A Guide to Effective Literacy Instruction

Grades 4 to 6

Volume One
Foundations of Literacy Instruction for the Junior Learner

2006
A Guide to Effective Literacy Instruction, Grades 4 to 6

Volume One: Foundations of Literacy Instruction for the Junior Learner
1. The Junior Learner
2. Knowledge and Skills Required for Literacy
3. Principles of Effective Literacy Instruction

Subsequent volumes in the series will cover a range of topics, including assessment; planning instruction; the classroom environment and resources; instructional approaches in oral communication, reading, writing, and media literacy; and technology as it supports literacy instruction and learning.
A Guide to Effective Literacy Instruction, Grades 4 to 6

A Multivolume Resource from the Ministry of Education

Volume One
Foundations of Literacy Instruction for the Junior Learner
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Une série de publications équivalente est disponible en français sous le titre suivant :
Guide d’enseignement efficace en matière de littératie de la 4e à la 6e année.
In order to improve the achievement of all students from Junior Kindergarten to Grade 6, the Ontario Ministry of Education requires elementary schools to participate in a regular cycle of assessment, target setting, and improvement planning. These practices, combined with effective instruction, have been shown by research to be key factors in improving the achievement levels of students.


*A Guide to Effective Literacy Instruction, Grades 4 to 6*, is based on the research and advice set out in the expert panel report. It provides Ontario teachers with a framework and practical resources for planning a successful literacy program that equips all junior students to grow as strategic readers, writers, talkers, listeners, and thinkers.

This multivolume guide was written by teachers for teachers. It builds on the strengths that exist in Ontario’s education system and supports the crucial work that teachers do every day to equip their students to become confident and successful learners. It is intended for all teachers of Grades 4 to 6 in the English-language school system, including those responsible for French immersion, English as a second language, special education, and specific subjects. A similar reference guide, reflecting research and effective practices in literacy instruction in the French language, has been developed for educators in Ontario’s French-language school system.

Certain portions of this guide rely heavily on, or are actually taken from, the expert panel report. The ministry gratefully acknowledges the panel’s permission to use excerpts from its report in this guide without attribution. (Citations for direct quotations refer simply to *Literacy for Learning*.) Although the report and the guide cover similar ground, each has a different focus. The report presents current research and best practices, while this guide suggests practical ways in which the research can be applied in the classroom. Educators charged with improving the literacy learning of students in the junior grades are strongly encouraged to use the guide in conjunction with the expert panel’s report.
In this guide, *literacy* is defined as the ability to use language and images in rich and varied forms to read, write, listen, speak, view, represent, and think critically about ideas. Literacy enables us to share information, to interact with others, and to interpret various kinds of texts. It connects individuals and communities and is an essential tool for personal growth and active participation in a democratic society. The development of literacy is a complex process that involves building on prior knowledge, culture, and experiences in order to instil new knowledge and deepen understanding.

**The Importance of Literacy Instruction in the Junior Grades**

To be successful personally and professionally, today’s students need to be independent, flexible, creative, critical, and strategic thinkers and communicators. They need to be proficient in many “literacies” – that is, they must be able to understand and communicate with people from diverse backgrounds by means of a wide and constantly expanding range of texts, media, and communication methods. They need to be confident in their learning and motivated to continue to learn throughout their lives.

Effective literacy instruction is the backbone of teaching and learning in the junior grades. Although junior learners may have a basic understanding of how to read and write, teachers need to teach these students explicitly the specific skills that will help them understand the increasingly complex texts and concepts they will encounter in school.

**Multiliteracies**

The term *multiliteracies* is used in this guide to describe the increasingly diverse ways in which ideas and information can be expressed and understood – using conventional and innovative text forms, symbols, and media. Students need to become proficient at understanding and using a wide range of text forms, media, and symbol systems in order to maximize their learning potential, keep pace with changing technologies, and actively participate in the global community. Building on their first language, students develop skills in critical literacy, visual literacy, media literacy, technological literacy, cross-curricular literacies (involving music, mathematics, science, visual arts, and other subjects), and literacy in other languages.
Text: A Representation of Ideas

The word *text* as used in this guide means a representation of ideas that can be shared over distance and time. In our technologically and culturally complex world, texts come in a wide variety of forms, in both print and electronic formats. For the purposes of this guide, the word *text* is used to describe information and ideas that are captured in print and electronic forms, using not only words but also graphics and other visual elements. These forms include print resources in English, French, and other languages that are normally associated with reading and writing instruction, such as novels, picture books, magazines, newspapers, textbooks, advertisements, and other word-rich texts. They also include electronic texts found in Web pages, Web logs (blogs), e-mails, Internet chat rooms, hand-held text messaging devices, and multimedia presentations. Beyond words, texts can be understood to include the visual and graphical images that convey meaning on signs and packaging, in cartoons, through charts, maps, diagrams, graphs, timelines, storyboards, movies, video games, and more.

Current research and best practices, such as those set out in *Literacy for Learning: The Report of the Expert Panel on Literacy in Grades 4 to 6 in Ontario* (2004), offer educators a great deal of information about how junior students develop as literate learners and about the knowledge and skills these students need to succeed at each stage in their development. This guide touches on the research, but its focus is on practical suggestions for implementing current research in the classroom.

**The Ontario Context**

Ontario has two official languages – English and French – and a wide range of other languages and dialects that thrive in homes, workplaces, and communities across the province. English is the language of daily life for the majority of people in Ontario; for a growing minority, however, it is an additional language.

Census statistics from 2001 show that over 70 per cent of Ontarians identify English as their first language; just over 4 per cent report French as their first language; and approximately 24 per cent have a first language other than English or French (Statistics Canada, 2001 Census). In some large urban areas, school boards have identified more than seventy-five different home languages and dialects among their students.

Ontario’s language diversity can present challenges in the classroom, but it also offers tremendous opportunities. With increasing globalization, the shift to an information economy, and growing awareness about how languages influence creative thinking and problem solving, the evidence is strong that language and cultural diversity are resources that can enrich classroom learning and benefit all students. The challenge for schools is to equip children to build on their language foundations while developing high levels of academic proficiency in English.
Ontario’s children have an unparalleled opportunity to learn how to live with respect and confidence in a multicultural world and to develop the higher-order thinking skills and critical-literacy skills they will need for responsible citizenship in the global community and for lifelong learning in the twenty-first century. Teachers play a key role by ensuring that their literacy instruction and classroom practices address the needs and experiences of all students. As students participate in building an inclusive community of learners in the classroom, they learn ways to communicate more effectively in the wider world.

**Literacy Goals for Junior Learners**

Literacy instruction in the junior grades has one overriding purpose: to enable all students to develop as competent communicators in a multiliterate, multicultural, multimedia world. Embedded in this broad purpose are four major goals for each junior learner:

1. to become a strategic reader, writer, and oral communicator
2. to expand thinking skills (including metacognitive and critical-literacy skills), developing the necessary habits of mind
3. to deepen the motivation to learn
4. to develop independence as a learner

These four goals are linked to one another, and they permeate literacy instruction across the curriculum. They provide a lens through which educators can view all planning, assessment, instruction, and related classroom practices. The strategies involved in achieving these goals are all discussed in detail in this guide.

**Goal 1: Become a Strategic Reader, Writer, and Oral Communicator**

Many students who enter Grade 4 are able to understand text at the literal level, can engage in paired and group discussions, and can communicate thoughts, feelings, and ideas in writing. In other words, they come with the basic foundation for literacy development. However, as many experts describe, this basic foundation is only the beginning. To progress through the junior grades and beyond, students need to continually develop their strategies for “making meaning” and communicating effectively. Strategic readers, writers, and oral communicators are able to do the following:

- identify the purpose of a text, and the intended audience
- work with a variety of text forms, technologies, and media
• apply their literacy and communication skills in all subjects and in new situations
• make choices about which strategies and skills to use in a given situation

Goal 2: Expand Thinking Skills, Developing the Necessary Habits of Mind

Research has shown that “effective readers and writers use intentional thinking skills to regulate their reading and writing processes, to formulate ideas, to solve problems, and to make meaning. Using higher-order thinking, they are able to move beyond rote learning and literal interpretation to a deeper, more discerning understanding of texts” (Literacy for Learning, p. 32).

In junior classrooms where effective literacy instruction takes place, there is an emphasis on higher-order thinking. Higher-order thinking refers to the transformation of information and ideas that occurs when students combine facts and ideas and use them to synthesize, generalize, explain, hypothesize, or arrive at some conclusion or interpretation. By manipulating information and ideas through these processes, students are able to solve problems, acquire understanding, and discover new meaning (Literacy for Learning, p. 116).

As well, higher-order thinking involves the development of “metacognitive” and “critical-literacy” skills. Metacognition is the process of thinking about one’s own thought processes. Using metacognition, students reflect on how they learn, what they know and need to know, and what strategies they need to make sense of what they see, hear, and say. Teachers model how to think metacognitively to give students the ability to construct meaning from texts and to plan, monitor, and improve their own learning. Metacognitive skills help students to achieve independence as learners.

Critical literacy requires the ability and willingness to look beyond the literal meaning of texts to observe what is present and what is missing, in order to analyse and evaluate the meaning and the author’s intent (Literacy for Learning, p. 116). It goes beyond conventional critical thinking to engage with issues of fairness, equity, and social justice. Critical-literacy skills equip students with the ability to analyse how authors develop texts in order to influence readers; they also give students the knowledge, skills, and confidence to develop their own perspectives and world view (Literacy for Learning, p. 37). For reflective learners, these skills can become a call to social action, challenging them to examine their role in making the world a better place.

“Reading” and “Writing”
Throughout this guide, reading is understood to include the concept of viewing – for example, viewing posters, advertisements, media presentations, Web pages, or any text that requires a reader/viewer to activate comprehension skills. As well, writing is understood to include the concept of representing – for example, illustrating, selecting a photograph, developing a multimedia presentation, or creating any text that requires the writer/presenter to present, explain, illuminate, or clarify ideas or information.

For the purposes of this guide, therefore, when a reference is made to reading or writing, or to the reader or writer, the intention is that all forms of media are included.

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Habits of mind necessary for higher-order thinking include open-mindedness, perseverance, curiosity, and independent thinking. Costa and Kallick define habit of mind as the stance that individuals adopt when confronted with problems that do not have immediate answers. The habits of mind that facilitate higher-order thinking transcend all subject areas. “They are what make... learning continual, workplaces productive and democracies enduring” (Costa and Kallick, p. 12).

Costa and Kallick believe that students need to develop the habits of mind represented in the diagram above. They agree that these habits of mind are characteristic of peak performers in all fields.

Goal 3: Deepen the Motivation to Learn

Another major goal of literacy instruction is to instil in students an appreciation of the value and power of reading and writing so that they will choose to read and write throughout their lives for personal and professional reasons. Students need to understand how reading and writing will help them learn about themselves, solve problems, and explore and influence the world.

“To motivate... is to bring out the best in people and to celebrate both their achievement and potential. When you enjoy helping others excel, grow, and discover, you are motivating them. Motivating others must always, by its very nature, be positive – though it must also be challenging.”

(Wilhelm, 2002, p.16)
Goal 4: Develop Independence as a Learner

Proficient communicators dig deep for meaning and develop their own stance and voice as independent thinkers. Effective literacy instruction strives to move students along a continuum of learning towards this independence, scaffolding their learning and gradually releasing responsibility to students as they master strategies and skills. Along the way, students learn to do the following:

• use appropriate strategies during reading and writing, with limited teacher support
• select texts and text forms for different purposes
• engage in accountable talk
• draw on internal motivation to read and write
• transfer learning to new situations
• persist when faced with a difficult task
• pursue meaningful activities after completing assigned tasks
• set personal goals and assess progress towards their goals
• draw on their strengths and develop new abilities
• think independently

Key Messages for Teachers and Students

The key messages for teachers listed in the following chart are intended to help teachers address the goals of the junior literacy program. They are the fundamental ideas that underlie all of the approaches, strategies, and tools described in this guide. They answer the question, “Why am I teaching this material, in this way, to this group of students, at this time?” Teachers can use these key messages to guide their practice.

The key messages for students correspond to the messages for teachers. By conveying these messages to students and ensuring that students internalize them, teachers will have gone a long way towards giving their students the understandings and tools they need to become proficient readers, writers, and oral communicators, and to succeed at school and in their future lives.

