
- Student handouts
- Assessment tips
- Checklists
- Accessible information-grade by grade continuum chart

Annotated Bibliography

Teaching Reading in Social Studies, Science and Math
Laura Robb
Scholastic, 2003. ISBN 0-439-17669-7
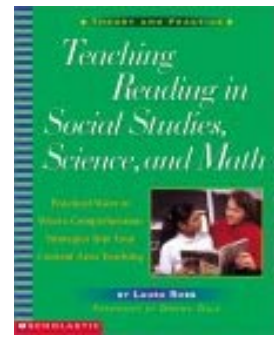
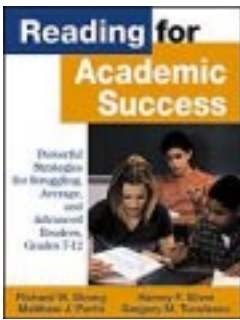| **Classroom Strategies Described:**	**Key Messages:**
• Offers reading strategies for social studies, science and math. Three part framework: before, during and after learning: **Before:** (Chapter 4) - Brainstorm and categorize - Fast-write - Preview/analyse/correct - Anticipation guide **During:** (Chapter 5) - Partner read/pause/retell - Using context to learn vocabulary - Paired reading and questions - "Fix it" strategies for reading repair - Self-monitoring **After:** (Chapter 6) - Skimming - Graphic organizers - Connect and apply - Paraphrasing - Double entry journals - Summarizing/synthesizing **General ideas/ strategies:** - Exploring text and non-fiction (Chapter 10) - Textbook scavenger hunt - Vocabulary building - Using literature in social studies, math and science (Chapter11)	• Assumptions in content area reading need to be examined. • Go beyond traditional textbook as main source of information. • Incorporate alternative methods. • Help students become active makers of meaning.
Notable Quote(s): "I do not propose that teachers overhaul their curricula or ways of teaching, but that they take short bursts of time each day to teach reading and learning strategies that will help their students unlock every kind of text and thus experience success in every subject."	**Strengths:** • Clearly laid-out lesson plans with sub-ject and grade-specific examples • Sidebars with informative tips • Topics labelled on sides of pages for easy access • Attractive layout, easy to read • Specifically geared to Social Studies, Math, Science in Grades 7-8, with valuable strategies that can be modified for use in other grades

Annotated Bibliography

Classroom Strategies Described:
Each chapter contains a variety of specific classroom strategies and related tools, graphic organizers, strategies for specific content areas and strategies for struggling students.

Chapters divisions include:
- Becoming a Thoughtful Notemaker
- Managing and Mastering Vocabulary
- Reading Beyond the Information Given: Thinking and Reading in the Content Areas
- Turning Questions Into Quests
- The Reading-Writing Connection
- Reading Styles: The Key to Learning Success

Key Messages:
- Improving reading in secondary schools is possible.
- Reading is an essential skill in our culture.
- Reading is thinking.
- Students need to become effective and strategic textbook readers.
- Students need modeling, practicing, coaching, and whole-class discussions about the applications of various techniques to develop effective notemaking skills.
- Strategies for processing and remembering new vocabulary are essential in helping students understand what they read.
- Students need content-specific skills instruction in reading for meaning and understanding questions.
- Reading and writing are naturally connected.
- Good reading instruction must recognize that students have different reading styles.

Notable Quote(s):
"This book is about how you can turn average or below-average readers in secondary school into thoughtful, high-achieving readers – readers like yourself, who can find and remember the information they need, reason out the implications of powerful and challenging ideas, and feel at home in libraries and bookstores, both virtual and real."

Strengths:
- Contains a wealth of tools, especially good graphic organizers, both blank and as cross-curricular, subject-specific samples
- Applies strategies and graphic organizers to subject-specific scenarios describing typical, realistic classroom practices
- Includes a comprehensive bibliography, useful references, and an exhaustive index