Key Messages

Look for this symbol

Look for the symbol of a key throughout this volume to identify key messages related to the text.
### Key Messages for Teachers and Students

<table>
<thead>
<tr>
<th>Effective literacy teachers in Grades 4 to 6 understand that:</th>
<th>Successful students in Grades 4 to 6 understand that:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy instruction must be driven by equitable ongoing assessment.</td>
<td>Assessments are a way for the teacher and for me to understand how well I am learning.</td>
</tr>
<tr>
<td>Literacy instruction must be explicit and relevant to students’ lives.</td>
<td>I learn best when I am reading and writing for a real purpose.</td>
</tr>
<tr>
<td>Literacy instruction must be differentiated, inclusive, and respectful of all students.</td>
<td>Some tasks will be difficult, but I can learn the strategies that I need to succeed.</td>
</tr>
<tr>
<td>Students’ unique identities and diverse experiences can contribute greatly to a rich learning environment.</td>
<td>I have valuable knowledge and experiences that I can share with my classmates.</td>
</tr>
<tr>
<td>Talk is the foundation for literacy.</td>
<td>Accountable talk helps me to improve my reading, writing, and thinking.</td>
</tr>
<tr>
<td>Reading, writing, talking, listening, thinking, viewing, and representing are reciprocal literacy processes.</td>
<td>Reading will make me a better writer, and writing will make me a better reader. Talking, listening, and thinking will make me a better reader and writer.</td>
</tr>
<tr>
<td>Students need to become proficient in “multiliteracies”, involving texts of all types.</td>
<td>I need to use my literacy skills to work with texts of all types.</td>
</tr>
<tr>
<td>Students need to learn that their literacy skills are transferable to all content areas.</td>
<td>I can apply the strategies and skills that I learn in Language to all subjects.</td>
</tr>
<tr>
<td>Students learn best when they are motivated and actively engaged in their learning.</td>
<td>If I am actively involved in making meaning when I read and write, I will improve my learning.</td>
</tr>
<tr>
<td>Explicit feedback given immediately after assessment leads to improved levels of student achievement.</td>
<td>The teacher’s feedback will help me to improve my learning.</td>
</tr>
<tr>
<td>By gradually releasing responsibility for learning to students, teachers help students improve their learning and develop a greater level of independence.</td>
<td>The strategies I am learning will help me become a proficient and independent reader, writer, and communicator.</td>
</tr>
<tr>
<td>When students are encouraged to assess their own work and set their own goals, they take ownership of their learning.</td>
<td>I need to think about my learning and set goals for my learning.</td>
</tr>
<tr>
<td>Authentic literacy experiences help students develop skills and attitudes that will serve them throughout their lives and improve the quality of their lives.</td>
<td>Knowing how to read, write, and communicate effectively will help me be successful during my school years and throughout my future.</td>
</tr>
<tr>
<td>Metacognitive skills give students a growing awareness of themselves as learners and a greater degree of independence.</td>
<td>Thinking about my thinking will help me understand what I have learned, make decisions about my learning, and become a more independent learner.</td>
</tr>
<tr>
<td>Critical-thinking and critical-literacy skills are the tools students need to develop into active, responsible participants in the global community.</td>
<td>I need to think critically about all the texts I encounter, and ask myself questions about the accuracy and fairness of the stories or information in these texts.</td>
</tr>
<tr>
<td>Professional collaboration and ongoing learning help teachers develop a deeper, broader, more reflective understanding of effective instruction.</td>
<td>Working with others gives me new ideas and helps me to reflect on and expand my own thinking and learning.</td>
</tr>
</tbody>
</table>
Organization and Features of this Resource Guide

A Guide to Effective Literacy Instruction, Grades 4 to 6, is organized into several volumes. The first three volumes provide the foundation for effective literacy instruction and literacy learning in the junior grades. Subsequent volumes go more deeply into what to teach – and how – in order to help all students experience success.

About Volume 1

Volume 1, “Foundations of Literacy Instruction for the Junior Learner”, establishes the context for a comprehensive examination of effective literacy instruction in Grades 4 to 6. The volume comprises three chapters – Chapter 1, The Junior Learner; Chapter 2, Knowledge and Skills Required for Literacy; and Chapter 3, Principles of Effective Literacy Instruction – and an appendix, which provides more than fifty practical classroom strategies and tools. The strategies and tools outlined in the appendix will be helpful to teachers as they apply the ideas presented in Chapters 1–3 in their classrooms. Throughout this guide, the “Application in Appendix” icon shown here in the margin is used to draw teachers’ attention to items in the appendix that are relevant to the specific teaching/learning situations being discussed at that point.
Students enter the junior grades with a zest for learning, full of wonder, excited to discover more about themselves and the world. They are ready to be taught the skills they will need to become independent thinkers and learners. They enliven the classroom with their wealth of experiences, backgrounds, abilities, and interests. These students generally range in age from nine to twelve years, putting them squarely in the category of *tweens*. The term *tweens* was coined by marketers to identify children between the dependent stage of early childhood and the growing independence of later adolescence, when parental influence wanes and peer pressure increases. Because children at this age tend to be impressionable and have spending money, they are targeted aggressively by retailers and advertisers. Effective literacy instruction can help them to become more critical thinkers, more cautious consumers of information in all media, and more independent decision makers.

**Factors That Affect Literacy Learning in the Junior Grades**

In a typical junior classroom, students will be at varying stages of physical, intellectual, social, and emotional development. Some will be operating at a primary level while others may already have progressed beyond their grade level. Each student’s progress in literacy and in specific subject areas will be influenced by a complex interplay of factors, which are depicted in the web diagram below and discussed in the subsequent sections of this chapter. It is the job of the classroom teacher to build on the diverse strengths of all students and support them as they continue to develop into proficient, confident communicators.
**Physical Development**

From the ages of eight to twelve years, students undergo many physical changes. Although the rate of physical development varies widely from one individual to another, most junior students:

- are able to sit and pay attention for longer periods of time;
- are developing greater manual dexterity and coordination, which influence fine-motor tasks such as handwriting;
- need opportunities to move and engage in active learning.

**What Teachers Do**

Teachers:

- actively involve students in reading, writing, talking, and thinking, in various forms;
- include drama, role playing, and hands-on activities that involve tools, props, and other manipulatives;
- let students demonstrate their learning in a variety of ways (for example, through visual arts, drama, songs and chants, and multimedia reports);
- promote healthy attitudes about body image and critical reflection about how the media portray girls, boys, men, and women.

**Intellectual Development**

Intellectually, junior students develop the capacity to examine increasingly complex topics in greater depth and breadth. They begin to see themselves as readers and writers. However, the literacy development of students in a typical classroom varies widely. Their interests and confidence greatly influence what and how much they read and write.

As thinkers and learners, junior students:

- begin to apply logical rules and reasoning;
- progress gradually from identifying and solving concrete problems to identifying and solving abstract ones;
- develop greater understanding of the concept of time and of spatial relationships;
- develop decision-making skills;
- are able to juggle many tasks;
- pay attention for longer periods of time and show sustained, intense interest in specific activities;
• develop higher-order thinking skills, including skills of analysis, synthesis, and evaluation – although they remain susceptible to believing what they see in print and other media;
• are motivated to acquire knowledge and to explore and investigate the world;
• develop a greater appreciation of the subtleties in different texts, in language, and in humour (although they continue to enjoy slapstick and other broad forms of humour);
• are able to play with words and language.

Grade 4 – A Critical Year

A large number of students with initial reading and writing skills may be challenged by the more intricate tasks required to make meaning of the subject-specific texts that are introduced in the junior grades. Starting in Grade 4, students are faced with new demands and responsibilities – they are asked to read and write longer texts involving more complex subject matter and to think about more abstract ideas.

Grade 4 teachers are challenged to guide students carefully towards developing the skills and knowledge they need to meet these new demands, while at the same time preserving and nurturing in them a love of reading and an appetite for discovering new ideas and gaining new understandings and new perspectives on the world through reading, writing, and thinking.

What Teachers Do

Teachers:
• provide texts of all types that are developmentally appropriate, interesting, and relevant;
• introduce increasingly complex texts that are appropriate for the students, presented in a wide range of text forms and genres;
• include anecdotes, mysteries, humour, word play, facts, puns, riddles, fiction, inquiry, and research on a range of topics;
• offer choices that include texts with multiple layers of meaning;
• provide daily opportunities for sustained reading, writing, and accountable talk;
• establish a safe environment that promotes risk taking;
• provide time and opportunity for a variety of responses to allow students to build confidence;
• engage students in authentic, relevant, and rich learning experiences, including opportunities to read and write about things that interest the students;

• use graphic organizers and the arts to explore ideas, deepen understanding, and convey meaning;

• draw attention to the writer’s craft in texts that interest the students (mentor texts), and encourage them to try similar language and techniques in their own writing.

To develop student strategies and skills, teachers:

• use instructional approaches that are highly structured and that include scaffolded support, in order to ensure that students are able to respond to the task;

• explicitly teach strategies (through modelling, demonstration, and think-aloud) that promote comprehension and problem solving, and that lead to independence;

• demonstrate and explicitly teach literacy skills in all subject areas;

• provide multiple opportunities for practice, feedback, and reteaching, if necessary;

• invite students to discuss, question, reflect on, and analyse what they see, hear, and experience, with opportunities to examine and discuss issues from different points of view;

• engage students in “accountable talk” (see p. 32) to solve problems, clarify their understanding, and consolidate their learning;

• challenge students to “dig deeper” for meaning, to wonder about possibilities, and to discuss contradictions, using higher-order thinking skills.

To promote learning through goal-setting and self-assessment, teachers:

• set high yet attainable targets or standards;

• create time for reflection and involve students in setting personal literacy goals, assessing their own progress, and making decisions about their literacy learning;

• explain expectations and assessment criteria at the beginning of a learning task so that students know what to expect and where to focus their efforts;

• teach time-management, organization, and information-management skills to promote independence, including how to handle pressures, how to prioritize, and how to make appropriate choices;

• present tightly structured, well-focused lessons based on a clear sense of purpose and tied to the achievement of clear goals;
provide constructive, focused feedback on a regular basis to involve students in monitoring their own learning;
build upon students’ strengths and celebrate their successes, using positive and concrete examples to generate an “I can do this” feeling.

**SOCIAL AND EMOTIONAL DEVELOPMENT**

Junior students are developing social awareness and skills that influence their relationships with others and their ideas about the world. They:
- develop a sense of justice, concern, and empathy for others, and become less egocentric;
- are more willing and able to consider different points of view and to change their opinions;
- form critical judgements about social issues;
- have a more flexible sense of right and wrong than they did when they were younger;
- develop leadership qualities;
- may challenge the adult world and test boundaries that are set for them – although they continue to look to adults for guidance and approval;
- begin to feel greater pressures and expectations, both socially and academically;
- increasingly seek acceptance, support, social standing, and identity from their peers and peer groups;
- enjoy working in groups;
- may strive to include or exclude others from their groups;
- are socially sensitive and more vulnerable to embarrassment than a younger child might be;
- may suffer a loss of self-confidence when they are compared with others;
- are increasingly conscious of and affected by gender roles;
- may expand their social circles beyond the home and school (for example, by venturing into online chat rooms).

**What Teachers Do**

Teachers:
- provide plentiful opportunities for students to talk and interact in flexible and dynamic groupings, including small groups and pairs;
• model and help students to build a community of learners where all students feel affirmed, support each other’s learning, and are prepared to take risks;
• extend opportunities for collaborative learning to include learning buddies in other grades;
• teach students to assume a critical stance when responding to texts of all types;
• model and provide opportunities for exploration, active listening, debate, discussion, and persuasive argument;
• establish routines and procedures that promote personal responsibility and respectful interaction, and reinforce these with lessons and anchor charts (see “Anchor Charts” in the appendix).

Personal Identity

Junior students are strongly influenced by the cultures of their families and communities but are also developing their own identity. They:
• begin to develop their own beliefs and values and to take responsibility for their own actions;
• realize that some of their attitudes and values differ from those of their siblings, their parents, and other adults;
• may look beyond parents and teachers for their role models – towards characters from various media, including television, movies, music, sports, and books;
• may be unsure of who they are and where they fit in;
• are anxious to cultivate a more sophisticated self-image – seeking ways to be “cool”;
• are influenced by popular culture, intentionally targeted by the media, very brand aware, and vulnerable to media advertising, which may include potentially harmful messages;
• look ahead to independence and start to think about possible careers;
• seek opportunities to test their own skills and abilities.

What Teachers Do

Teachers:
• ask students about themselves, their attitudes, and their interests. They do not assume that any one aspect of a student’s cultural, linguistic, or personal identity is the defining characteristic of that student;
• provide opportunities for students both to read and to write about things that interest them;
• provide positive role models through biographies, historical texts, informational texts, current events, and literature in many genres, and include heroes who break free from negative peer pressure;
• ensure that texts, images, celebrations, and examples reflect the global nature of Canadian society;
• encourage students to reflect on what they think and feel about the texts and characters they encounter, how they are influenced by the writer’s craft and message, and why others may have different responses to the same text;
• teach critical-literacy skills to help students read their world and become more aware of how media, peers, and others portray roles and convey messages;
• provide an environment where each student feels valued and is comfortable taking risks;
• encourage students to question what they see and value in advertising and other forms of popular culture.

**Gender**

There is a large body of evidence, including data from the province-wide assessments of literacy achievement in Grades 3 and 6, showing a discrepancy in both the literacy attitudes and the literacy achievement levels of boys and girls. Research indicates that fewer boys than girls like to read and write, and fewer boys than girls feel that they are good readers and writers.

**What Teachers Do**

Teachers:

• offer varied forms of literacy instruction, including active-learning opportunities and concrete, step-by-step instruction;
• integrate technology into the literacy program, including visual media and computers;
• consider the differing, gender-related interests and text preferences of some boys and girls, and offer choices that reflect those interests and that include non-traditional reading material, such as comic books, baseball cards, magazines, Internet material, and e-mail messages;
• consider differences in fine-motor skills, language development, learning pace, and learning styles, and offer opportunities for students to choose activities that draw on their strengths in order to show what they know and can do;
• provide opportunities for flexible and varied groupings (for example, all boys, all girls, and mixed groupings);
• recognize that sometimes boys may be more reluctant than girls to ask for help when they need it, preferring to do things by themselves;
• offer inquiry-based learning, which allows students to ask questions and develop knowledge and skills in their areas of interest;
• provide texts that show male and female protagonists in non-traditional roles;
• make students aware of the relevance of what they are learning in every subject area;
• provide opportunities for talk;
• embrace the arts;
• demonstrate that they care about students as individuals and want them to learn.

**Language Background**

Regardless of their language background, most junior students are far more confident as speakers than as readers or writers. Their vocabulary is increasing – although the language they use to express themselves (their expressive language) tends to lag behind the language they understand (their receptive language).

Students whose first language is not the language of instruction have both advantages and challenges.

From their language background, they have:
• an understanding of how languages work;
• prior knowledge and experiences that can enrich their analysis and interpretation of texts;
• a foundation for becoming multilingual that can broaden their opportunities in the global community.

At the same time, however, second-language learners face the daily challenges of developing their academic vocabulary in the language of instruction, and of working collaboratively and making friends in an unfamiliar language.

“‘Conversational fluency’ can get [these students]… through the first few years of school but by fourth grade they need to have ‘academic proficiency’ – a more complex range of skills that facilitates comprehension of increasingly difficult texts.”

(Cummins, n.d.)
What Teachers Do

Teachers:

• consider a student's literacy in his or her first language as a foundation for developing literacy skills in the language of instruction;

• provide the background knowledge that students need to understand unfamiliar concepts;

• allow second-language learners to use their first languages when necessary to clarify their understanding and to keep up with content learning in all subject areas;

• encourage students to maintain and further develop their proficiency in other languages and to use this knowledge as a scaffold for developing their proficiency in English and French;

• support the use of translation programs, electronic dictionaries, and other technological tools that can help students to understand the language of academic texts and to build bridges from one language to another;

• provide flexible student groupings that allow students to support one another in their first languages and in the language of instruction;

• encourage parents to read to their children in the family's home language;

• celebrate language diversity in the classroom by talking about the language backgrounds of students and by encouraging students to share stories and information from their backgrounds;

• in selecting texts for classroom learning, include stories and information that feature the languages and cultures of the students, and encourage students to see the connections among various languages and cultures;

• use total physical response (TPR) to help second-language learners – for example, through gestures, variation in voice, or pantomime (see "Total Physical Response" in the appendix);

• offer student-led conferences in which students can use their first language;

• use graphic organizers and concrete materials and experiences to support comprehension and language development.
**Family Involvement With the School**

“Junior students thrive in schools that are family-friendly, and in families that are school-friendly. They are better able to draw meaning from their school experiences and apply that meaning in other contexts when they sense that school is a valued and vital part of the bigger world around them. Most families, students, and teachers value strong family-school partnerships at all grade levels; however, these partnerships tend to decline in the junior grades unless schools and teachers make a conscious effort to sustain and develop them at each grade level. Students provide a vital link between the home and school, but they need information and guidance about how to help maintain this link (Epstein, 1995).”

*(Literacy for Learning, p. 19)*

**What Teachers Do**

Teachers:

- communicate regularly with parents about the literacy learning of their children;
- welcome parents into the school and actively engage them in supporting student learning;
- become aware of the local community and its cultures – especially the cultures of students and their families – and use this awareness when choosing texts and literacy activities for the classroom;
- organize family literacy events;
- use translators to help families participate and feel included in school events.

**Learning Strengths and Needs**

Students who understand their own learning strengths and needs are better equipped to succeed in the classroom and in life. With this self-awareness as a tool, they become more engaged in their learning, more strategic in setting their own learning goals and advocating for their own needs, and more effective at working independently and with others. Teachers who recognize and capitalize on the strengths and needs of their students are better able to provide targeted instruction and support to individual students and groups of students.

There are many different theories about human intelligence, learning styles, and temperament, and many different models to describe the similarities and differences among learners. This guide offers a brief introduction to learning styles and multiple intelligences. Either of these models, alone or in combination, can be used as part of diagnostic assessment before learning. The information that is collected about each student’s strengths and preferences can help the teacher to consciously adapt instructional methods to meet the needs of all learners.
Learning Styles

Learning-styles theory suggests that there are three kinds of learners:

1. **Visual learners** learn through seeing. They prefer to have ideas and concepts demonstrated for them. Charts, diagrams, and visual displays also help the visual learner.

2. **Auditory learners** learn best by listening and talking through ideas with others. Written information may make little sense to them until it is read aloud or discussed with others.

3. **Kinesthetic/tactile learners** prefer to be actively engaged. They enjoy hands-on activities using concrete materials and the opportunity to move about and engage in physical activity.

Multiple Intelligences

Multiple intelligences, as identified by Howard Gardner, reflect eight different ways to demonstrate intellectual ability (Gardner 1983; 1993). Individuals generally have some abilities in all eight categories but will tend to favour or show strength in a particular few. Being aware of all eight forms of intelligence enables teachers to plan activities that build on the strengths of each student and that help students to develop their intelligences in areas that are not naturally strong. It is important for teachers to vary their approaches and class work to ensure that students grow in all eight areas.

The chart on page 23 outlines the eight intelligences and identifies several characteristics that describe each form of intelligence.

Multiple Intelligences Surveys

The appendix includes two different multiple-intelligences surveys and a scoring tool to help students identify their natural strengths as learners. Survey 1 is suitable for Grades 4 to 6. Survey 2 uses more advanced ideas and language, and may be more suitable for older junior students. The scoring tool can be used with either survey (see “Multiple Intelligences Survey 1”, “Multiple Intelligences Survey 2”, and “Multiple Intelligences Score Sheet”, all in the appendix).
## The Eight Intelligences

<table>
<thead>
<tr>
<th>Verbal/Linguistic</th>
<th>Logical/Mathematical</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student:</td>
<td>The student:</td>
</tr>
<tr>
<td>• uses language for a variety of purposes</td>
<td>• recognizes abstract patterns and relationships</td>
</tr>
<tr>
<td>• develops logical arguments</td>
<td>• reasons logically</td>
</tr>
<tr>
<td>• is sensitive to the sounds and meanings of words</td>
<td>• hypothesizes</td>
</tr>
<tr>
<td>• decodes and makes meaning from text</td>
<td>• invents</td>
</tr>
<tr>
<td>• responds to oral language</td>
<td>• investigates issues scientifically</td>
</tr>
<tr>
<td>• understands diverse vocabulary</td>
<td>• likes challenges</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual/Spatial</th>
<th>Bodily/Kinesthetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student:</td>
<td>The student:</td>
</tr>
<tr>
<td>• recognizes and manipulates patterns in a wide area or a confined space</td>
<td>• is active and energetic</td>
</tr>
<tr>
<td>• needs to see in order to understand</td>
<td>• demonstrates good fine-motor and gross-motor control</td>
</tr>
<tr>
<td>• uses visual clues to make meaning</td>
<td>• learns best by doing</td>
</tr>
<tr>
<td>• works with images, mind mapping, visualizing, drawing</td>
<td>• processes information through touch, movement, dramatics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Musical/Rhythmic</th>
<th>Interpersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student:</td>
<td>The student:</td>
</tr>
<tr>
<td>• may hum and whistle while working</td>
<td>• is people-oriented and outgoing</td>
</tr>
<tr>
<td>• makes connections to sounds in the environment</td>
<td>• understands the intentions, motivations, and desires of others</td>
</tr>
<tr>
<td>• creates imaginative and expressive performances</td>
<td>• learns best cooperatively</td>
</tr>
<tr>
<td>• responds to auditory stimuli using rhythm, melody, patterned sound, song, rap, dance</td>
<td>• demonstrates confident and appropriate social skills</td>
</tr>
<tr>
<td>• learns through rhythm, rhyme, and repetition</td>
<td>• shares effectively</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intrapersonal</th>
<th>Naturalist</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student:</td>
<td>The student:</td>
</tr>
<tr>
<td>• understands self as a learner and uses this information to regulate his or her own life</td>
<td>• loves nature and is curious about it</td>
</tr>
<tr>
<td>• is independent and self-directed</td>
<td>• recognizes and classifies many of the species found in nature</td>
</tr>
<tr>
<td>• can be reserved</td>
<td>• notices patterns in the environment</td>
</tr>
<tr>
<td>• reflects on and analyses personal learning</td>
<td>• has extensive knowledge of the living world</td>
</tr>
<tr>
<td>• uses metacognitive skills</td>
<td>• can precisely discriminate among objects or phenomena</td>
</tr>
<tr>
<td></td>
<td>• spends time outdoors</td>
</tr>
</tbody>
</table>
The Challenge of Learning Academic Language

Jim Cummins
University of Toronto

What Is Academic Language?
The major challenge for students in the early grades of elementary school is learning how to decode written text. Students acquire decoding skills by means of balanced instruction that develops their awareness of how the sounds of the language map on to written symbols and encourages them to apply these skills in the context of extensive reading and writing. However, the acquisition of fluent decoding skills in the primary grades is only the beginning stage in becoming a strong reader. Students in the junior grades face a new set of challenges. As students progress through the grades, they are required to read increasingly complex texts in the subject areas of the curriculum (science, mathematics, social studies, literature). The complexity of academic language reflects:

- the difficulty of the concepts that students are required to understand;
- the vocabulary load in subject texts that include many low-frequency and technical words that we almost never use in everyday conversation (for example, typical of academic texts are words such as analysis, sequence, fluctuation, criterion that derive from Latin and Greek sources);
- increasingly sophisticated grammatical constructions (such as the passive voice) that again are almost never used in everyday conversational contexts.

Students are not only required to read this language, they must also use it in writing reports, essays, and other forms of academic work.

In short, academic language is the language of school success. We find this language predominantly in books. Therefore, students who read extensively both inside and outside the school have far greater opportunities to acquire academic language than those whose reading is limited.

How Long Does It Take Second-Language Learners to Catch Up Academically?

There are large numbers of second-language learners in urban schools across Ontario. Therefore, any discussion of literacy development must take account of the specific challenges that these students encounter in acquiring the language of school success.

Many research studies conducted in several countries show clearly that second-language learners usually require at least five years to catch up to native speakers in academic language proficiency. By contrast, it takes only about one to two years for students to become reasonably fluent in conversational language. An implication of these time periods is that second-language students will typically require additional support to gain access to the language of the curriculum and to harvest the language of academic texts.
A crucial component of this support is encouraging and enabling students to read extensively. Because academic language is found primarily in written texts and in all curricular areas (novels, textbooks, newspapers, and math problems, for example), support must extend across the curriculum and be provided by all teachers, not just by specialized language teachers.

What Strategies Enable Students to Develop Academic Language?

Increasing the amount of reading and writing that students carry out in school and out of school is obviously a central strategy in helping students develop their knowledge of academic language.

Many schools organize book fairs, author visits, student-generated newsletters, and other activities designed to place reading and writing at the centre of school life. These activities recognize that helping students develop strong literacy skills involves more than just effective instructional techniques. Students’ affective response to reading and writing will determine the extent of their literacy engagement just as much as, if not more than, the instructional techniques that teachers use.

When students see literacy valued by important members of their communities (teachers, peers, parents), their motivation to participate in literacy-related activities increases significantly.

This perspective implies that schools should articulate, implement, and monitor school-based language and literacy policies aimed both at increasing students’ engagement with literacy practices and at deepening their knowledge of academic language. These policies should apply to all grades of elementary school (including Kindergarten) and should explicitly address three areas that are sometimes neglected:

- the involvement of parents in supporting students’ literacy in both the home and the school languages;
- the school’s orientation towards the language and culture of diverse students. Extensive research clearly shows that literacy in two languages is educationally enriching; thus, schools should be proactive in supporting the development of students’ home language and literacy skills;
- the ways in which technology can be harnessed to amplify students’ language exploration and literacy engagement.

It is important to note that school-based language and literacy policy is a process rather than a product. Although at some point a policy may be articulated in a written document, it should be revisited and monitored on a constant basis to ensure that there is regular dialogue among teachers and parent representatives about initiatives, resources, and directions.

Specific strategies that schools in Ontario and elsewhere have adopted to enable culturally and linguistically diverse students to invest their identities in literacy include the following:

- From Kindergarten on, students bring in words to class (in either the home language or English/French) to explore with peers and the teacher. Students discuss why they chose these words and, working in groups, they incorporate them into technology-supported multimedia glossaries (print, image, audio) that reflect their “language detective” work. Students can carry out image searches on the Internet to create picture dictionaries, and they can audio-record definitions of the words in both their home languages and the language of the school.

- Students create dual-language books written in both English/French and the students’ home languages. Students illustrate these books, which can then be scanned into the computer and uploaded onto the school’s website (for an outstanding example, see the website created by Thornwood Elementary School in the Peel District School Board, http://thornwood.peelschools.org/Dual/). These books can be termed identity texts, insofar as students invest their identities in the creation of the texts (written, spoken, visual, musical, dramatic, or combinations in multimodal form) that then hold a mirror up to students in which their identities are reflected back in a positive light. When students share identity texts with multiple audiences (peers, teachers, parents, grandparents, sister classes, and the media, for example) they are likely to receive positive feedback and affirmation of self in interaction with these audiences.

In short, in the junior grades the major challenge for schools is to create a climate in which students’ engagement with literacy shapes their identities as intelligent, imaginative, and talented human beings who have something important to contribute to their schools, their families, and, ultimately, their societies. Under these conditions, students will take ownership of literacy and invest their identities in powerful literacy practices.
INTRODUCTION

The knowledge and skills required for literacy are not isolated elements taught in a lock-step sequence; rather, they are interrelated components that support and build on each other as students explore increasingly complex language and texts in the junior grades.

To develop as literate learners, students need explicit instruction in the individual components of reading, writing, oral communication, and higher-order thinking—and plenty of practice using the components in combination in authentic contexts. Students need to have the knowledge and skills that enable them to make decisions independently, just as proficient communicators do. They need to think like readers, writers, and speakers as they interact with, and create, increasingly complex texts of all types.

Students require explicit instruction in essential skills and strategies. They also need to understand that becoming literate is a lifelong process. The learning never stops, as new forms of communication are developed and language continues to evolve over time. Teachers need to model that they themselves are learners.

This chapter outlines some of the knowledge and skills that junior students need in order to develop literacy. Literacy learning continues throughout school and beyond the school years. It is important to remember that the skills and knowledge taught through the use of specific resources are transferable to other subject areas and aspects of life, and that they are enduring. It is not essential that students learn the parts of a plant. It is essential that they learn how to find the information, how to read a diagram, and how to remember significant information.

The Four Roles of a Literate Learner

Literacy in the twenty-first century involves not a single skill but a complex combination of skills and resources that the literate learner draws upon to make meaning from texts of many types. One approach to understanding this complex process is offered by Peter Freebody and Allan Luke in their “Four Resources Model” (1990, and later works). The four resources are also referred to as “four roles” or “four families of practices”.

To be literate, students must learn (1) to make meaning from texts, (2) to break the “code” of texts, (3) to use texts to acquire knowledge/information and perform tasks, and (4) to analyse and critique texts. One family of practices does not stand alone as more important than the others; students integrate all four simultaneously when they read, write, listen, and speak. Freebody notes that “any program of instruction in literacy, whether it be in kindergarten, in adult [second-language] classes, in university courses, or any points in between, needs to confront these roles systematically, explicitly, and at all developmental points” (Freebody, 1992, p. 58).
It is important for teachers to integrate the four roles in a meaningful way in all subjects across the curriculum. The roles are not intended to be addressed in a linear sequence—for example, by teaching code-breaking skills first and then moving on to meaning making when students have learned the essential code-breaking skills. Students who are struggling with reading or writing may need considerable scaffolded support from the teacher as they work with increasingly complex texts; however, all students can develop as critical and analytical thinkers while they are acquiring their literacy skills.