Annotated Bibliography

I Read It, But I Don't Get It
Cris Tovani
Pembroke, 2000. ISBN 1-57110-089-X

Classroom Strategies Described:
- Strategies cover the entire reading process, from motivating students to read, to helping improve comprehension during reading, and making sense of content after reading.
- Some examples include:
  - Activating prior knowledge- drawing on personal experience and personal knowledge (page 67)
  - "Think alouds"- teacher guided reading which walks students through process of understanding text (pages 27-28)
  - "Fix Up" strategies- what students can do when they get stuck – marking text, summarizing, making predictions (pages 50-51)
  - "Articulating confusion"- highlighting confusing parts (pages 40-41)
  - "I wonder" questions- questioning the text (pages 82-83)
  - Making inferences- encouraging probable, not "outlandish" outcomes (pages 104-105)
  - Double Entry Diaries (page 30, Appendix A)

Key Messages:
- Many students are "fake readers"- they may be good oral readers and decoders of words, but have weak comprehension and retention skills.
- Teachers cannot expect students to be proficient without practice.
- Students need to know that it's okay to be confused and to ask questions about a text.
- Examines what good readers do and what struggling readers need to learn to do.

Notable Quote(s):
"Teachers have a choice. We can choose to cover the curriculum or we can choose to teach students to inquire. It is our obligation to renew our students' curiosity and guide them toward inquiry."

"Teachers don't have to be reading specialists to teach comprehension strategies. They simply have to be aware of their own processes as readers. They can notice their own thinking as they read, determine what they do to make meaning, and pass these techniques to their students."

Strengths:
- Practical strategies, suitable for a wide variety of subject areas and a range of grade levels
- "What Works" section summarizes key ideas, highlights practical suggestions, is easy to locate and use.
- "Teaching Points" offer wise insights about students and reading.
- "Access Tools" contains a series of reproducible templates for handy use.
- Humorous and believable anecdotes about classroom situations and quotes from students

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If your students are struggling with . . .

Reading for Meaning	Reading Textbooks	Subject-specific Vocabulary	Identifying Key Words and Ideas
Go to ↓	**Go to** ↓	**Go to** ↓	**Go to** ↓

Reading for Meaning

R - Using Context to Find Meaning
- Anticipation Guide
- Drawing Conclusions

W - Supporting the Main Idea
- Setting the Context
- Asking Questions to Revise Writing

O - Jigsaw
- Determining Key Ideas
- Triangle Debate
- Discussion Web

Reading Textbooks

R - Visualizing
- Previewing a Text
- Analysing Features of a Text
- Finding Organizational Patterns
- Finding Signal Words
- Extending Vocabulary
- Sorting Ideas Using a Concept Map
- Making Judgements
- Reading Informational Texts
- Reading Graphical Texts
- Reading Literary Texts
- Following Instructions
- Using Context to Find Meaning

O - Jigsaw
- Determining Key Ideas

Subject-specific Vocabulary

R - Extending Vocabulary

W - Webbing, Mapping and More
- Adding Details

O - Take Five
- Place Mat
- Jigsaw
- Determining Key Ideas
- Triangle Debate

Identifying Key Words and Ideas

R - Most/Least Important Idea(s) and Information
- Sorting Ideas Using a Concept Map

W - Webbing, Mapping and More
- Supporting the Main Idea
- Adding Details

O - Think/Pair/Share
- Take Five
- Place Mat
- Jigsaw
- Triangle Debate
- Determining Key Ideas

R - Reading Strategies   **W** - Writing Strategies   **O** - Oral Communication

If your students are struggling with . . .

Identifying Purposes for Writing	Making Connections to Own Lives	Making Inferences	Writing Conventions
Go to ↓	**Go to** ↓	**Go to** ↓	**Go to** ↓

Identifying Purposes for Writing

Go to

R - Making Notes

W - Setting the Context
- Using Templates
- Webbing, Mapping and More
- Reorganizing Ideas
- Asking Questions to Revise Writing

O - Presentation Modelling

Making Connections to Own Lives

Go to

R - Visualizing
- Anticipation Guide
- Responding to Text
- Drawing Conclusions

W - Adding Content
- Rapid Writing

O - Think/Pair/Share
- Timed Retell
- Place Mat
- Discussion Web
- Discussion Etiquette
- Group Roles
- Four Corners
- Triangle Debate

Making Inferences

Go to

R - Using Context to Find Meaning
- Reading Between the Lines

O - Place Mat
- Discussion Web
- Triangle Debate
- Think/Pair/Share

Writing Conventions

Go to

W - Reorganizing Ideas
- Peer Editing
- Proofreading Without Partners

R - Reading Strategies   **W** - Writing Strategies   **O** - Oral Communication