### The Four Roles of a Literate Learner

<table>
<thead>
<tr>
<th></th>
<th><strong>Meaning Maker</strong></th>
<th><strong>Code User</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(What does this mean?)</strong></td>
<td>The learner:</td>
<td><strong>(How do I crack this?)</strong></td>
</tr>
<tr>
<td></td>
<td>• uses prior knowledge and experience to construct and communicate meaning when reading, viewing, writing, representing, and speaking.</td>
<td>• recognizes and uses the features and structures of written, visual, and spoken texts, including the alphabet, sounds in words, spelling, conventions, sentence structure, text organization, graphics, and other visuals.</td>
</tr>
<tr>
<td></td>
<td>• understands diverse vocabulary.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Text User</strong></th>
<th><strong>Text Analyser</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(What do I do with this, here and now?)</strong></td>
<td>The learner:</td>
<td><strong>(What does this do to me?)</strong></td>
</tr>
<tr>
<td></td>
<td>• understands that the purpose and audience help to determine the way a text is structured, the tone, the degree of formality, and the sequence of components, and uses this knowledge to read, write, and speak.</td>
<td>• understands that texts are not neutral, that they represent particular views and perspectives, that other views and perspectives may be missing, and that the design and messages of texts can be critiqued and revised.</td>
</tr>
</tbody>
</table>

(Based on Freebody and Luke’s “four resources model”, 1990; adapted from *Literacy for Learning*, p. 9)

### The Relationship Among the Reader, the Text, the Teacher, and the Author

As reflected in the accompanying diagram (on page 30), Jim Burke illustrates the idea that meaning is constructed as a result of negotiation among the reader, the text, the author, and, at times, the teacher or a knowledgeable other. That is why two readers looking at the same text can arrive at totally different interpretations, both of which might be equally appropriate. The diagram speaks to the importance of questioning texts, the author, and oneself in order to seek the best possible understanding. No text is entirely neutral, and no reader is without bias. Being critically literate demands an inquiring, open mind. Effective teachers stretch their students’ thinking through intense and deliberate dialogue that questions texts and digs deep for meaning.
The Relationship Among Reader, Text, Teacher, and Author

The Author Asks:
• What is my subject?
• What is my objective?
• Which is the most appropriate form or genre for this text?
• Which is the most appropriate medium for the content?
• How does this text relate to my past work and the tradition within which I am working?
• Who is my audience?
• What assumptions can I make about my intended audience?
• Who (or what) do I want them to be when they enter this text?
• What will the reader/user need to know to read/use this text successfully?
• What is the best way to organize this information?

The Teacher Asks:
• Why did I choose this text?
• What is my objective in teaching it?
• How does it relate to what they read before and will read after?
• Who (or what) do I want them to be when they enter this text?
• What knowledge/skills must I develop in them BEFORE they read/use this text?
• What is my attitude toward this text?
• What is my role/responsibility in this particular interaction (between reader and the text)?
• What is the best way to introduce this text to the reader (in light of my rationale for teaching it)?
• How do I want them to read/use this text in this context?
• What evidence am I willing to accept that they have read and understood it?

The World Asks
• Why are you asking our children to read this particular text?
• How does this text reflect our standards and expectations?
• How does this text help to prepare them for life?
• Is this text consistent with our community’s values?
• What role can we play to help our children read/use this text successfully?

The Reader Asks:
• Who am I as I read this text?
• Why am I reading it?
• What do I need to know and be able to do to read/use this text successfully?
• How does this text relate to what I have read and studied before?
• How will I read this text?
• How does the author (based on the format/design) expect me to read it?
• Why should I trust this author?
• How does this text work?
• What if anything, should I do while I read this text?
• What strategies can I use to read this text successfully?
• What question do I need to be able to answer when I am finished?
• How does this relate to other works by this author?

(Reproduced, with permission, from Illuminating Texts: How to Teach Students to Read the World by Jim Burke [Portsmouth, NH: Heinemann, 2001], p. 88.)
The Interrelationship of the Knowledge and Skills Required for Literacy

The knowledge and skills required for literacy – the focus of this chapter – fall into a number of distinct but interrelated areas. Each of these areas has its own unique set of skills and strategies that help students become proficient communicators. These skills and strategies are related and mutually reinforcing and should be taught in an integrated, connected way so that students clearly understand that what they learn in each aspect of their language program is connected and transferable to all subject areas. For example, the expository text form they learned to write in their writing class will help them to understand both the text they will be exploring in their next reading class and the report they will need to write in their social studies class.

Oral Communication

“Four decades of research has established oral language as the foundation of reading and writing development, especially for intermediate students, who are expanding their use of literacy as a tool for learning.”

(Fountas and Pinnell, 2001, p. 21)

Oral communication skills – both speaking and listening – provide the foundation for literacy. These skills include oral fluency (the smooth flow of speech) and the cognitive and social skills of accountable talk.

Oral Fluency

Students need to develop oral fluency if they are to become proficient speakers and effective readers and writers of increasingly complex texts. Fluency refers to the ability to use language with ease, clarity, and automaticity – without struggling at the level of words and sentences. Fluent language users are able to decode words and sentences quickly and accurately; to read, write, and speak with expression and ease; and to comprehend the meaning in written and spoken language.

Fluency in reading is sometimes considered to be less important than other aspects of the reading process. However, lack of fluency can indicate problems with comprehension. Timothy Rasinski, a noted literacy educator, explains: “If readers read quickly and accurately but with no expression in their voices, if they place equal emphasis on every word and have no sense of phrasing, and if they ignore most punctuation, blowing through periods and other markers that indicate pauses, then it is unlikely that they will fully understand the deeper levels of meaning embedded in the text” (Rasinski, 2004, p. 46).
Fluency also affects the motivation to read and write. Students are less likely to persist in a subject if they lack the technical vocabulary and familiarity with the concepts and content they need to decode texts with relative ease and automaticity. (See the Signature Page, “The Challenge of Learning Academic Language”, by Jim Cummins, pages 24–25 in this volume.)

When faced with texts that are beyond their level of fluency, or subjects beyond their current understanding, students need explicit strategies and scaffolded support that will help them to make meaning. For more on scaffolding, see page 80 in Chapter 3 of this volume, “Principles of Effective Literacy Instruction”.

**Accountable Talk**

The term *accountable talk* refers to talk that is meaningful, respectful, and mutually beneficial to both speaker and listener. When students engage in accountable talk (Allen, 2002), they do the following:

- focus on the topic and purpose of the discussion
- attend to the listener’s needs and what others are saying
- seriously respond to and build on what others have said
- give evidence to support their points of view
- help each other to reach a common understanding, and share responsibility for the learning of the whole group

Accountable talk stimulates higher-order thinking – helping students to learn, reflect on their learning, and communicate their knowledge and understanding. To promote accountable talk, teachers create a collaborative learning environment in which students feel confident in expressing their ideas, opinions, and knowledge. The chart on page 33 describes aspects of accountable talk in the junior classroom.

For more information on accountable talk, see the following:

- the section entitled “The Importance of Talk” in Chapter 3, “Principles of Effective Literacy Instruction” (p. 93 in this volume)
- the following strategies/tools in the appendix to this volume: Book Talks; Carousel; Four Corners; Graffiti; “I” Message; Inside-Outside Circle; Jigsaw; Literature Circles; Place Mat; Questioning the Author; Ranking Ladder; Retell, Relate, Reflect; Say Something; Tea Party; Value Line; Walkabout
Cueing Systems: How Language and Words Work

Researchers have noted that the brain is a pattern seeker. It is this capacity to detect patterns that enables humans to acquire language and to use language to communicate with others.

When students understand some of the predictable patterns in language, they possess powerful tools they can use to expand their vocabularies and develop fluency. As students learn about words and about different text forms and structures, they develop a schema—an understanding of how language and words work. As they meet increasingly complicated texts, they draw upon their schema to help them understand how a new text works and what is expected of them as users of that text.

Effective teachers deliberately teach the writer’s craft to students to make them more aware of the techniques that writers use to communicate with their readers. They also teach text forms and structures to familiarize students with the patterns that writers use to convey meaning and that readers interpret to make meaning.
The patterns in spoken and written language are sometimes referred to collectively as “cueing systems”. They include the following:

- **Semantics**
- **Syntactics**
- **Pragmatics**
- **Graphophonics**

**Semantics (Meaning)**

*Semantics* refers to the *meaning* in language that comes from the reader’s experiential and conceptual background. It is what the reader *brings to* the words, phrases, sentences, signs, and symbols of language, alone and in context, that enables the reader to make meaning from a text. Meaning exists in the mind of the reader rather than on the printed page. In order to develop comprehension and fluency, therefore, junior students must go beyond memorizing a bank of words to develop the habit of using prior knowledge and problem-solving skills to find the meaning of new words.

The word *microscope*, for example, is easier to recall if students know that *-scope* refers to an instrument for viewing and *micro-* is a combining form meaning “very small”. Equipped with this knowledge, students can then tackle words that share the same origins (derivatives), such as those illustrated in the following chart:

**Exploring Word Origins and Derivatives**

Far from being passive consumers of information, proficient language users monitor their understanding of language and actively try to make sense of words. They ask for clarification if they do not understand a new word, and compare new concepts with their existing understanding. For example, when faced with a new word such as *equivalent*, effective readers might notice the *equi-* portion and reason that this word could be related to *equal*. They would then confirm or modify their guess by reading the word in context, asking a peer, checking a dictionary, or using other strategies. When reading a passage, they monitor their comprehension and use appropriate fix-up strategies if the text fails to make sense.
Effective writers monitor their use of language by reading a draft aloud to see if the content conveys the intended message when they hear it in spoken form. Depending on the purpose and audience, the vocabulary and grammar of a written text may need to be more precise than would be necessary in speech, but the written text should still convey the clarity and flow of effective oral language.

**Syntactics (Language structure)**

“Syntax refers to the generally accepted ways words in a language are combined to form phrases, clauses, and sentences. Syntax includes classes of words (such as noun, verb, and adjective) and their functions (such as subject and object)” (*Literacy for Learning*, p. 65).

As they develop greater language awareness, students begin to see patterns at the level of syntax. They realize, for example, that -ed added to the end of a base word usually signals the past tense, as in *jumped*. This is important in spelling, since the sound at the end of *jumped* is /t/, yet the spelling is still -ed. In reading, the -ed ending likewise signals that the action took place in the past.

Students also learn, of course, that there are many exceptions to this rule. Through listening to oral language, they realize that the past tense of *to go* is *went* rather than *goed*. Patterns at the level of syntax become more complex as students progress through the junior grades and include concepts such as possessives and contractions.

**Pragmatics (Context)**

“Pragmatics is the study of how people choose what they say or write from the range of possibilities available in the language, and how listeners or readers are affected by those choices. Pragmatics involves understanding how the context influences the way sentences convey information” (*Literacy for Learning*, p. 65).

Strategic communicators are able to use all aspects of language to make sense of the world, and use language in diverse ways to accomplish specific purposes. They understand the pragmatics involved in engaging an audience; getting to the point; checking for understanding; sustaining interest; and striving for truthfulness, clarity, and comprehension (Bainbridge and Malicky, 2004, p. 46).

Students learn pragmatic skills by watching their teachers model the skills and then by practising and refining the skills in authentic situations, such as debates, brainstorming sessions, critiques of ideas, and focused discussions. For example, a group of students might write a letter to the editor of a local newspaper to express concerns about a nearby park that is littered with garbage – using a text form, conventions, and voice that would suit this formal context. If their intent is to influence their schoolmates to help clean up the park, they might create posters or brief comments for morning
announcements, using a more informal voice and graphical style that would appeal to a younger audience.

Pragmatics also involves understanding subtle, non-verbal nuances of communication. For example, knowledge of how design, light, colour, and sound influence a person can equip students to be more conscious and critical consumers when they view a television program or a product display in a department store. In face-to-face communication, being able to “read” body language, intonation, and pace of delivery can help students to be more sensitive and competent communicators and to “read between the lines” to make meaning in a variety of situations.

**Graphophonics (Sound-symbol relationships)**

Readers use graphophonic cues – along with semantic, syntactic, and pragmatic cues – to determine if a work is logical or makes sense. *Graphophonics* refers to the relationships between the symbols (e.g., letters of the alphabet) and the sounds of a language, as well as visual information on the page (including word patterns and words recognized by sight) that helps readers to decode text.

Literate learners recognize sound-symbol relationships and word families in the texts they see and hear. This knowledge allows them to deal with new words they encounter. For example, if students see the word *guild* in a unit on the Middle Ages, they will be able to read it correctly by relating it to the word *build* that has the same spelling pattern. Likewise, *guild* will be easier to spell if they link it by analogy with *build*.

**Characteristics of Texts**

In addition to recognizing patterns at the level of words and sentences, literate learners look for recognizable patterns in whole texts. These include the following:

**Text features:** features of the design and structure, or orderly presentation, of text

**Text forms:** structures and functions of texts

**Genres:** literary or thematic categories

The chart on page 37 lists some examples of text features, text forms, and genres.

Learning to draw consciously on their understanding of text features, text forms, and genres helps junior students to make meaning from increasingly complex texts in a range of media, including print and electronic texts. This knowledge also helps students to write more effectively, using strategies that match their purpose and intended audience.
Text Features
(Design/presentation)

- Structural elements and navigation aids such as:
  - Table of contents
  - Index
  - Title and topic
  - Headings
  - Preface or Foreword
  - Epilogue
  - Captions
  - Footnotes and endnotes
  - Glossary
  - Bibliography
  - Pull-down menus
  - Hyperlinks

- Typographical or design elements such as:
  - Font or type style
  - Bold and italic print
  - Colour
  - Layout

- Illustrations such as:
  - Inlays and cross-sections
  - Pull quotes
  - Sidebars
  - Photos
  - Graphs and charts
  - Timelines
  - Maps

Text Forms
(Physical forms and functions)

- Narrative (fiction or informational) such as:
  - stories told in poetry, novels, short stories, picture books

- Recount (fiction or informational) first-person accounts such as:
  - diaries, journals, short stories, novels, memoirs

- Procedure such as:
  - recipes, rule books, directions and maps, instruction manuals, “how to” books and posters, experiments

- Exposition such as:
  - essays, position papers, articles, advertisements

- Explanation such as:
  - textbooks in science, social studies, history, geography

- Report such as:
  - magazine and newspaper reports, letters, editorials, critical reviews, essays, posters

- Electronic text such as:
  - multimedia texts, e-mail, blogs, websites, broadcasts

- Functional text such as:
  - lists, memos, notes, pamphlets, brochures, flyers, print advertisements, CD cover inserts, invitations, announcements, programs, business letters, scripts, minutes of a meeting

Genres
(Literary or thematic categories)

- Adventure
- Epic
- Fable
- Fairy tale
- Fantasy
- Folk tale
- Historical fiction
- Horror
- Humour and satire
- Legend
- Mystery
- Myth
- Poetry
- Realistic fiction
- Science fiction
- Autobiography
- Biography
- Memoir
- Diary or journal
- Travel book
- Atlas
- Textbook
- Reference text
Text Features

Text features are physical or design characteristics of a text that clarify and/or give support to the meaning in the text. Examples include the title, headings and subheadings, bold and italic fonts, illustrations, and other elements listed in the “Text Features, Forms, and Genres” chart. Well-designed text features can help readers to navigate the text, find the most important information, and see the connections among related ideas.

Students who pay attention to recurring text features are better able to comprehend, organize, and remember information in the text than those who do not. Writers enhance their ability to convey meaning by using appropriate text features.

Text Forms and Genres

Text forms and genres offer a framework within which readers and writers make or create meaning. The distinctions between the two are not always perfectly clear and straightforward, since some writers blend text forms and genres to suit their particular audience and purpose. This guide makes a distinction between the two terms, and defines them as follows:

Text form can refer to both the function and the structure of a text (for example, a summary, laboratory report, procedure, essay, narrative, or jot notes – in print or electronic form). The content may be fiction or non-fiction.

Genre refers to the theme or literary category of a text (for example, fantasy, science fiction, historical fiction, biography, poetry, satire). The content may be imaginative (e.g., fiction, poetry) or informational.

As the expert panel notes, “There is no single defining list of text forms [or genres] that teachers can memorize and share with their students. The concept of text forms is simply useful as a way for readers and writers to think about the purpose of a text and its intended audience” (Literacy for Learning, p. 82). Students need to be exposed to many and diverse text forms in order to expand their reading “diet”, to explore what good writing looks like, and to draw connections between the reading and writing processes. Knowledge of the characteristics of a wide variety of text forms and genres
leads to greater independence for students, since they will be able to apply their knowledge to unfamiliar texts of all types that they encounter in school and throughout their lives. What is important is that they understand how to determine the characteristics of the texts they meet and how such characteristics convey meaning. In various informational text forms, particular organizational patterns can often be identified. Familiarity with these patterns can help students navigate and make sense of the texts they read and convey meaning more effectively through their writing. The chart on pages 39–40 outlines various organizational patterns, as well as associated signal words used to guide readers and questions readers might ask themselves in order to achieve an accurate and full understanding of the content.

**Organizational Patterns Found in Informational Texts**

<table>
<thead>
<tr>
<th>Organizational Pattern</th>
<th>Questions That Promote Understanding</th>
<th>Signal Words That Guide the Reader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronological</strong></td>
<td>What sequence of events is being described?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What are the major incidents that occur?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How is this pattern revealed in the text?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comparison and contrast</strong></td>
<td>What items are being compared?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What characteristics are being compared?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What characteristics do the items have in common?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In what ways are these items different?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What conclusion does the author reach about the degree of difference and similarity between the items?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How did the author reveal this pattern?</td>
<td></td>
</tr>
<tr>
<td><strong>Concept/definition</strong></td>
<td>What concept is being defined?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What are its attributes or characteristics?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How does it work or what does it do?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What examples are given for each of the attributes or characteristics?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How is this pattern revealed in the text?</td>
<td></td>
</tr>
<tr>
<td><strong>(continued)</strong></td>
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</tr>
</tbody>
</table>

“There continues to be an explosion of genres and blending of genres as new technologies become the norm for communication. We cannot know what genres students will need to know in the future, but we can teach ways of learning genres and help them develop the flexibility with form and habits of inquiry that will allow them to be competent in interacting with many forms of text.”

*(Lattimer, 2003, p. xi)*
### Organizational Patterns Found in Informational Texts – Continued

<table>
<thead>
<tr>
<th>Organizational Pattern</th>
<th>Questions That Promote Understanding</th>
<th>Signal Words That Guide the Reader</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>What is being described?</td>
<td>above, across, along, appears to be, as in, behind, below, beside, between, down, in back of, in front of, looks like, near, on top of, onto, outside, over, such as, to the right/left, under</td>
</tr>
<tr>
<td>• describes characteristics</td>
<td>What are its most important attributes or characteristics?</td>
<td></td>
</tr>
<tr>
<td>of specific persons, places,</td>
<td>Would the description change if the order of the attributes were changed?</td>
<td></td>
</tr>
<tr>
<td>things, events</td>
<td>Why is the description important?</td>
<td></td>
</tr>
<tr>
<td><strong>Episode</strong></td>
<td>What event is being explained or described?</td>
<td>a few days/months later, around this time, as a result of, as it is often called, because of, began when, consequently, first, for this reason, lasted for, led to, shortly thereafter, since then, subsequently, this led to, when</td>
</tr>
<tr>
<td>• organizes a large body of</td>
<td>What is the setting where the event occurs?</td>
<td></td>
</tr>
<tr>
<td>information about specific</td>
<td>Who are the major figures or characters that play a part in the event?</td>
<td></td>
</tr>
<tr>
<td>events</td>
<td>What are the specific incidents or events that occur? In what order do they happen?</td>
<td></td>
</tr>
<tr>
<td>• identifies time, place,</td>
<td>What caused this event?</td>
<td></td>
</tr>
<tr>
<td>specific people, specific</td>
<td>What effects has this event had on the people involved?</td>
<td></td>
</tr>
<tr>
<td>duration, specific sequence</td>
<td>What effects has this event had on society in general?</td>
<td></td>
</tr>
<tr>
<td>of incidents, and causes and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Generalization/principle</strong></td>
<td>What generalization is the author making or what principle is being explained?</td>
<td>additionally, always, because of, clearly, conclusively, first, for example, for instance, furthermore, generally, however, if … then, in fact, it could be argued that, moreover, most convincing, never, not only … but also, often, second, therefore, third, truly, typically</td>
</tr>
<tr>
<td>• organizes information into</td>
<td>What facts, examples, statistics, and expert opinions are given that support the generalization or</td>
<td></td>
</tr>
<tr>
<td>general statements with</td>
<td>explain the principle?</td>
<td></td>
</tr>
<tr>
<td>supporting examples</td>
<td>Do these details appear in a logical order?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are enough facts, examples, statistics, and expert opinions included to support or explain the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>generalization/principle?</td>
<td></td>
</tr>
<tr>
<td><strong>Process/cause and effect</strong></td>
<td>What process or subject is being explained?</td>
<td>accordingly, as a result of, because, begins with, consequently, effect of, finally, first, for this reason, how, if … then, in order to, is caused by, leads/led to, may be due to, next,</td>
</tr>
<tr>
<td>• organizes information into</td>
<td>What are the specific steps in the process, or what specific causal events occur?</td>
<td></td>
</tr>
<tr>
<td>a series of steps leading to</td>
<td>What is the product or end result of the process, or what is the outcome of the causal events?</td>
<td></td>
</tr>
<tr>
<td>a specific product or outcome</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE READING PROCESS

“Reading in the junior grades is an interactive, problem-solving process, with the primary purpose of making meaning” (Literacy for Learning, p. 61). The process is not linear; it often requires the reader to go back and rethink, or to shift focus to a different strategy or step. The following chart shows some of the steps and strategies that proficient readers use before, during, and after reading.

The Reading Process

<table>
<thead>
<tr>
<th>Before Reading</th>
<th>During Reading</th>
<th>During and After Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Determine a purpose for reading.</td>
<td>• Use strategies to make meaning, such as:</td>
<td>• Assess, critique, and reflect on the text.</td>
</tr>
<tr>
<td>• Decide on an appropriate reader’s stance (for example, reading for pleasure or for information).</td>
<td>– making connections</td>
<td></td>
</tr>
<tr>
<td>• Select an appropriate text.</td>
<td>– determining important information</td>
<td></td>
</tr>
<tr>
<td>• Preview the text (for example, by scanning the cover, title, organization, layout).</td>
<td>– questioning</td>
<td></td>
</tr>
<tr>
<td>• Activate prior knowledge (for example, by recalling what you know about the text form, author, topic, similar texts).</td>
<td>– visualizing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– summarizing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– inferring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– predicting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– synthesizing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– evaluating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– monitoring and repairing understanding</td>
<td></td>
</tr>
</tbody>
</table>

**Before reading, I ask myself:**

What do I already know?
What would I like to know?
What do I need to know?
I wonder if…?
What is my purpose for reading?
What do I need from this text?
What does this text require of me?
What strategies will I use to help me remember or keep track of my thinking?

**During reading, I think to myself:**

Does this make sense?
Hmm, I wonder…?
That reminds me of …
I think … because …
I still need answers to the question …
What is this author’s intent?
Why am I feeling this way?
Does this information align with what I already know?

**During and after reading, I ask myself:**

Why did the author write this?
Whose voice is represented?
Whose voice is missing?
What do I know now that I didn’t know before I read this?
If I had to tell someone about what I just read, what would I say?
How will I remember this information?
What will I do with this information?
Do I need to seek another perspective?
“Writing, in the junior grades, provides students with powerful opportunities to learn about themselves and their connections to the world. Through writing, students organize their thoughts, remember important information, solve problems, reflect on a widening range of perspectives, and learn how to communicate effectively for specific purposes and audiences” (Literacy for Learning, p. 79).

Proficient writers know how to approach the writing task in manageable steps. They understand that the writing process is similar to the reading process in that it is “recursive”, meaning that the results of one step may require them to go back and repeat steps in order to refine their thinking and improve the final product. Revision, for example, may occur throughout the entire writing process, as writers rethink and revisit their work. Conferencing may also occur at various stages of the writing process, as writers collaborate with their peers and build on the rich ideas that are generated during the dialogue.

The following chart shows the steps in the recursive writing process. It is important to stress that writing is not a linear process. Revision, for example, occurs throughout the entire process.
The Writing Process

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**Strategies to Make Meaning in Reading and Writing**

The essential purpose of both reading and writing is to make meaning. Effective readers and writers use a range of strategies in a variety of combinations when interacting with text (Keene and Zimmerman, 1997).

Proficient readers and writers know how to select appropriate strategies and use them in combination to serve their particular purpose. They are able to think independently, and they use critical-literacy skills to recognize when they are being manipulated in a variety of media, to determine an author's intent, and to identify the techniques the author uses to achieve his or her purpose. Students need to learn to use a variety of strategies to support and enhance their critical literacy. These strategies (which are discussed below in more detail) include the following:

1. Determining the purpose and audience for writing
2. Determining a purpose and an appropriate stance for reading
3. Activating prior knowledge and schema for reading and writing
4. Generating ideas for writing
5. Making connections
6. Determining important information
7. Determining the key message when writing
8. Determining which writer's-craft techniques to apply
9. Establishing and identifying tone and voice when writing and reading
10. Questioning
11. Visualizing
12. Summarizing
13. Inferring
14. Predicting
15. Synthesizing
16. Evaluating
17. Monitoring and repairing understanding

Teachers must introduce these strategies one at a time by modelling the strategy and then providing students with ample time to practise. Teachers must also read students' written responses and discuss with them whether and how they have used strategies, to ensure that the use of strategies becomes integral to students' reading and writing processes.
Although students learn about the strategies one at a time, it is important for them to realize that these strategies are not meant to be used in isolation. “When students have a variety of strategies from which to choose, they have a better chance of comprehending challenging text on their own” (Tovani, 2000, p. 107).

Proficient language users realize that certain strategies will be more helpful than others for specific tasks, and that different texts and situations require different combinations of strategies. On the one hand, they may read a novel carefully, enjoying each detail of plot and setting. On the other hand, they may skim and scan electronic text quickly while browsing the Internet for a research project; when they find a website that contains pertinent information, they will extract only the details that are appropriate to their inquiry.

A discussion of the individual strategies follows.

1. **Determining the Purpose and Audience for Writing**

Proficient writers understand that selecting a text form for writing is determined by the writer’s intent and the audience for whom the piece is written. The details, the vocabulary, and the format of the writing change depending on who the reader might be and what the author is trying to accomplish.

In a junior classroom, instruction in determining a purpose and audience for writing might involve having students:

• select appropriate resources to conduct a personal inquiry;

• engage in authentic writing, selecting an appropriate text form to achieve their purpose and adapting the style to suit their intended audience.

2. **Determining a Purpose and an Appropriate Stance for Reading**

Proficient readers decide on their purpose for reading and select a text that serves that purpose. They also approach the reading differently, depending on their purpose for reading. If they are doing research, they will assume a serious stance, select a resource that contains the information they need, and use appropriate tools (highlighter, stickies) as they skim and scan the resource, looking for significant facts.

If the reader is reading for pleasure, the stance is different. Readers are more relaxed and observant of the aesthetic value of what they are reading. Speed is not usually an issue, nor is remembering specific facts. The reader may wish to mark especially well-written or moving passages to share with peers at a later time.

In a junior classroom, instruction in determining a purpose and an appropriate stance for reading might involve having students:

• apply critical-literacy skills as they respond to a particular text;

• make intertextual connections, identifying purpose, audience, and style of the texts.

“Explicit instruction in reading strategies – showing our thinking and the mental processes we go through when we read – gives students an idea of what thoughtful readers do. We explicitly teach reading comprehension strategies by demonstrating them for students before turning the task over to them.”

(Harvey and Goudvis, 2000, p. 30)
3. Activating Prior Knowledge and Schema for Reading and Writing

Prior knowledge and schema refer to the knowledge and experiences that readers and writers bring to a text and draw on continually to construct meaning. Their previously acquired understanding of how various text forms work, of how words are constructed to change or alter their meaning, and of how phrases and sentences can be constructed for maximum effect helps students interpret texts and use language to communicate effectively.

Providing students with rich and frequent opportunities to activate their prior knowledge – before and during reading and writing – deepens their comprehension and their ability to construct new meaning. “The more we front-load students’ knowledge of a text and help them become actively involved in constructing meaning prior to reading, the more engaged they are likely to be as they read the text” (Beers, 2003, p. 101).

In a junior classroom, instruction relating to activating prior knowledge might involve the following:

- Teachers encourage students to make connections to mentor texts (exemplary texts that they have previously experienced) and support their efforts to do so.
- Teachers model the process of activating prior knowledge by thinking aloud before reading or writing, during which time they may highlight aspects of the text that connect to other texts students have experienced.
- Teachers determine the amount of prior knowledge students need to proceed with a reading or writing task, and provide knowledge-building opportunities to expand the students’ knowledge base (for example, teachers may pre-teach complex vocabulary before students begin reading a piece of writing that has difficult words).
- Teachers may engage students in Quick Writes to activate their prior knowledge (see “Quick Writes” in the appendix.).

4. Generating Ideas for Writing

Proficient writers draw on their prior knowledge and experiences. They are observant and collect ideas for future reference.

A writers’ notebook is an excellent way to keep such ideas together in one place that allows for revisiting and reflection. Other strategies for generating ideas for writing may include brainstorming, conferencing, sketching, quick writing, or story mapping. Once many ideas are generated, writers may select one topic with which to experiment.

“Researchers have shown that plunging students into a book or a study without activating, assessing or enlarging their prior knowledge causes students to have difficulty reading the materials, which results in diminished learning.”

(Robb, 2000, p. 117)
5. **MAKING CONNECTIONS**

Making connections is an intricate, ongoing process of interacting with the text. It involves making connections within the text to related ideas, and beyond the text to prior knowledge and other sources of information.

There are three types of connections that readers and writers make: text-to-text, text-to-self, and text-to-world (Keene and Zimmerman, 1997; Harvey and Goudvis, 2000). These connections help readers to relate to characters, visualize, avoid boredom, listen to others, read actively, remember what they read, and ask questions (Tovani, 2000). They help writers to make sense of their own ideas and to communicate those ideas in a way that makes sense to their audience.

The following examples illustrate how making connections might be taught in a junior classroom:

- Teachers model how to mark the text while reading. Marking the text forces readers to make connections with the reading. Students might use highlighters, sticky notes, highlighting tape, jot-note strips, bookmarks, or other tools to mark the text (see “Coding the Text” and “Highlighting the Text” in the appendix).
- Teachers show their students how to use mentor texts. These are well-written texts, previously read by the students, that they can refer to when they need to recall a literary device or text feature or remember how to apply a writing strategy.
- Teachers think aloud to model how to connect ideas between texts, using a variety of picture books, poems, and fiction and non-fiction reading materials on a related subject. For example, they might say: *That reminds me of…* or *Remember when…?*

6. **DETERMINING IMPORTANT INFORMATION**

Determining important information is all about understanding the purpose of the text and distinguishing between interesting and essential information. Non-fiction text, such as a history textbook or an Internet home page, can provide a good starting point for teaching how to select important information. Junior readers need to be explicitly taught about the text features and signal words that indicate important information to follow. Strategies that will help students learn to process and manage large amounts of text in a variety of formats include:

- skimming and scanning;
- examining text features, such as paragraphs, headings, subheadings, and italics, and recognizing signal words such as “in other words” and “for example”, to locate important details;
- reading and creating maps, graphs, and charts that highlight important ideas;
- using organizational frameworks to convey information, such as cause and effect, comparison, sequencing, problem/solutions, and similarities/differences.
Some of the text features that students can learn to look for and draw upon to find important information include the following:

- a biographical note about the author
- footnotes
- diagrams
- focusing questions
- definitions
- sidebars
- interesting facts or features
- graphs
- illustrations and/or captions
- bolded terminology
- text boxes
- marginal notes

In a junior classroom, instruction in determining important information might involve the following:

- Teachers provide explicit instruction by modelling the strategies of overviewing and highlighting (Harvey, 1998). Overviewing is a way to skim and scan non-fiction text before reading. Students scan the text and highlight important points or key words. “The ability to overview eliminates the need for kids to read everything when searching for specific information. Overviewing represents an early entry in the effort to determine importance” (Harvey and Goudvis, 2000, p. 119).

- Teachers and students create non-fiction “convention posters” – that is, posters that explain a convention (e.g., the semi-colon: What is it? Why is it important? How is it used?) – using text features such as special fonts, cue words, and graphics to highlight important information.

- Teachers and students engage in class discussions about a shared text, circling key words, underlining, and writing in the margins of the page (Harvey and Goudvis, 2000, p. 132).

- Teachers think aloud as they read or write a text, saying things like, *This is really important …* and *So far, I have learned that …*

- Students engage in a Place Mat exercise, first thinking individually about a topic they have researched, and then reaching consensus within their small group about the most significant information to put in the centre of the group’s place mat (see “Place Mat” in the appendix).

- In a brainstorming exercise, students write ideas on sticky notes (placing one point on each sticky note), and then categorize the ideas by putting the notes into piles with similar ideas. This eliminates duplication and also helps the students to see which ideas occurred most frequently, suggesting that these might be particularly important considerations (see “Brainstorming” in the appendix).
7. Determining the Key Message When Writing

Effective writers check for clarity during the writing process, always referring back to their purpose for writing. They ask themselves some of the following questions:

- Is this piece of writing clearly conveying my message?
- Have I used the most effective vocabulary?
- Does my message come through early in my writing?
- Will my readers be able to articulate the key message?

8. Determining Which Writer’s-Craft Techniques to Apply

Considering the audience and purpose as well as the text form helps writers to determine what literary techniques and structures might be most appropriate. Effective writers understand that strong verbs and nouns enhance writing, as do literary techniques such as the use of metaphor, simile, and analogy. Experimenting with a variety of sentence and text structures, conferencing, and reading aloud for feedback enable writers to revise their work until they are happy with the sound and impact of their writing.

9. Establishing and Identifying Tone and Voice When Writing and Reading

Writers must take care that the tone of their writing is appropriate to the purpose, the audience, and the genre within which they are writing. Writers also need to be aware of how their own voice is developing and being reflected in their writing. Is their voice coming across the way they intend it to be heard? Readers must be able to detect bias and recognize the author’s intent, tone, and voice. Critical-literacy skills can help writers to develop the necessary awareness of their own voice and can help readers to avoid being unduly influenced by what they read.

10. Questioning

Literate learners pose questions before, during, and after reading and writing. As they consider these questions, they continually sift and sort their ideas and monitor their understanding in order to construct a deeper meaning from the text. Questioning helps make the thinking process explicit. It can also clarify the purposes for reading and writing, and can strengthen students’ involvement in the text as they keep reading and writing to “satisfy their wondering” (Robb, 2000, p. 15).

In the junior grades, as students begin to develop their critical-literacy skills, they are able to ask more complex questions that dig deeper for meaning. They learn the difference between “thick” and “thin” questions and answers – that is, between answers that are found in the text and those that are found “between the lines” or beyond the text. “Thin” questions are easily answered by referring to what is written in the text. They require no deep understanding. “Thick” questions require the reader to think beyond
what is obvious in the text. They are usually open ended and may have more than one answer, or no clear answer at all. Such “thick” questions might include the following:

- What is this author’s intent?
- Whose point of view is represented?
- Whose voice is missing?
- What am I feeling and why?
- What does this writing mean to me?
- Do I need to seek another perspective?
- What can I do to make things better?
- Is this information accurate?
- Does this presentation align with what I know or what I have read in other sources?

Questioning is central to metacognitive thinking and critical literacy, and additional questions similar to those listed here are suggested in the sections that focus on those skills (see pages 62 and 64).

The following are examples of how questioning might be taught in a junior classroom:

- Teachers model the questioning process before, during, and after reading, using a variety of fiction and non-fiction texts. (For sample questions, see “The Reading Process”, on page 41.)
- Teachers model the questioning process during shared writing. (For sample questions, see “The Writing Process”, on pages 42–43.)
- Teachers provide explicit instruction in the Question-Answer Relationship (QAR) strategy (Raphael, 1982; 1986). (See “Question-Answer Relationship” in the appendix.)
- Teachers and students develop effective questions – differentiating between literal, inferential, and evaluative questions.
- Teachers model the importance of questioning to clarify and/or monitor understanding, using statements such as I wonder …? How come …? Why …? I’m confused.

11. **Visualizing**

Visualizing is the ability to create mental images in order to see the action of the text. Readers visualize as they read, and create pictures in their mind based on the author’s writing. Writers create passages that evoke, for the reader, images that enhance and clarify the message or the information the writer is communicating.
The term visualizing also refers to other senses such as touch, hearing, and smell. It is not enough simply to suggest to students that they form visual images as they read or write. “It is ... important to explicitly identify the use of visual strategies to create mental imagery as an essential part of reading. It helps readers to experience stories and other textual information and think about the content of the text” (Wilhelm, 2004, p. 57).

In a junior classroom, teaching visualizing might involve the following:

- Teachers provide students with engaging texts (fiction and non-fiction) that inspire students to create pictures in their minds.
- Teachers read aloud to students while thinking aloud about the mental images that the text creates in their own minds. Their comments might include: I get a picture in my mind of ...; I can see ...; The movie in my head shows ...; I visualize ... 
- Students listen to a piece of music or a passage from a text and then describe or illustrate their visualizations.
- Students use a two-column note format to record their responses to a text, using headings such as the following:
  - “Quotation/passage from text” versus “Mental image”
  - “What is the text about?” versus “What I see”
  - “Words on the page” versus “My mental map of what happened”
- The teacher models how to create a piece of writing that stimulates the reader to visualize.

12. SUMMARIZING

“In summarizing a text, students are asked to apply a number of thinking processes in order to combine meanings, delete less important details, and condense the key messages to arrive at the essence of meaning. Junior students need a great deal of practice with the help of teacher modelling and guidance before they are able to apply these processes independently. Oral and visual summaries, concept maps, and frequent discussions with the teacher and other students enable junior learners to develop the skills and processes they need to summarize meaning in their reading” (Literacy for Learning, p. 70).

In writing, the ability to summarize can help students to clarify their own understanding and intent, and ensure that their message is clear and consistent.

Students might follow these steps to summarize a text passage:

1. Read for meaning.
2. Divide the reading into small parts.
3. Delete unimportant information.
4. Think of a word to describe each chunk.
5. Connect the words into a summary statement.
Following are some other examples of how summarizing might be taught in a junior classroom:

- Students record jot notes during an inquiry exercise and then synthesize these into a paragraph (see “Jot Notes” in the appendix).
- Students and the teacher create a mind map summarizing what they know about a topic (see “Mapping” in the appendix).
- Guided by the teacher, students use a KWL chart (Know, Want to Know, Learned) to organize their thinking about a new topic before and during a lesson, and to summarize their learning after the lesson (see “KWL” in the appendix).

13. INFERRING

Inferring is the ability to go beyond the literal text and read between the lines, to “determine a character’s motivation and personality, to discover themes, and to identify main points in informational text” (Robb, 2000, p. 15). Beers (2003) states that the reader infers what the author implies and that the reader uses the implied information from the author, along with his or her internal text (all the reader’s background knowledge and text experiences), to make an educated guess. The ability to draw inferences is essential for critical literacy, described later in this chapter.

Proficient readers actively draw on prior knowledge, make connections, and ask questions while creating an inference. “Because each person’s experiences are different, the art of inferring takes the reader beyond the text to a place only he or she can go” (Keene and Zimmerman, 1997, p. 148). Picture books provide a context for explicitly teaching students how to draw inferences because the text and illustrations combine to provide clues for the reader.

The following examples illustrate how inferring might be taught in a junior classroom:

- Teachers model how to identify the difference between “prediction” and “inference”.
- Teachers and students discuss what the main ideas might be in the text as they actively explore the plot and theme.
- Teachers model how to create notes about the text, using two columns headed “Facts” and “Inference”.
- Teachers highlight specific passages where the author makes an implication that leads to an inference.
- Teachers show students how to code the text as they read, using codes such as: “I” for inference; “P” for prediction; “+” for an inference or prediction confirmed by the text; and “–” for an inference or prediction that is contradicted by the text (see “Coding the Text” in the appendix).
- Students use a graphic organizer such as “Somebody Wanted … But … So” to organize their thinking and draw inferences as they read (see “Somebody Wanted … But … So” in the appendix).
14. PREDICTING

“Through prediction, students bring their personal experiences, prior knowledge, and worldview to the text, both before and during reading. They may begin by considering the title, cover, key words, and a partial reading of the whole text, and then use reasoning and inquiry to predict what will come next. Prediction enables students to set and revise their assumptions about the text as they actively look for what they think will happen or, if their predictions are wrong, as they are surprised by new ideas or information that engage their interest and cause them to reconsider. Prediction involves students in combining details and impressions, making inferences, and coordinating information and ideas drawn from the text and from the way in which the text is presented” (Literacy for Learning, p. 69).

The following examples show what instruction in predicting might look like in a junior classroom:

- Students complete an anticipation guide or other graphic organizer before reading, and then check their accuracy after reading (see “Anticipation Guides” and “Think, Predict, Read, Connect” in the appendix).
- Students predict what will happen next as they read.
- Teachers model predicting during a read-aloud.

15. SYNTHESIZING

Synthesizing is a higher-order thinking skill that involves bringing together and sorting through an accumulation of information and ideas about a text to arrive at an understanding of it. The understandings that emerge are new. When readers are actively synthesizing, they address questions such as the following:

- What does the information in the text mean to me?
- What information is useful to me, and how does it fit with what I already know?
- What am I taking away with me?

The following examples show how synthesizing might be taught in a junior classroom:

- Teachers tell a brief story and model a basic framework to help students begin to synthesize the information.
- Teachers guide their students in integrating new knowledge with prior knowledge in order to deepen their understanding of an idea, concept, or topic.
- Teachers model their own synthesizing process by thinking aloud, with statements such as I have learned … and Now I understand …
- Teachers model how to code the text as they read, using codes such as “SZ” for information that needs to be synthesized, or a light bulb to show where a new idea surfaces or where confusion is clarified (see “Coding the Text” in the appendix).
• Students use a Venn diagram to sort and synthesize ideas before writing (see “Mapping” in the appendix).

• Students discuss how their thinking evolves as they summarize a piece of text and respond personally to it.

• Students use a two-column note format to compare ideas or record their responses to a text, with headings such as the following:
  – “Direct quotation” versus “Personal response”
  – “Content” versus “Process”
  – “Facts from the text” versus “Responses”

Synthesizing is also discussed later in this chapter, under “Higher-Order Thinking”.

16. EVALUATING

Evaluating is both a higher-order thinking skill and a strategy for making meaning. To evaluate is to assess something and then make a judgement about it (or assign a value to it) based on specific standards or criteria. Readers and writers need to be able to evaluate texts of all types in order to determine the suitability of the text for the intended purpose, to discern the reliability of the information, to uncover bias, and to be open to new thinking and points of view. The ability to evaluate is essential for critical literacy (described later in this chapter).

Following are some activities that provide opportunities for students to assess, critique, reflect on, and evaluate ideas and texts in the junior classroom (for details, see these items in the appendix):

• Four Corners
• Questioning the Author
• Ranking Ladder
• Value Line

For more information about evaluating, see “Higher-Order Thinking”, later in this chapter.

17. MONITORING AND REPAIRING UNDERSTANDING

Strategic communicators actively monitor their understanding and use “fix-up” strategies when their understanding breaks down. Fix-up strategies help readers to repair comprehension, and help writers to rethink and revise their text. These strategies include the following (Tovani, 2000; Keene and Zimmerman, 1997; Harvey and Goudvis, 2000):

• rereading or reading ahead
• checking the meaning of key words
• visualizing (see strategy 11 in this section)
• stopping and thinking about what you have written or already read
• adjusting the pace – slowing down or speeding up – as appropriate
• noticing patterns in the text
• retelling what you’ve read or written
• checking your understanding or use of print conventions, such as headings, sidebars, and bolded text

The following examples illustrate what instruction in monitoring and repairing understanding might involve in a junior classroom:

• Teachers use think-aloud to model a variety of “fix-up” strategies, using statements such as Does this make sense? Does that look right? Does that sound right?
• Teachers model “click” or “clunk” as a way to self-monitor comprehension in a non-fiction text. As they read through a passage, they constantly ask themselves if the text makes sense. If it does not make sense, that’s a “clunk”, and they need to activate their fix-up strategies.
• Students and teachers engage in dialogue about the text during the reading or writing process – before, during, and after reading or writing.

**Higher-Order Thinking**

Students need to develop the habits of mind that will equip them to be successful in the rapidly changing information age in which they live. They will need to think flexibly, creatively, and independently as they solve problems related to increasingly complex and unfamiliar scenarios. They will also need to develop a sense of responsibility, justice, and fairness, as well as curiosity about their world. Teachers need to teach students how to think about familiar topics in new ways, how to apply what they know to new situations, and how to be persistent even if the task is difficult.

Higher-order thinking skills play a large role in helping students mature as learners and communicators. All strategies for making meaning require some form of higher-order thinking. By using a range of thinking skills, students are able to draw more meaning from texts and apply their learning in more sophisticated ways. That is why a key goal of the junior literacy program is to expand thinking skills, including metacognitive and critical-literacy skills (see the Introduction in this volume).
**Taxonomies of Higher-Order Thinking Skills**

Several taxonomies (ways of classifying ideas and information) have been developed to describe higher-order thinking. In 1956, Bloom and Kathwold developed a taxonomy that divided thinking skills into six levels.

That original taxonomy was revised in 2001, in a text entitled *A Taxonomy for Learning, Teaching, and Assessing*, edited by Anderson and Krathwohl. The revised taxonomy involves two dimensions – the Knowledge Dimension and the Cognitive Process Dimension. The Knowledge Dimension consists of four kinds of knowledge: factual, conceptual, procedural, and metacognitive. The Cognitive Process Dimension comprises six categories, as illustrated in the following chart.

### A Taxonomy to Promote Higher-Order Thinking

<table>
<thead>
<tr>
<th>Learning level</th>
<th>Definition</th>
<th>What the student will do</th>
<th>Associated processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CREATE</td>
<td>Combine elements to form a coherent or functional whole; reorganize elements into a new pattern or structure</td>
<td>Develop an alternative hypothesis; devise a procedure to accomplish a task; invent a product</td>
<td>Generating, planning, producing</td>
</tr>
<tr>
<td>EVALUATE</td>
<td>Judge the value of ideas, materials, or products</td>
<td>Detect inconsistencies within a process or product; judge the appropriateness of procedures and ideas to solve particular problems</td>
<td>Checking, critiquing</td>
</tr>
<tr>
<td>ANALYSE</td>
<td>Break down an idea into its constituent parts and determine how the parts are related to one another and to an overall structure</td>
<td>Differentiate between important and unimportant parts of presented material; determine how parts fit together; deconstruct presented materials to determine point of view and underlying intent</td>
<td>Differentiating, organizing, attributing</td>
</tr>
<tr>
<td>APPLY</td>
<td>Carry out a procedure to perform exercises or to solve problems</td>
<td>Apply previously learned information to familiar and unfamiliar tasks</td>
<td>Executing, implementing</td>
</tr>
<tr>
<td>UNDERSTAND</td>
<td>Construct meaning from instructional messages, including oral, written, and graphic communication</td>
<td>Change form of representation; find specific examples; categorize; summarize; draw logical conclusions; compare ideas; explain</td>
<td>Interpreting, exemplifying, classifying, summarizing, inferring, comparing, explaining</td>
</tr>
<tr>
<td>REMEMBER</td>
<td>Retrieve relevant knowledge from long-term memory</td>
<td>Recognize and recall information from long-term memory</td>
<td>Recognizing, recalling</td>
</tr>
</tbody>
</table>

(Adapted from *Literacy for Learning*, p. 33)
Anderson and Krathwohl point out that “most authentic academic tasks require the coordinated use of several cognitive processes as well as several types of knowledge” (p. 89). An example of a process that cuts across many of the categories in the knowledge and cognitive process domains is critical thinking. To think critically about an issue involves both conceptual knowledge and the analysis and evaluation of different perspectives on the issue.

Teachers challenge students in the junior grades to engage in higher-order thinking at various levels as they perform tasks and activities involving reading, writing, viewing, representing, speaking, and listening. The following chart indicates the categories of knowledge and cognitive processes involved in the performance of various tasks.

### Application of the Revised Taxonomy

<table>
<thead>
<tr>
<th>Task</th>
<th>Knowledge Dimension/Cognitive Process Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write a persuasive essay stating your opinion on …</td>
<td>Factual and procedural knowledge/Create</td>
</tr>
<tr>
<td>Describe the techniques that producers of commercials use to entice you to purchase their products.</td>
<td>Conceptual knowledge/Remember and understand</td>
</tr>
<tr>
<td>Explain what you learned about yourself as a writer after completing your report on …</td>
<td>Metacognitive knowledge/Analyze</td>
</tr>
<tr>
<td>Classify these rocks according to the following criteria …</td>
<td>Factual knowledge/Evaluate</td>
</tr>
<tr>
<td>Examine examples of mysteries and non-mysteries, then list the characteristics that describe most mysteries.</td>
<td>Conceptual knowledge/Understand</td>
</tr>
<tr>
<td>Design a brochure urging people to vote.</td>
<td>Procedural and conceptual knowledge/Create</td>
</tr>
</tbody>
</table>

### Thinking Skills

Well-founded and widely accepted research (e.g., Langrehr, 1988, pp. v–vi) suggests that students need to develop the following skills in order to become proficient communicators.

**Focusing** involves directing one’s attention to selected information. This can include:

- defining a problem;
- setting a goal to establish direction and purpose;
- articulating a vision;
- clarifying the task;
- identifying the question.
Information gathering involves acquiring relevant information and data. This can include:

• accessing prior knowledge;
• observing and obtaining information through the senses;
• questioning to obtain new information;
• identifying and acknowledging sources.

Remembering involves storing and/or retrieving information. This can include:

• encoding – storing information in long-term memory;
• recalling – retrieving information from long-term memory.

Organizing involves arranging relevant information, data, ideas, and evidence so they can be used more effectively. This can include:

• comparing to note similarities and differences;
• classifying to place information in groups by common attributes;
• ordering or sequencing entities according to a given criterion.

Analysing involves clarifying existing information such as data, ideas, or styles. This can include:

• identifying and distinguishing among attributes and components by determining characteristics or parts of something;
• identifying relationships and patterns by recognizing ways elements are related;
• detecting and understanding point of view, bias, inclusiveness, and perspective.

Generating involves using prior knowledge to add new information. This can include:

• inferring – reasoning beyond available information to fill in gaps and thinking carefully about conclusions drawn from statements read or heard;
• predicting – anticipating or forecasting future events;
• elaborating – using prior knowledge to add meaning to new information and to link it to existing structures;
• representing – adding new meaning by changing the form of information.

Integrating involves connecting and combining information. This can include:

• summarizing – abstracting information efficiently;
• restructuring – changing existing knowledge structures to incorporate new information.
Synthesizing involves integrating, connecting, and combining information. This can include:

- listing the main/key points;
- describing connections;
- making a generalization from specific information.

Concluding involves coming to a conclusion after processing the information. This can include:

- stating an opinion;
- selecting the best option;
- solving a problem;
- outlining a plan;
- articulating a decision.

Evaluating involves assessing the reasonableness and quality of a conclusion based on established criteria. This can include:

- establishing criteria for judging;
- verifying information – confirming the accuracy of claims;
- identifying errors;
- determining the validity, appropriateness, relevance, and/or impact of the conclusion;
- reflecting on the process of arriving at the conclusion;
- testing the hypothesis.

Learning these thinking skills will improve the kinds of questions that both teachers and students ask themselves and each other about the content they are studying. The skills need to be explicitly taught, practised, and applied in every subject area and throughout each grade. They are lifelong skills that will continue to develop and evolve as students use them. Cross-curricular examples include:

- Science – Students will: generalize and apply knowledge about the characteristics of rock specimens (Grade 4);
- Social Studies – Students will: point out the inferences and assumptions made regarding First Nations Peoples (Grade 6);
- Health – Students will: critically analyse the hidden messages about body image found in advertisements (Grades 5 and 6).
Metacognitive Skills

Metacognition is the process of thinking about one’s own thought processes. It is especially important in the junior grades as readers begin to deal with more complex texts and try to make sense of various written forms and genres in all subjects. According to Frank Serafini (2001, p. 130), research shows that “students who are more metacognitive about their reading processes ... are more successful readers”. Other educators support this view: “Good readers use metacognition to self-monitor their reading. Metacognition enables good readers to identify what they understand and what confuses them” (Robb, 2000, p. 135). Keene and Zimmerman (1997) firmly believe that metacognition is the foundation on which all reading comprehension strategies are built, and that each strategy is a variation of metacognition.

Readers who engage in metacognition are aware of their own thinking processes and can adapt strategies to help them comprehend text. For example, when reading a confusing article, a strategic reader will go back and reread the section that is confusing and use appropriate strategies to clarify thinking. In this case, the reader may try to make meaning of the text by connecting the article to his or her own life, or by formulating questions to make sense of the text.

Just as proficient readers need to use metacognition when reading, so writers need to use metacognition when writing. Proficient writers are always thinking about their choice of words, literary techniques, audience, and purpose to determine whether their ideas are being communicated clearly. As they question and evaluate their writing, they apply the same strategies they use in reading. In other words, they read like a writer and write for their readers.

As individuals become more skilled in using metacognition, they gain greater insight into themselves as learners. They begin to understand what helps them to make meaning, and they become more adept at making appropriate decisions and adjusting to the demands of new situations. To equip students to succeed as learners at school and in life, teachers need to model metacognitive strategies, explicitly teach those strategies, and provide time and scaffolded support so that the strategies become automatic and a part of a student’s way of thinking (Fountas and Pinnell, 2001).

Teachers model metacognitive vocabulary by thinking aloud as they engage students in reading and writing rich texts and in talking about their processes. They explicitly teach the vocabulary students need in order to use metacognition, and provide time to practise metacognitive dialogue. “Think-alouds provide struggling readers with a structure on which to build this dialogue; they learn to think about their reading and to monitor what they do and do not understand” (Beers, 2003, p. 122). Robb notes that “it takes a long time for a reader to develop metacognition strategies and move from knowing the names of repair strategies to accessing and using them as they read” (Robb, 2000, p. 152).
“Metacognitive questions ask readers to examine their thinking as they read so that they can become adept at noticing their own confusions and what they need to do to sort through the text” (Allen, 2002, p. 37). Metacognitive questions help writers in the same way. Effective metacognitive strategies and questions include the following:

- activating prior knowledge and connecting it with new information (What do I already know about this topic/author/audience?)

- intentionally selecting and applying thinking strategies (Does this make sense? Does this look right? Does this sound right? What am I writing about? What is my main idea? What “voice” would best suit the audience?)

- monitoring one’s own learning (Where did I get confused? What words are new to me? What information is important? Have I conveyed my message to the reader?)

- evaluating one’s own learning (What did I learn from reading/writing this selection? What strategies did I use to help me understand what I read/wrote? What did I learn about my reading/writing?)

To help students deepen their understanding, teachers can create anchor charts with prompting questions. Teachers can also work with students to create exemplars that demonstrate effective responses, and post these exemplars beside the anchor charts (see “Anchor Charts” in the appendix).

Many examples of metacognitive questions appear in this chapter and throughout the guide (for example, see “The Reading Process” and “The Writing Process” charts on pages 41 and 43, respectively). The chart on page 62 summarizes some key metacognitive questions to encourage students to think about their thinking as they read, write, speak, and listen.

### Helping Students Think Through the Reading Process

To help them think through the reading process, students can create a personal bookmark of prompting questions, such as those listed below. Students can also create focusing questions and keep them in their writing folder or notebook.

**My Reading Bookmark**

- I was confused when …
- Words new to me are …
- When I read …., I thought about …
- Questions I would ask if I were the teacher include …
- Questions I would like to ask the author are …
Questions to Promote Metacognitive Thinking During Reading, Writing, Speaking, and Listening

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Critical-Literacy Skills

“Critical literacy is not a generic set of procedures – not simply an orthodoxy to be set in opposition to older orthodoxies – nor is it a set of new activities teachers can simply add and stir. What a critical perspective does offer teachers is a way to think about what it is students are learning to read and write, what they do with that reading and writing and what reading and writing do to them and their world. When such understandings inform teaching, they affect how teachers think of the literacy work of the classroom, the questions they ask and the tasks they set.”

(Kamler and Comber, 1997, p. 1)

The Expert Panel on Literacy in Grades 4 to 6 identified critical-literacy skills as essential for lifelong learning in the twenty-first century:

Students today experience a constant stream of ideas and information – online, in print, and through electronic games and mass media. As they move into the junior grades, they encounter an ever-widening range of texts. They need skills to determine where to direct their attention and how to interpret messages and use them appropriately.

Critical-literacy skills give students the tools they need to think more deeply about the texts they meet and the texts they create. They challenge the learner to look beyond the literal message, to read between the lines, to observe what is present and what is missing, and to reflect on the context and the way the author constructed the text to influence the reader. (Literacy for Learning, p. 9)

Critical literacy goes beyond conventional critical thinking because it asks students to question the authority of texts and to explore issues of bias, perspective, and social justice. In the multiliterate world of the twenty-first century, it is not sufficient simply to teach students how to read at a literal level. Students need to develop the ability to decipher critically the messages contained in texts, whether those messages were intentional or unintentional.

Texts that engage students in deep thinking about societal values provide opportunities for rich dialogue and learning in the junior classroom. Sample texts may include posters, poetry, fiction, advertisements, newspaper articles, music, and informational texts. Picture books for mature readers have many layers of meaning and are ideal for teaching critical-literacy skills. Titles such as Shin’s Tricycle by Tatsuharu Kodama (New York: Walker and Co., 1995), One More Border to Cross by William Kaplan with Shelley Tanaka (Toronto: Groundwood, 1998), and Remember by Toni Morrison (New York: Houghton Mifflin, 2004) are exemplary books that promote discussion and inquiry.
Critical-literacy skills help students to determine the bias in a text by examining both what an author states explicitly and also what the author doesn’t state. Students explore possible reasons for deliberate inclusions and omissions in order to determine the author’s intent. To be successful and comfortable in exploring critical-literacy issues, students need exposure to inquiry and higher-order thinking skills and practice in using them.

Many of the questions that can help students to reflect critically as they read, write, and learn are the same as those given for promoting metacognitive thinking, in the chart on page 62. A few additional questions specific to critical thinking are as follows:

- What techniques did the author use to influence my thinking?
- Is this text presenting a balanced view of the issue?
- What is the author really trying to say?
- Do I need to consult another source of information?
- How would this text be different if …?
- Do I agree with this text?
- Does this information make sense to me?
- Is this information consistent with what I already know?
- What action do I need to take?

The following lists some guiding principles for teaching critical literacy in the junior grades.

**Guiding Principles for Teaching Critical Literacy in the Junior Grades**

- Critical analysis is an integral part of literacy learning.
- Critical literacy may be taught using the gradual-release-of-responsibility model, from think-alouds to shared, guided, and independent reading and writing.
- *All students* are capable of critically analysing and responding to texts.
- Teachers need to encourage students to become critical analysts and questioners of text.
- Texts are social constructions; they are never neutral.
- Critical analysis is negotiated with students.
- Critically literate individuals understand and can talk respectfully about the balance of power between the author and audience, and the relationships between their own ideas and the ideas of the author.
- Critical-literacy skills equip students to analyse and evaluate texts of all types – in print, audio-visual, graphical, and electronic media. Students learn to ask meaningful questions about the origin and purpose of the text, to explore other perspectives, to draw conclusions, and to take appropriate action.
Tools and Technologies

“Tomorrow’s citizens face greater reading demands than ever before. The written word is no longer restricted to paper form. Children of all ages are being bombarded with information from the Internet and other electronic forms of print. The ‘E’ generation needs to comprehend more than ever before.”

(Tovani, 2000 p. 110)

Students of all ages are affected by the rapid development and widespread use of information and communication technologies, such as word processors, e-mail, CD-ROMs, digital cameras, instant text messaging, hand-held games, multichannel television, and the Internet (Smolin and Lawless, 2003). The texts that students encounter on a daily basis are no longer limited to print forms. Many of the literacy skills that students have traditionally learned through print can easily be taught and applied using more advanced technologies. For example, as students search, explore, select, and scroll down a computer screen, they are practising skimming and scanning skills (Booth, 2001).

Attention to tools and technologies supports all four of the overarching goals of the junior literacy program (outlined in the Introduction to this volume), helping to equip students as independent, motivated, thoughtful, and strategic creators and users of texts of all types. For many students, including second-language learners and students with special learning needs, assistive technologies can promote independence and inspire motivation to engage in literacy learning. Examples of these technologies include: software for voice recognition, co-writing, translation, and graphic organizing; audio and visual aids; and electronic dictionaries.

Exposure to current technologies at school can also help to bridge the digital gap between students who have access to technology in their homes and those who do not. “Most students already have some experience with personal computers and electronic games before they reach the junior grades. Those who do not have access to current technologies outside the school are at a significant disadvantage. The school plays an important role in providing equitable access to the tools, information, and new forms of learning on which all students will increasingly rely as they advance through the grades and plan for their future beyond school” (Literacy for Learning, p. 24).
Instruction and practice in the use and evaluation of information and communication technologies help to equip students with a range of knowledge and skills, including how to:

- detect signs of fraud, misinformation, and illegal content when using the Internet or other electronic media;
- determine the accuracy and reliability of information;
- use text cues to navigate through software programs and on the Internet;
- interpret evolving languages, such as the jargon of instant messaging and text messaging;
- choose the right tool for the task, including word-processing and design software, and other electronic media, but also more basic tools when those are most appropriate for the situation.

**Bridging the Digital Divide**

Today's junior students are exposed to, and conversant with, a wide range of media and technologies. Effective literacy instruction builds on these skills and makes learning relevant to students living in the information age. Many students may be processing information in much more sophisticated ways outside of school than they do in the classroom. For example, they may:

- use e-mail and other forms of electronic text messaging;
- use animation and word-processing programs;
- read texts from pop culture, including the storylines and instructions for electronic games;
- use online search engines and CD-ROMs.

However, not all students have access to these tools and resources outside of school, and many of those who do are not using them effectively. This creates a “digital divide” in some classrooms. The term digital divide refers to the knowledge gap between those who do, and those who do not, have access to current digital and information technology. Teachers need to help bridge this gap by providing instruction and guidance in the effective use of these technologies, as well as opportunities for students to explore them in a purposeful way.
A developmental continuum can be a helpful resource for planning instruction and observing student learning. It describes the key knowledge, skills, and behaviours that learners exhibit at various stages of literacy development. By plotting their students’ current development on a developmental continuum, teachers will be better able to meet their students’ immediate needs and plan for longer-term programming.

Knowing each student’s phase of development and considering each student in relation to others in the class help teachers to provide a range of resources and instructional approaches to meet all needs. Teachers become more intentional about providing instruction at a level of complexity that is “just right” to challenge and support each student to move to the next step and/or stage.

Teachers determine a student’s phase of development by observing that the student is exhibiting the key indicators of a phase. The key indicators describe conceptual understandings and the behaviours that students demonstrate when they have internalized those understandings. Most children will display behaviours from more than one phase at a time. “Developmental records show that children seldom progress in a neat and well-sequenced manner; instead they may remain in one phase for some length of time and move rapidly through other phases. Each child is a unique individual with different life experiences so that no two developmental pathways are the same” (Australian Government, n.d.).

Many school boards in Ontario now use one or more of the First Steps™ developmental continua. First Steps offers separate continua for reading, writing, and oral language. The overviews for those continua are reproduced on the following pages.*

*Reprinted from First Steps Reading Developmental Continuum (1994), First Steps Writing Developmental Continuum (1994), and First Steps Oral Language Developmental Continuum (1994). These publications, including First Steps Professional Development, are available from Pearson Canada, 26 Prince Andrew Place, Don Mills, Ontario. E-mail: professionallearning@pearsoned.com.
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Teachers can identify a child's phase of development by observing that the child is exhibiting all the key indicators of that phase. It should be noted, however, that most children will also display indicators from other phases.

**Phase 1: Role Play Writing**
- demonstrate the connection between oral and written language
- demonstrate that written messages remain constant
- demonstrate that writing communicates a message
- focus on the way print works (print concepts and conventions)
- demonstrate that writing is purposeful and has an intended audience
- use correct terminology for letters, sounds, words
- encourage children to experiment with writing

**Phase 2: Experimental Writing**
- model brief, imaginative and factual texts and explain the purpose and intended audience
- help children build lists of high-frequency words from their reading and writing
- demonstrate the one-to-one correspondence of written and spoken words
- discuss how writing can be used to communicate over time and distance
- encourage children to talk about their experiences
- help children understand how written texts are composed in sentences
- help children develop a stable concept of a word
- help children relate written symbols to the sounds they represent
- talk about letters, words and sentences

**OVERVIEW OF WRITING DEVELOPMENTAL CONTINUUM**

Children are beginning to come to terms with a new aspect of language, that of written symbols. They experiment with marks on paper with the intention of communicating a message or emulating adult writing.

**Key Indicators**

**The Writer:**
- assigns a message to own symbols
- understands that writing and drawing are different, e.g. points to words while 'reading'
- is aware that print carries a message
- uses known letters or approximations of letters to represent written language
- shows beginning awareness of directionality; i.e. points to where print begins

Children are aware that speech can be written down and that written messages remain constant. They understand the left to right organisation of print and experiment with writing letters and words.

**Key Indicators**

**The Writer:**
- reads back own writing
- attempts familiar forms of writing, e.g. lists, letters, recounts, stories, messages
- writes using simplified oral language structures, e.g. 'I brt loles'
- uses writing to convey meaning
- realises that print contains a constant message
- uses left to right and top to bottom orientation of print
- demonstrates one-to-one correspondence between written and spoken word
- relies heavily on the most obvious sounds of a word

**Major Teaching Emphases**

**Phase 3: Early Writing**

Children write about topics which are personally significant. They are beginning to consider audience needs. They have a sense of sentence but may only be able to deal with one or two elements of writing at one time, e.g. spelling but not punctuation.

**Key Indicators**

**The Writer:**
- uses a small range of familiar text forms
- chooses topics that are personally significant
- uses basic sentence structures and varies sentence beginnings
- can explain in context some of the purposes of using writing, e.g. shopping list or telephone messages as a memory aid
- experiments with words drawn from language experience activities, literature, media and oral language of peers and others
- begins to develop editing skills
- attempts to use some punctuation
- talks with others to plan and revise own writing

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Teachers can identify a child's phase of development by observing that the child is exhibiting all the key indicators of a phase. It should be noted, however, that most children will also display indicators from other phases.

**Phase 1: Beginning Language**

- Uses own grammar style which is an approximation of adult grammar – overgeneralisations are common, e.g. plurals sheeps for sheep, verbs goed for went, auxiliary verbs I did run fast
- Is beginning to develop awareness of listener needs and begins to provide feedback information when introducing new topic, e.g. Nanna, I went shopping. Look at this.
- Gives simple descriptions of past events
- Shows an interest in explanations of how and why
- Focus on language structures and patterns through songs, chants, rhymes and stories
- Develop children's ability to adjust their language to suit particular purposes, audiences and situations
- Encourage children to tell stories, recount experiences, describe ideas, events and objects, report information and role play characters and situations
- Develop and extend children's use of vocabulary in different contexts
- Help children to give and receive simple explanations, information and instructions

**Phase 3: Exploratory Language**

- Has grasped most grammatical rules but may still overgeneralise, e.g. tenses swimmed for swam, keept for kept, plurals mouses for mice, pronouns they put the book in there
- Contributes appropriately to classroom interactions, showing or expressing puzzlement if something is not understood
- Adapts language for social control, requests and for seeking information
- Includes when, who, where, what in recounts
- Uses language to explain, enquire and compare

**Major Teaching Emphases**

- Focus on language structures and patterns through songs, chants, rhymes and stories
- Provide opportunities to develop language through small-group and large-group interaction
- Help children to learn through speaking and listening, e.g. formulating ideas, classifying, comparing, giving and receiving instructions and explanations
- Provide opportunities to retell stories
- Assist children to recount experiences, within and outside school
- Encourage children to talk about reading and writing experiences
- Incorporate collaborative and exploratory activities in all curriculum areas

**In this phase children's use of language becomes more refined and extended. It is used to satisfy simple social needs and to gain control of objects, people and knowledge in the environment.**

**Ch: I know where my Grandma lives**
**T: Where?**
**Ch: (points)**
**T: When did you last see your Grandma?**
**Ch: A long time ago.**

**Key Indicators**

The child:

- In this phase, children already know a great deal about language. They use language competently and include most grammatical patterns. They know that language can be used to express meaning and share experiences with others.

**Ch1: Good morning everyone. Um, when I went to my Grandma's I saw a light brown rabbit hop into the bush.**
**T: Where is your Grandma's house?**
**Ch1: They're called Dowling Flats.**
**Ch2: Our house has a flat roof.**
**Ch1: No, not the roof. It's a building.**

**Key Indicators**

The child:

**Phase 4: Emergent Language for Learning**

- Judges whether a sentence is grammatically correct and adapts accordingly
- Uses tone, volume, pace, intonation pattern and gesture to enhance meaning
- Takes into account audience and purpose when speaking
- Can sustain a conversation with a variety of audiences, e.g. teacher, peers, parents
- Develops specific vocabulary to suit different purposes, e.g. language for description, classification, comparison, argument
- Shows evidence of language cohesion; (a) narrative logical, sequenced retells, (b) recounts sequenced by time order, (c) conversation sustained, on topic
- Uses language to predict and recall
- Uses language to interact with peers, e.g. collaborative activities

**In this phase, children use language effectively to satisfy social and communicative needs. They also display considerable skill in responding to and using language to satisfy the demands of formal learning.**

**I'm going to tell you about yesterday when we went to the zoo. We went in the conservation room and I held a llama skin in the feeling boxes and Mrs Smith pressed the button, um, and it showed us a picture of llamas and I had a race with, um a tortoise and I won because I was faster, and ...**

**Key Indicators**

The speaker/listener: