

# BOYS GIRLS and LEARNING

**K-12  
Handbook**

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**Department of Education  
Educational Programs & Services  
Fredericton, NB**

**August 2006**

## Acknowledgements

The Department of Education gratefully acknowledges the many educators who contributed to the development of this handbook. Their effort in sharing their experiences and expertise related to narrowing the academic achievement gap between boys and girls, and bringing success to all students, is highly valued.

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# Why Pay Attention to Gender Differences in Learning?

**“...research that identifies characteristics of groups can provide a useful starting point for teachers by alerting us to issues we might encounter in our work with individual students.”**

**Michael Smith and Jeffrey Wilhelm (2002)  
*Reading Don't Fix No Chevys*, p. 10**

## Introduction

The New Brunswick *Quality Learning Agenda: Quality Schools, High Results* has as one of its targets to be “in the top three provinces in Canada for academic achievement, high school graduation rate, and participation in post-secondary learning” (p. 20). In support of this objective, “beginning in the 2003 - 04 school year, we will work with districts on strategies and targets to improve the literacy achievement level of boys.” (p. 34).

For a number of years, provincial, national, and international testing programs have shown a widening gap in achievement between boys and girls. *Report Card 2004*, an annual review of student achievement in New Brunswick's Anglophone school districts, as measured by results of provincial examinations, identifies that “girls tend to do better than boys, particularly on the Middle Level English Language Proficiency Assessment, where 77% of girls reached the standard, compared to 64% of boys” (p. 3). The *Programme for International Student Assessment* (PISA 2000) reports that “girls performed significantly better than boys on the reading test in all countries and in all Canadian provinces.” The School Achievement Indicators Program (SAIP), now Pan-Canadian Assessment Program (PCAP), a cyclical program of pan-Canadian assessments of student achievement in mathematics, reading and writing, and science, has been conducted by the Council of Ministers of Education, Canada since 1993. Results of the SAIP indicate, “between 1994 and 2002, girls have maintained a significant advantage over boys in reading and writing. In 1998, at age 13, girls scored on average 15 % higher than boys on reading; at age 16 it was 21 % higher. In 2002, at age 16 girls held a 16.5 % advantage over boys for writing.” Additionally, “Studies by the Organization for Economic Co-operation and Development (OECD) have found that by age 12, girls have a 30 % higher rate of literacy than boys” (Montgomery, 2003).

Other statistics that support the need to look at the academic achievement gap between boys and girls include post-secondary enrolments. A Statistics Canada report for the year 2002 indicates that “young women were more likely to have gone on to post-secondary education than were young men” and that University admissions ratios in Canada are about 55 to 45 in favour of girls.

Other data necessitate a look at what is happening and what can be done to support the teaching and learning of boys: the fact that boys drop out of school more often than girls (NB Dropout statistics); boys are often noted to have received more disciplinary infractions than girls (Gurian, 2001); boys are three to five times more likely to have learning - and/or reading



disabilities - referrals in school; and boys are more likely to be suspended from school (Booth, 2002).

This handbook is intended as an introduction for educators to stimulate and promote discussions on how boys and girls learn differently. Background information, strategies, and resources are presented to assist educators in their on-going efforts to support the learning of all students. There are no easy solutions to address the academic achievement gap between boys and girls.

The attention on boys should in no way diminish a continued attention to girls. There are several strategies that will help all students succeed. The goal of this handbook is to identify strategies to improve the performance of both boys and girls while narrowing the gender gap between them. Likewise, the intention is to provide a variety of strategies that a school staff can explore, develop over time, reflect upon, and refine based upon results and their evaluations.

**Dr. Tim Hawkes states “schools are often not boy-friendly. Schools can fail to be stimulating places of learning for boys, as many teachers do not really understand how boys learn.”**

**Dr. Tim Hawkes (2001).  
*Boy oh boy: how to raise and educate boys*, p. 23.**



## Ideas on How to Use the Handbook “Boys, Girls, and Learning”

This section of the handbook presents a variety of practices, strategies, and learning opportunities for educators to explore the issue of “boys, girls, and learning.” Several of the ideas presented are based upon the experiences of 25 educators who had the opportunity to review literature related to how boys and girls learn differently and field-test instructional strategies advocated as being effective to address the academic achievement gap between boys and girls. Various resource books, journal articles and other materials were explored in order to identify strategies and initiatives teachers and schools could utilize effectively in their classrooms to meet the needs of all learners. The experiences and findings of the group members are incorporated in the handbook to stimulate discussion and encourage other educators to conduct research in their classrooms.

**Study Group** - Study groups, usually groups of 6 to 8 people, provide a collegial way for teachers to learn and support one another as they study the latest research. They provide an opportunity for the participants to learn and put into practice new ideas. Participants in study groups are supported by their colleagues to learn together, problem solve, share, experiment, and reflect on a common topic or issue.

*I was able to create a study group with the vice-principals who agreed to play a leadership role in Boys, Girls, and Learning. Our group participated in a Reading Study Group. There were 3 groups: one group studied the book Reading, Writing, and Gender, one group studied Teenage Boys and High School English, and the third group studied Reading Don't Fix No Chevy's. Each group developed a presentation on the book for which they were responsible and presented at our meetings. I took responsibility for the book by Michael Gurian, Boys and Girls Learn Differently! In addition, we participated in reading and sharing various articles on boys' learning. We had discussions on observations of boys' and girls' learning in their schools. This has been a learning year for the vice-principals. The task for the next school year will be to take action and develop workshops and awareness within the schools. Also, vice-principals who have tried the strategies will be expanding their experience by involving staff in their schools.*

School District Director of Education

**Book Clubs and Literature Circles** –These discussion groups use questions and group roles to assist colleagues in getting the most from a book. Members of the group decide when they will get together, what they would like to read, and who will lead the discussions at each session. Opportunities are provided for individuals to highlight interesting points and share strategies they may have tried in their classrooms.



*At our school we are using a Literature Circle format to study the book Teenage Boys and High School English. There are 15 teachers, a cross section of teachers from a variety of disciplines, a supervisor and the superintendent taking part in the group. We meet once a month, ask questions, challenge some of the reading, discuss and share. There is lots of sharing of ideas to help students in all subject areas. Also, at our school, one teacher has a literature circle with students and a couple of teachers. They are studying the book The Life of Pi.*

High School Principal

Books to consider for a book club or literature circle include:

*Boys and Girls Learn Differently!* by Michael Gurian

*Teenage Boys and High School English*, by Bruce Pirie

*Reading Don't Fix No Chevys*, by Michael Smith and Jeffrey Wilhelm

*Reading, Writing, and Gender*, by Gail Goldberg and Barbara Sherr Roswell

*Even Hockey Players Read*, by David Booth

*Boys' and Girls' Literacy: Closing the Gap*, by Heather Richmond and Cheryl Miles

**Focus Groups** - A focus group is a group of people (usually 6-10) who gather together for the specific purpose of gaining their opinions on an idea or question. During the session, usually about one to one and a half hours, participants identify a major objective to be addressed. Group members discuss, share, and reflect upon the identified ideas or questions. A report is generated from the discussion and later shared among participants. Focus group sessions are valuable opportunities for educators to spend time discussing instructional strategies.

**Learning Clubs** - Learning clubs are small groups of teachers who meet on a regular basis to discuss aspects of their teaching. Teachers review instructional strategies they have studied together, problem solve situations and ask group members for assistance in clarifying the problem, share success stories, or plan a lesson or unit together. Each member spends about 15 minutes sharing, and the session concludes with the group spending five to ten minutes discussing the ideas shared during the meeting and their potential for use in the classroom.

**Action-Research Projects** - Such projects encourage teachers to engage in research of strategies, such as implementing literature circles, using graphic organizers, or employing technology to support learning. Teachers ask important questions directly related to their day-to-day work. They read, problem solve, search for answers, take action, collect data, and meet to monitor progress in a practical way.

**On-Line Discussion Groups** - With on-line discussion groups, participants post questions to which group members respond, and share their thoughts.



***Incorporate this handbook, or listed articles as part of staff meetings and/or grade level meetings -***  
During the meeting, jigsaw parts of the handbook or ask teachers to read sections in advance and be prepared to share their thoughts or insights about the topic with their fellow teachers.

*As part of our staff professional development, we organized into teams of males and females and studied the book Boys and Girls Learn Differently!. The book was divided up and the various chapters were studied through activities that reinforced the concepts of the book and provided for reflection among our staff. Problem-solving, fine-motor tasks, trivia games, and the presentation of information were all part of the learning activities.*

School District Office Supervisor

***Implement this handbook within existing curricula -*** Invite teachers to explore, through existing curricula, the various strategies and/or reading suggestions that encourage and motivate boys' learning. Promote collaborative planning among teachers to support the delivery of curricula, the creation of assessments, the examination of student work, or the selection of instructional practices.

***Individual Reflection -*** As an individual, reflect upon and examine personal teaching to strengthen the quality and effectiveness of instruction. Ask questions, such as: What is taking place in our school? What options are available? What practices will best help to deliver the curriculum?

**“The most significant influence on the educational outcomes of school aged children is the teacher.”**

**Dr. Ken Roe (2000).**

***Boy oh boy - Australian Council for Educational Research, p. 71.***





**How Might  
Boys and Girls  
Be Different?**

## Learning Trends of Boys and Girls

This table presents areas of learning style trends of boys and girls. When designing student learning activities consider that:

BOYS tend to ...	GIRLS tend to ...
be deductive in their conceptualization, moving from the general to the specific.	be inductive in their thinking, going from the specific to the general.
explore more the abstract – arguments, debates and principles.	deal with the concrete world.
be better at working silently during the learning process and use fewer words.	produce more words than boys as they learn and develop language and social skills earlier than boys.
hear less and more often ask for clear evidence to support a teacher’s claim. They respond better to structured activity, clearly defined objectives and instructions, short – term challenging tasks, and visual, logical and analytical approaches to learning.	be better listeners, hear more of what’s said and be more receptive to instructional meandering .
become bored more easily and often require more and varying stimulation to keep them attentive.	self-manage boredom and be less likely to “give up” on the learning process or act out. Girls tend to evaluate their own performance more critically.
use more space when they learn, especially at younger ages.	find it easier to learn in limited space, not needing to spread out their work as much as boys.
need movement to stimulate their brains and manage and relieve impulsive behaviour.	require less movement while learning.
focus on performing tasks well without as much sensitivity to the emotional needs of others.	learn a code of social conduct and be aware of the emotional needs of others around them. They are better at grasping feelings and relationships.
rely on pictures more in learning.	prefer written text in learning and require less support to begin a piece of writing.
show greater interest in exploring the environment .	develop fine motor skills sooner than boys.
create structured teams that are task oriented and more competitive.	be process oriented in teams.

**Note that these characteristics are trends and do not apply to all boys or girls. Variation exists and the goal is to use this information to enhance choice and flexibility in the classroom.**

Drawn from the following sources:

*Boys and Girls Learn Differently!* by Michael Gurian

*Even Hockey Players Read*, by David Booth



**“PET scans and MRIs indicate that males and females use different areas of their brains when accomplishing similar tasks.”**

**David Sousa (2001)  
*How the Brain Learns p. 173.***

The following pages provide background on the structural and performance differences of female and male brains. By learning how the brain learns, one is able to gain a greater understanding of the differences between the ways male and female brains function.

For example, brain research shows that girls’ brains mature earlier than boys, and, as a result, girls are often ahead of boys in language development. Some males are stronger in the right hemisphere functions that control geometric and spatial perception and therefore possess the ability to see things better in three dimensions. Researchers have found differences in the amount of grey matter in the left hemisphere of males and females. There are also cross-hemispheric connection differences, as females have more connections among the neurons. Differences exist in language areas; for most females and males, the language areas are in the left hemisphere. Females, however, also have an active language processor in the right hemisphere.

Girls tend to multitask better than boys as a result of the “cross-talk”. Boys tend to lateralize brain activity, and their brain renews itself by entering a *rest state*. The male brain is suited to symbols, abstraction, diagrams, and objects. PET scans and MRIs show that the female brain at rest is as active as an activated male brain.

Boys tend to move emotive material downward to the brain stem where the fight or flight response is stored. They have higher levels of the stress hormone cortisol and tend to suppress their emotions. Girls tend to move more emotive material to the upper brain where complex thought occurs.

Myelin, the coating of the nerves that spiral around the shaft of other nerves of the brain, allows for electrical impulses to travel down a nerve faster and more efficiently. Myelination is the process of coating these nerves, and is completed in women’s brains at an earlier age than males. This allows girls to develop more complex verbal skills much earlier than boys.

The female brain secretes more serotonin, a neurotransmitter associated with movement, helping females to be less impulsive and more able to remain still and not fidget in class. Serotonin inhibits quick impulse movements and thus enhances smooth relaxed movements. The female brain also produces more oxytocin than the male brain. This allows females to be empathetic more quickly than males.

It is important to recognize that although there are brain differences in boys and girls, both have similar capabilities to succeed. It is by understanding and attending to male/female brain differences that educators can better meet the needs of the students with whom they work. Designing lessons and learning activities which incorporate strategies to engage and stimulate the whole brain benefits more students and enhances comprehension. Such strategies include applying visual and verbal strategies to teach new concepts, discussing concepts logically and intuitively, and building in choices during the delivery of curriculum and the assessment of learning.



References: *Boys and Girls Learn Differently!* by Michael Gurian  
*Teaching With the Brain in Mind*, by Eric Jensen  
*How the Brain Learns*, by David Sousa  
*Brain Matters: Translating Research into Practice*, by Patricia Wolfe

**“There are no differences in what boys and girls can learn. But there are differences in the best ways to teach them.”**

**Leonard Sax (2005).  
*Why Gender Matters*, p. 106.**



## The Language of the Brain

This section of the handbook provides an overview of some of the main terminology associated with the brain, the function of parts of the brain, similarities and differences in the brains of males and females, and the impact of these differences.

### **Cerebral Cortex**

A few millimeters thick, it extends over the 4 lobes of the left and right hemispheres.

### **Left Frontal Lobe**

Conveys meaning received from sight and sound.

### **Temporal Lobes**

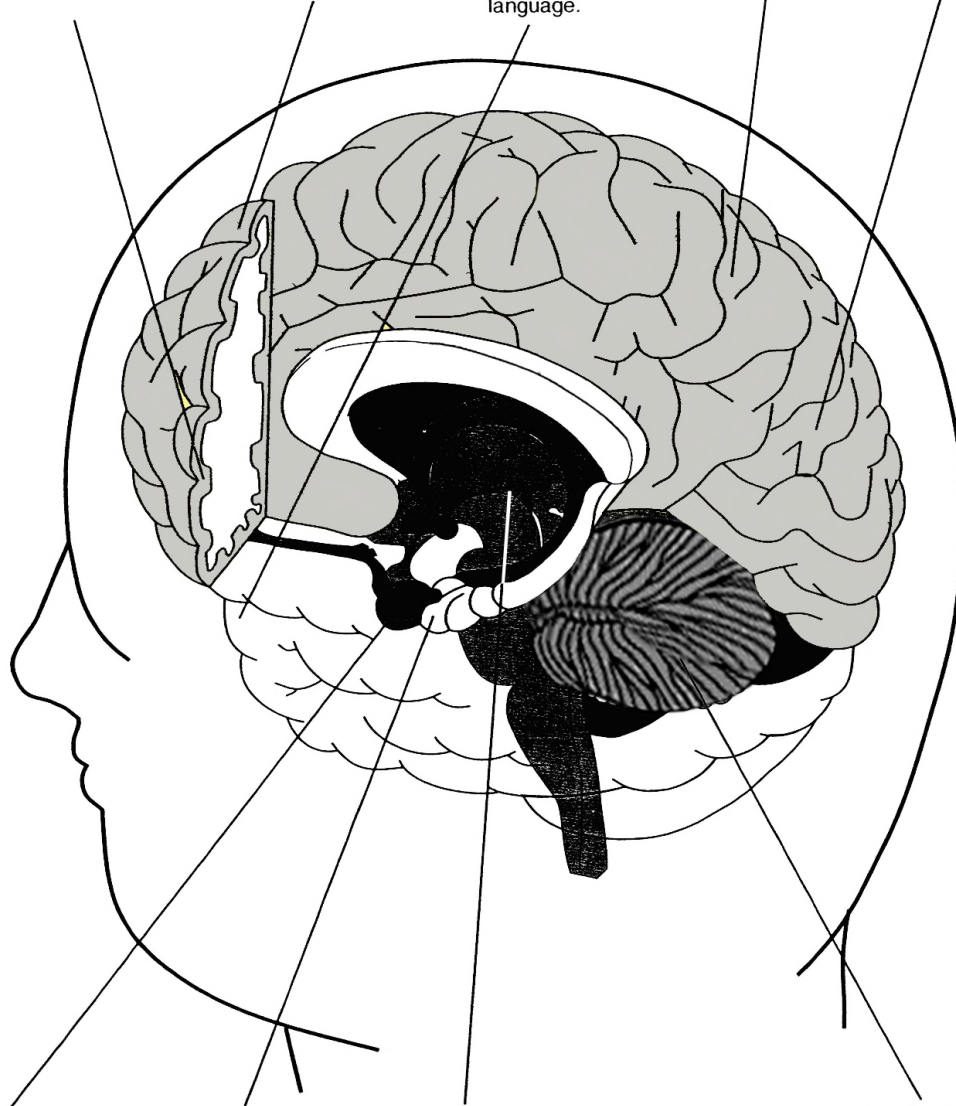
Hear and interpret music and language.

### **Parietal Lobes**

Collect and convert data from the senses.

### **Occipital Lobes**

Vision processing area.



### **Amygdala**

Creates emotions from perceptions and thoughts.

### **Hippocampus**

Combines new with old information, turns short-term into long-term memory.

### **Thalamus**

Relays sensory information to the cortex.

### **Corpus Callosum**

Fibers connecting left and right brain hemispheres.

### **Cerebellum**

Controls balance and the memory of rote body movements.

Source: Gurian Institute 2003



## Brain Gender Differences

Part of Brain	Function	Similarities/ Differences	Impact
Amygdala	Located in the middle of the brain area and involves emotional processing	Larger in males  Men may handle more emotions in this area, which is less wired to the parts of the brain that handle language	Tends to make males more aggressive
Basal Ganglia	Control movement sequences when necessary (e.g., walking)	Likely to engage more quickly in males - when required	Males generally respond more quickly to demands in physical environment
Broca's area	Motor area for all speech	More active in females.	Improved verbal communication in females
Cerebellum	Contains neurons that connect to other parts of the brain and spinal cord  Facilitates smooth, precise movement; balance/speech	Stronger connecting pathways in female brain between brain parts  Matures at different rates in boys and girls	Females have superior language and fine-motor skills  Males are less intuitive because fewer parts of the brain are involved in tasking  Males have 2-3 language centres and females have 5-7 language centres
Cerebral Cortex	Contains neurons that promote higher intellectual functions (e.g., thinking) and memory  Interprets sensory impulses	For males, thicker on the right side, and more neurons in the cerebral cortex  For females, thicker on the left side and more connections between the neurons	Males tend to be right-brain dominant (visual/spatial) (mechanical/spatial) with superior gross motor skills  Females tend to be left-brain dominant (verbal/emotive) with superior fine motor skills
Corpus Callosum	Bundle of nerves that connects the right and left hemispheres of the brain	Up to 20% larger in females  Develops at different rates in boys and girls	Helps females coordinate two sides of brain better  Gives better cross-talk between the hemispheres



Part of Brain	Function	Similarities/ Differences	Impact
Frontal Lobe	Facilitates speech, thought and emotion  Controls voluntary movement	In females tends to be more highly active	Results in improved verbal communication skills for females
Hippocampus	Involved in learning and memory development	Larger in females	Results in increased memory storage for females  Used by males for spatial tasks
Occipital Lobe	Detects and interprets visual images	Male and female differences in divergent responses to light sensitivity	Females see better in lower light (night)  Males see better in bright light
Parietal Lobes	Perceives and interprets data from senses  Plays a role in reading, writing, language, and calculation	For females more data moves through	Females have more tactile sensitivity (touch and emotion)
Right Hemisphere	Interprets emotional contents e.g., tone of voice, facial expressions, gestures, melodic speech, social, musical, spatial, environmental awareness, unconscious self-image, body image, emotional and visual memory	Males use right side of brain to work on abstract problems  Females use both sides of the brain to work on problems (Cerebellum has stronger connecting pathways between brain parts)	Males-superior at spatial relationships
Temporal Lobes	Primarily responsible for hearing, memory, meaning and language	Females have stronger neuron connections	Females have better sensually detailed memory storage, and are often superior in communicative tasks



Part of Brain	Function	Similarities/ Differences	Impact
Hormones / Chemicals:			
Estrogen	Group of female sex hormones	Greater presence in females than males	Lowers female aggression, competition, and self-reliance
Oxytocin	“bonding hormone”	Much more functionally present in females	Females are more capable of emphatic responses
Testosterone	Male growth hormone	Greater presence in males than females	Increases aggression, self-assertion, self-reliance, and confidence
Serotonin	Neurotransmitter responsible for inducing relaxation	Male brain secretes less than the female brain	Makes males, generally, more impulsive as well as fidgety
Myelin	<p>Myelination is the process by which nerve cells are covered and insulated with a fat layer</p> <p>Myelin allows electrical impulses to travel down a nerve quickly and efficiently. Myelin helps make neurons more efficient and increases the speed of information processing</p>	Myelination is completed earlier in females (age 25) than males (age 30)	Lack of complete myelination affects the ability to perform skilled movements

**Sources:**

*Boys and Girls Learn Differently!* pp. 20-26 (2001), by Michael Gurian

*Brain Matters, Translating Research into Classroom Practice* (2001), by Patricia Wolfe

*Teaching with the Brain in Mind* (2<sup>nd</sup> Edition, 2005), by Eric Jensen

*How the Brain Learns* (2<sup>nd</sup> Edition, 2001), by David Sousa





## Learning Styles and Gender Differences

Students acquire knowledge and skills through different means; their learning style(s) may be visual, auditory, kinaesthetic and/or tactile. Due to these differences, they may prefer new information in written form, visually, or through listening. When planning for instruction teachers need to include a multi-sensory approach thus ensuring the needs of a greater number of students are addressed.

Boys tend to be spatial learners, preferring to spread out their learning materials; furthermore, boys often like to work alone rather than in groups. They also enjoy active learning. Girls tend to be more expressive and can talk at length about a subject (Pirie, 2002; Gurian, 2003; Booth 2004). To accommodate for gender differences, teachers may wish to incorporate the following instructional implications.

Because	consider...
boys tend to like physical activity,	<p>providing active, hands-on learning experiences. For example, give boys lots of opportunities to move, when reading and writing. Incorporate drama, computer games, and other such active learning experiences.</p> <p>demonstrating tasks and minimizing verbal instructions.</p> <p>including physical movement whenever possible.</p> <p>making as much space available as possible.</p>
boys often prefer <i>explicit /precise</i> instructions	<p>modelling <i>process</i>, showing <i>how</i> things are done, step-by-step (reading, writing, listening, speaking, thinking).</p> <p>using “think-alouds” to demonstrate thought processes.</p> <p>teaching explicitly “how to read, write, and/or work in a group” and other related skills.</p> <p>providing varied activities accompanied by explicit instructions.</p>



<b>Because</b>	<b>consider...</b>
<p>boys tend to respond well to spatially organized material,</p>	<p>using graphic organizers (e.g., webs, timelines, charts, diagrams) to promote the development of ideas.</p> <p>using pictures and graphics while teaching.</p>
<p>boys often find it difficult to express feelings and emotions,</p>	<p>providing quick tension release opportunities, such as counting to ten or taking long deep breaths.</p> <p>encouraging them to take responsibility for others.</p> <p>using drama as a route to expressing feelings or developing imagination and verbal skills.</p> <p>making learning experiential and purposeful.</p>
<p>girls generally like to work in groups,</p>	<p>incorporating a variety of social arrangements in the classroom (e.g., small group learning and girls only groups).</p>
<p>girls tend to use more areas of their brains for verbal and emotive functioning than for spatial functioning,</p>	<p>using manipulatives in mathematics and science to enhance tactile learning experiences.</p> <p>connecting abstract concepts with real world applications.</p> <p>using puzzles to enhance perceptual learning.</p> <p>using “story” problems or contexts to teach abstract concepts to girls.</p> <p>using journal writing in math and science lessons as an additional means of explaining or expressing understanding.</p>



<b>Because</b>	<b>consider...</b>
girls are often concerned with pleasing adults,	providing specific feedback that is encouraging and that stimulates further learning.  creating a learning environment that promotes a variety of means of recognizing student success (e.g., displaying pictures of work).



**How Might We  
Teach Boys and Girls?**

## Instructional Strategies for Consideration

This next section of the handbook explores a range of strategies to assist teachers in meeting the needs of all students.

- Differentiated Instruction
- Mentoring
- Teaching with Single Gender Groups
- Active Learning
- Reading Instruction
  - Think-Aloud
  - Literature Circles
- Writing Engagement
  - Comic Books
  - Graphic Organizers
- Cross-curricular Strategies



## Differentiated Instruction

Differentiated instruction is based on the philosophy that all students can learn and that each learner is unique (Tomlinson, 1999). Effective teaching methods and strategies, such as flexible grouping, learning centres, mentoring, cooperative learning and multiple intelligences, are used commonly in the differentiated classroom to build on the strengths, interests, and learning styles of students. Differentiated classrooms are proactive, student-centered, and use a combination of whole-class, small group and individual instruction. Additionally, students are provided with choices in the ways in which they show what they have learned.

According to Carol Ann Tomlinson, teachers can differentiate the content (what students need to know), the process (how the students make sense of the content), and/or the product (how students show what they have learned) in response to students' readiness, interests and learning profile.

“At its most basic level, differentiating instruction means “shaking up” what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn. In other words, a differentiated classroom provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively.”

(Tomlinson, 2001, p.1).

With the increased emphasis on improving student learning, it is important that teachers become aware of ways to differentiate learning within their classrooms (Hawkes, 2001). Incorporating interests, prior knowledge, and learning styles of students within the teaching and learning environment allows teachers to better meet student needs.

Additionally, acknowledging and responding to gender differences improves the classroom learning environment and enhances the learning process for students.

For example, schools might offer an array of technology options, which tends to have good success at engaging boys in the learning process (Taylor and Lormiar, 2003). Interventions that incorporate group work and real-life applications are beneficial for both boys and girls. Building links between what students are reading and learning to their own lives helps create a framework for learning (Smith and Wilhelm, 2002).

When teachers incorporate students' interests and/or learning profiles in their lesson design, students are more likely to connect with learning and reach their learning potential (Gregory and Chapman, 2002).

*Differentiation has been a focus in our district and I have found, in my work with boys, that the aforementioned strategies are valuable and support the brain research and learning needs of boys.*

District Resource Teacher



## Mentoring

Another strategy to help students succeed in school is mentoring. Research indicates that mentoring relationships improve motivation and academics. Many boys do not have male readers and writers as role models in their lives. Involving role models, whether from within the school or the community, can be an effective strategy in addressing the academic achievement of boys (MacDonald, 2005).

In the *Boys' & Girls' Literacy Project* (Richmond and Miles, 2004), males volunteered as mentors in a school. Their practices included reading aloud and completing literacy response activities with the students in whole class situations.

The male mentors engaged students through active, playful reading, and responses, as they modeled success with literacy. The mentors attempted to bring in the “outside world”, sharing their world view with the children, and establishing relevant purposes for reading. Book selections were based on both the mentors' own interests and the subject the students requested. The study showed that students most often requested books about animals (snakes, bears, etc.).



*Photos used with permission from Richmond and Miles (2004), Boys and Girls' Literacy: Closing the Gap.*

Jon Scieszka, developed a web site (<http://www.guysread.com>) with the goal of motivating young male readers. The web site provides book lists and allows boys to check out recommendations from other GUYS READ “visitors”.

*This year I established a Male Mentor Reading Program. We found out what boys were reading and what they were interested in reading. The goal of the program was to improve the boys' reading skills and to increase interest in reading. Nine men from the community were each paired with two grade 4 boys. The program ran for 3 months and finished with a visit from Lt. Gov. Hermeneglide Chiasson, an author, poet and playwright.*

Elementary School Principal

As a result of the project described in the quote above, suggestions to establish a male mentor reading program are presented:

1. Create a list of men in your community who you could invite to participate in a mentoring program (teachers, dentists, directors of local businesses, lawyers, or retirees).
2. Send letters to the men to explain the program; including a reply form and an addressed stamped envelope.
3. Consider purchasing books to be used for the program.
4. Consult with School District office staff and/or Department of Education staff to identify possible information books.
5. Ask classroom teachers to create a list of students to be involved in the program.
6. Meet with students to complete a survey form about their reading interests.
7. Prepare packages for the volunteer male mentors (i.e., policy forms, police check, articles on boys and literacy).
8. Send a letter to the parents of students invited to participate in the program.
9. Prepare name tags for the boys and the mentors; name tags are kept with the books at the end of each reading time.



Photo provided with permission - School District 6



10. Invite a newspaper reporter to cover the first session and follow-up sessions.
11. Select locations in the school for men to read to the students.
12. During the first three weeks of the program, ask the boys to select books according to their interests. This is done weekly the day before the reading time.
13. At week four, the boys select a novel to continue from week to week along with the book they selected according to their interests.
14. Invite a special visitor to read to the students.

**“We need to model literacy as parents and teachers, especially with male role models. We can do this by sharing materials and experiences from our own lives as readers and writers. We can also demonstrate techniques and strategies for boys so that they can continue to grow as literate beings.”**

**David Booth (2002).  
*Even Hockey Players Read*, p. 18.**



# Reading Mentorship Program Begins At School

By Trudy Kelly Forsythe

**H**AMPTON—Businessmen from the community are stepping up to the library bookshelves at Hampton Elementary School to take part in the school's new reading mentorship program.

Thursday, from 8:30-9 a.m., nine men from the Hampton area each paired up with two Grade 4 boys. After the boys selected the books that interested them, they listened to the men read aloud and together they discussed the books and reading in general.

Joan McFarlane, a Grade 5 teacher at Hampton Elementary School and coordinator of the project, said the goals are to improve the boys' reading skills or to increase their interest in reading.

The Grade 4 teachers had the responsibility of selecting the boys for the project.

"The top two considerations were low reading levels and low interest in reading," said McFarlane, explaining one boy's

reading levels were fine but he had no interest in reading. "He could go much further if his interest is aroused."

In preparation for the project, McFarlane said they found out what the boys were reading and what they were interested in reading. The elementary school provided funds for books McFarlane purchased especially for the program and School District 6 also supplied books.

"They are highly informational books as opposed to novels, because it's been proven boys like the concrete information," said McFarlane. "They like facts and trivia as opposed to made up stuff."

"School libraries are filled with novels which boys don't like so they don't read," she continued. "They like science, geography and sports."

Terry MacNeill, administrator at Dr. V.A. Snow Centre, said one of the reasons he got involved in the program was to model community involvement.

"Being in what some people

would consider a leadership role in the community, I think it's important to role model community participation," said MacNeill. "More importantly to the younger kids and especially the boys, it's important for me to provide some type of a role model of how people and men need to be responsible and respectful and demonstrate those behaviours and attitudes

in ways of community involvement.

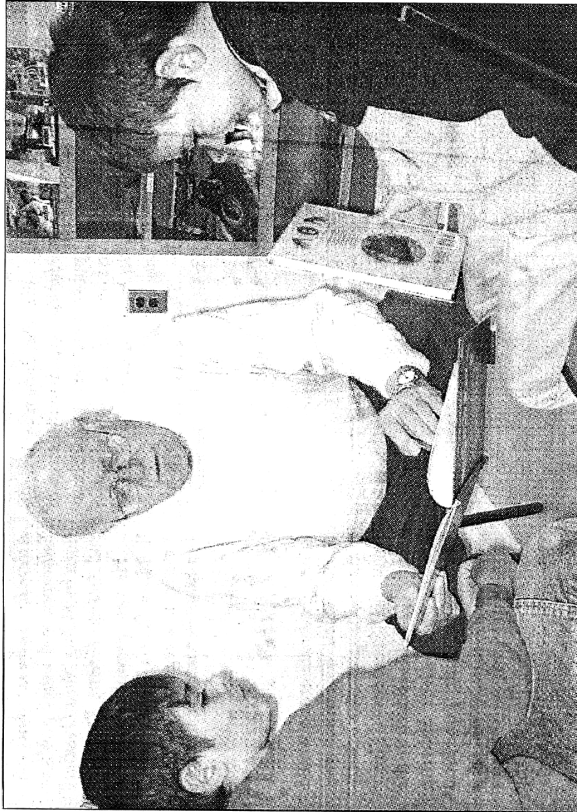
"I'm a firm believer in being person and community-focused so I think part of our responsibility, especially if we hold lead-

ership positions in the community, is to give back and demonstrate to others that these sorts of things are important."

Lawyer Larry Veniot agreed. "I think it's important when the school calls upon the community that the community respond because of the scarce resources available and the importance of the education for the young people," said Veniot.

The reading mentorship program is just one facet of a provincial study group on males and literacy. The group is also developing a handbook for teachers that will include suggestions and recommendations for boys at all levels for reading and writing to increase their literacy scores and interest in reading. This project could become part of that handbook.

"By developing this project in this school, if we're successful, guidelines and strategies to implement the program will be shared with other schools in the province," said McFarlane. The program will last approximately three months and take place every Thursday morning.



Mayor Jim Hovey (centre) reads to Nic McInns (left) and Dominic Lechapelle (right) as part of Hampton Elementary School's new reading mentor program.

Kelly Forsythe / KCR



## Teaching Single-Gender Groups

Single-gender classes, groupings, and clubs are other intervention strategies that can be explored to assist in narrowing the achievement gap. It is important to remember that this strategy requires carefully targeted groups, specific teaching approaches, dedicated staff, and goals.

With single-gender groups, certain stresses can be removed from the learning environment, such as competition between the genders. Separating students by gender allows both boys and girls to feel more at ease, resulting in enhanced learning (Gurian, 2001). Single-gender groups can be used for games, project work, preparing reports, book clubs, interest activities, or discussions (Sax, 2005).

*This year (January 2005) I started a project in my school with 6 physical education classes at K-2. For one month we taught gender specific classes. The primary teachers also taught gender specific classes (math, and language arts activities). The goals were the same but the tasks were accomplished in different ways. The primary teachers wrote observations and verbal feedback was obtained from our students. Next year we will expand the project to other subjects; the interest is there at the school.*

*Vice-principal, Elementary School*

In the above experiment with single-gender classes at the elementary level (K-2), the following comments were reported by teachers: “The girl groups were quieter; however, both groups accomplished the same amount of work – but differently.” It was also noted, during a math class session involving the use of tangrams, “the boys ‘saw’ how the tangrams went together, much quicker than the girls ... the boys made their patterns quicker and with better accuracy.”

**“Each of these elements has created success in coeducational settings and does not require single-gender settings, but their benefits are often very observable when there are only boys in the room.**

- **More physical movement occurs.**
- **More stress balls get squeezed in boys’ hands.**
- **More diagrams, graphs, and pictures get used.**
- **More art and music techniques achieve strong academic results.**
- **More boy-friendly books get read.**
- **More men become involved as teachers and as volunteers.”**

**Michael Gurian and Kathy Stevens (2005)  
*The Minds of Boys*, p. 209.**



*The priority of our School Improvement Plan is literacy. We feel it is important to continue a strong focus on strategies for increased competency. Daily, at our middle school, a designated time is set aside for literacy classes. The classes are divided as to gender with flexible grouping by ability.*

*Middle School Principal*

To focus on increasing student competency, teachers grouped students in single-gender classes for literacy instruction. Below are examples, with observations, of middle level literacy strategies used in single-gender groupings at a New Brunswick school during the 2004-2005 school year.

For the boys' group – A variety of reading materials for silent reading was used (fiction, non-fiction, magazines...). An increase in the amount of movement was allowed during the class, computers were incorporated, and the type of reading varied. The *Guinness World Records* book for silent reading was very popular as well as the collection of Archie comics. *Scrabble* was used as an activity with the boys.

It was found that the boys became particularly engaged in activities involving physical movement (e.g., board work by students, classroom presentations). The boys enjoyed working in groups; they liked listening to funny songs and stories as warm-up activities. The boys thrived on movement and frequent changes of activities. They liked to connect things to their own experiences.

For writing activities, the boys responded well to hands-on artistic activities. They enjoyed making posters, and creating ads. They needed to be shown examples, as many were visual learners.

For the girls' group – The girls studied biographies and historical fiction. A greater emphasis was placed on discussion groups and personal experiences.

It was found that the girls loved to share ideas and answers; they got really involved in questions and discussions on subjects that interested them. They liked to discuss presented topics through sharing personal experiences or those of other family members. As noted by one teacher, "When the girls wrote a story or poem, I, as the teacher, generally tried to do the same task. When their work was shared, I also shared mine. It provided a model for them, it stretched me, and they enjoyed the personal component."

For writing activities, the girls created their own journals, modeling the covers on the Canada Series. They also enjoyed using scrap-booking materials.



## Active Learning

*“Tell me, I forget. Show me, I remember. Involve me, I understand.”*

*Ancient Chinese Proverb*

Active learning activities increase meaning, are highly motivating, and facilitate transfer of knowledge. Reading researcher Jeff Wilhelm (2002) found success for boys can be achieved by incorporating a variety of interactive action strategies. Performance-based readings, readers’ theatres, and “hot seat” are examples of action strategies that combine movement with written tasks. Research (Wolfe, 2001; Gurian, 2003; Wilhelm, 2002) has shown that boys find movement natural so they often like to move around while learning.

Movement for instructional reasons enhances memory for learning. Movement involves more of a student’s brain than does seatwork, since movement accesses multiple memory systems (Jensen, 2001).

Role playing benefits both boys and girls, as movement appeals to boys’ brains and conversations appeal to girls’ brains. The brain grows in relation to its connection with physical activity and natural environments.

There are many ways to engage learners so they are more actively involved in the learning process. According to brain researcher Pat Wolfe (2001), movement and active learning strategies enhance memory and facilitate learning. There are a variety of ways teachers can facilitate meaningful active learning while encouraging students to be involved in the learning process. For example, role-playing, simulations, and encouraging students to think and discuss with partners are ways of engaging students in their learning.

**“Studies indicate that people learn better when they are actively engaged in what they are learning. Students who are listening to a teacher talking or watching a video are passive receivers rather than active participants. When one is “doing,” one is using more of oneself to learn.”**

**Michael Gurian (2003).  
*Boys and Girls Learn Differently*, p. 147.**

**“The most enjoyable and powerful form of assistance and support for reading that the boys identified were activities that involved active, participatory, hands-on response to the reading.”**

**Michael Smith and Jeffrey Wilhelm (2002).  
*Reading Don’t Fix No Chevys*, p. 101.**



Below are some suggestions for incorporating movement into the school day.

**Assign tasks** - Have students hand out papers or run errands (Gurian, 2003).

**Give students something to touch** - Providing students with nerf balls or other manipulatives or allowing them to doodle can assist with students' needs to fidget. If students can keep their hands busy, they are sometimes more attentive (Gurian, 2003).

**Allow movement within a lesson** - Put a continuum (e.g., timeline, number sequence) on the floor and pose questions to the students. Ask them to move to the location of their answer (Gregory & Chapman, 2002).

**Provide stretch breaks with an energizer partner** - Ask students to select or assign them an *energizer partner*, another student in the class who sits at a distance. Both students are provided with opportunities to stand and meet with one another to discuss any assigned task like re-teaching a concept just taught by the teacher (Gregory & Chapman, 2002).

**Try action songs and games** - Activities where children are actively participating are engaging to young children, strengthening their attention span and tapping into multiple intelligences.

**Add simulations** - Recreating concepts to demonstrate understanding helps to increase motivation, to improve communication, to explore issues, and to enhance understanding of concepts.

In science, to demonstrate an understanding of the rotation of the planets and their revolution around the sun, have students work in groups of ten; one student symbolizes the sun while the other nine revolve around it and rotate on their axis simultaneously (Tate, 2003).

In music, to demonstrate the notes on the treble clef, ask students to sit in chairs that represent the lines (EGBDF) on the treble clef; other students stand in spaces between the chairs to represent the spaces (FACE) on the treble clef. When a note is called out or played on an instrument, students stand (if seated) or squat (if standing) when the note played corresponds to their position on the scale (Tate, 2003).

**Build in dramas, pantomimes, role-plays and charades** - These strategies take information (e.g., words, facts, and numbers) and link them with movement, placing the information in more than one memory pathway. Difficult concepts often become easier for students to understand when students are actively engaged by representing the concept being taught (Wilhelm, 2003).



## Reading Instruction

The attainment of strong reading skills is fundamental to one's educational success and personal fulfillment. Without the ability to read and understand the written word, doors are often closed to many opportunities. For this reason, it is important that teachers of all subjects, at all grade levels, work collaboratively to support students in furthering their literacy development. The teaching of reading should not be the sole responsibility of the teachers of English language arts, but rather a shared responsibility of teachers across subject areas (Neufeld, 2005).

Numerous research studies have shown that students benefit from explicit instruction in comprehension strategies used by proficient readers. Duke and Pearson (2002, p. 207) stress that "good comprehension instruction includes both explicit instruction in specific comprehension strategies and a great deal of time and opportunity for actual reading, writing and discussion of text." No matter what the subject area, direct instruction in reading strategies helps students to connect with content in a meaningful way. Ultimately, students understand more and retain more.

When presenting comprehension strategies for students to use, it is valuable to consider the following three-step process:

1. **Teach** – give explicit instruction in what the strategy is, why and when it is used, and how to effectively use it.
2. **Model** – model use of the strategy, utilizing the process of "think-aloud," where appropriate.
3. **Practise** – provide several opportunities for students to practise use of the strategy.

Further instructional strategies can be found in the document *Cross-Curricular Reading Tools for the Young Adolescent*, being developed and published through CAMET (Council of Atlantic Ministers for Education and Training).

The think-aloud technique, utilized to present strategies, is applicable to most subjects and grade levels. "Think-aloud involves making one's thoughts audible and, usually, public – saying what you are thinking while you are performing a task (Duke and Pearson, 2002, p. 214). Since boys respond better to explicit instruction, the "think-aloud" strategy is ideal for modeling the thought processes unconsciously used by effective readers.



## Reading – Think Aloud

### General Comprehension Strategy Explained ...

Reading Tool	Connection to what skilled readers do:
Think-Aloud	<ul style="list-style-type: none"><li>✓ visualize/make images in their minds</li><li>✓ make and confirm predictions</li><li>✓ summarize</li><li>✓ develop critical questions and comments</li><li>✓ connect to prior knowledge</li><li>✓ monitor understanding and use fix-up strategies when needed</li><li>✓ identify main ideas</li><li>✓ make inferences/assumptions</li></ul>

During a think-aloud teachers verbalize their thoughts as they read either fiction or non-fiction and students follow along silently, listening to the thought processes. Think-aloud is a valuable technique to model the multiple strategies effective readers use constantly to construct meaning.

The teacher models the thinking process skilled readers use while reading text. (Hint: it is easier to model the strategies of skilled readers if you **ARE** actually reading information you find a bit challenging to comprehend. Find a text on the Internet about a topic that is unfamiliar to you [e.g., nuclear physics, philosophy] and use it in a read aloud situation.)

Prior to reading aloud to the class, preview the material and develop questions that you will say to yourself as you read.

Read the text, verbalizing the thinking processes you use to comprehend. Identify comprehension challenges and model strategies and ways to think through these problems.

Example of verbalizing the thinking processes:

- *From this subtitle, I predict this section will tell how fishermen used to catch whales.*
- *I have a picture of this scene in my head. I can see the boat with men leaning over the edge with spear-like weapons.*





- *I have never seen this word before – I'll try to sound it out and see if I can understand the meaning from the rest of the sentence. Can I sound it out? Yes, I think I've said it correctly, based on how it looks, but I still don't understand it. Maybe if I read ahead it will make sense to me, or maybe I should reread the whole paragraph.*
- *I have heard this before! Now what have I heard? If I can remember, it might help me understand.*
- *This is like the time we went deep sea fishing and the waves were so high!*
- *Let me see if I can think of one sentence that would summarize what the author has said in this paragraph.*
- *From what's been written so far, I bet I'm about to read ...*
- *What did that last paragraph mean? I'd better read it again to see if I can figure out what the author is trying to say and I'd better change my picture of the story because I didn't know it was really stormy when I read the first part.*
- *I know all the words in this sentence, but I still don't understand it! I'll reread and see if any of the words might have another meaning that would help me to make sense of the paragraph.*
- *I don't agree with this part! I'll look up information later to see who's right.*

Invite students to practise think-alouds by reading short passages with partners. Repeat this modeling process until students are familiar with these meta-comprehension skills. "Students who are to think and talk about the strategies they use are better able to draw from their own resources to problem-solve as they encounter difficulties in their reading – *thinking about their thinking* as they go about a task"(Braunger and Lewis,2006).

Dr. Kylene Beers, author of *When Kids Can't Read, What Teachers Can Do*, suggests bookmarks to use during the think-aloud activity. The bookmarks identify the following six strategies: to remember, identify the problem, fix the problem, predict what will happen next, make comparisons, and make comments.

Think-aloud strategies assists students in their reading as they make predictions, compare and contrast events, verbalize information, and make connections to prior knowledge, throughout all grade levels.



## Using Fix-up Word Strategies to Understand Difficult Words

<b>Sound out the word.</b>	Use phonics (letter sounds) to pronounce the word.
<b>Take the word apart.</b>	Briefly examine the word parts. Find the root if you can. Take away the prefix. Take away the suffix.
<b>Take a guess.</b>	Pronounce the word as best you can.
<b>Read ahead to the end of the sentence.</b>	Read the rest of the sentence and see whether your word makes sense.
<b>Reread.</b>	If your word guess does not make sense, reread the sentence and guess again. If you are close, the actual meaning of the word will become obvious.
<b>Read on.</b>	Read ahead. Often the meaning of the word becomes clear when you do this. NOTE: You may skip the word if you do not need it to understand the meaning of the text.
<b>Seek help.</b>	If the word is important and you cannot figure it out: <ul style="list-style-type: none"><li>• look it up in the dictionary—a sure thing</li><li>• ask someone who may know the word.</li><li>• look at the word wall in your classroom</li></ul>

Adapted from: *Cross –Curricular Reading Tools*, CAMET 2006.

***At the elementary level, the following observations were noted by teachers after using the think-aloud strategy.***

Using the book *Offers* (from the Sailing Solo Series – Harcourt) it was observed that both boys and girls were enthusiastic about the story. One boy in particular was very vocal about the subject.

With the book, *Food from Water* (from the Sailing Solo Series – Harcourt), there were lots of responses from boys and opportunities to develop vocabulary. The boys loved the pictures and had lots of questions about the animals.



## Reading – Graphic Organizers

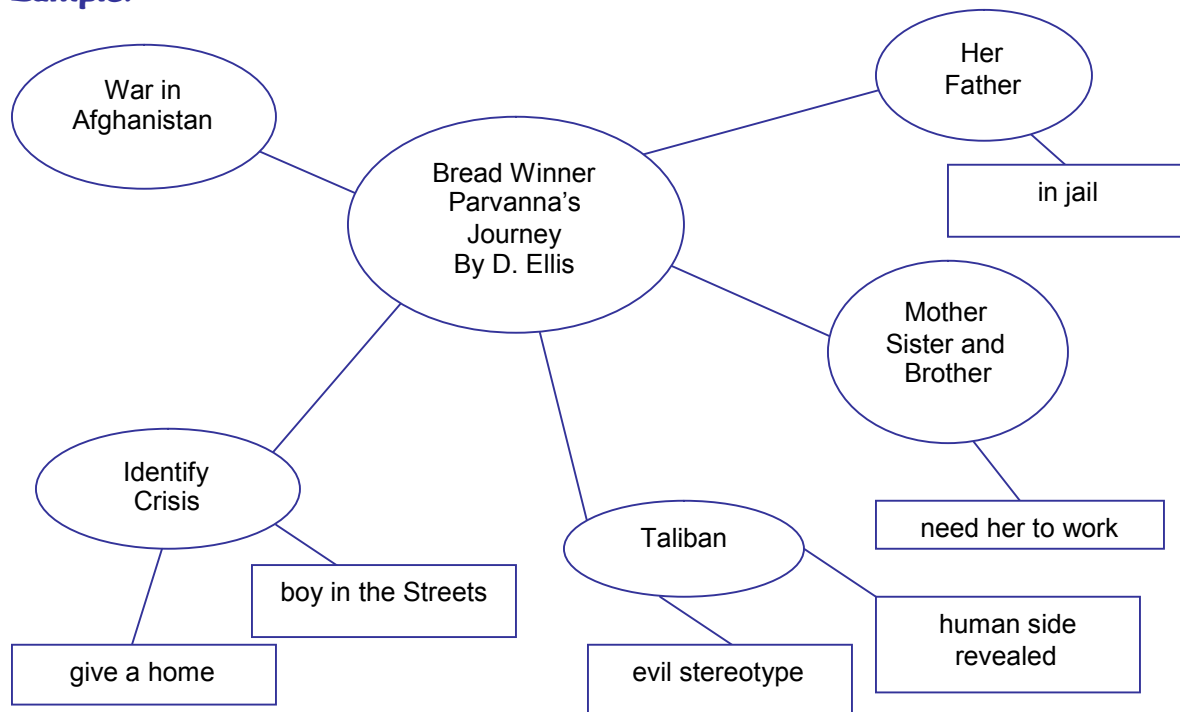
The need to strengthen reading instruction is pertinent to all students, but perhaps even more so for boys (PISA, Dropout Stats). Boys tend to be right-brain dominant and as the right brain functions in a manner more visual/spatial than the verbal, left-brain hemisphere, boys often respond more positively to spatially-organized information (Gurian, 2001). For this reason, instruction in the use of reading strategies that include graphic organizers can assist boys in comprehending and retaining what they read.

Graphic organizers help students search for patterns to make sense of information. For examples: the KWL (what I **K**now, what I **W**ant to know, and what I **L**earned) chart is very helpful for building vocabulary and enhancing comprehension.

Another example is the use of concept maps. They are flexible and can be simple, detailed, linear, or hierarchical, and can be used throughout a lesson. They are helpful for brainstorming and exploring topics in a variety of perspectives. Likewise they assist students with the organization of information and help students expand and apply their knowledge.

Concept maps generally display a main theme or idea, key words or symbols, words that connect, and links that show relationships.

### Sample:



Additional graphic organizers can be found at: <http://curry.edschool.virginia.edu/go/readquest/strat/>



## Reading – Literature Circles

**“If we start helping boys find materials they will want to read, they just might surprise us and start reading. They just might find out that reading is for guys too.”**

**Jon Scieska**

Literature circles are a literacy strategy where students engage in meaningful discussion of texts, either fiction or non-fiction. Small groups of students are formed based on book selections. The literature circle process is designed to be student led. Each group of students is responsible for designating how much will be read for each literature circle session, preparing for a discussion, and engaging in a discussion after each section of text is read.

Literature circles are a literacy strategy that can be implemented across the grade levels within all subject areas. The *Atlantic Canada English Language Arts Curriculum* documents frequently refer to literature circles as an appropriate strategy to address the speaking and listening, reading and viewing, and writing and representing outcomes. Literature circles provide students with purposeful and meaningful literacy opportunities by:

- giving students choice in what they read;
- offering a range of literature from which students may select;
- providing large blocks of time for students to read independently or with the support of a small group;
- making personal connections to the text;
- responding personally to a range of texts;
- communicating information and ideas effectively and clearly;
- developing comprehension skills;
- developing critical literacy skills by formulating questions as well as understandings, acknowledging and identifying different points of view;
- supporting opinions and point of view with details from the text and personal experiences;
- exploring and extending vocabulary/word meaning/knowledge of the author’s craft/literary elements;
- developing skills for summarizing;
- providing opportunities to represent understanding of a text creatively and artistically;
- developing presentation skills; and
- engaging students in self-assessment.



## The Literature Circle Framework

The ultimate goal of literature circles is for students to engage in *grand conversations*. This form of conversation should not be expected to happen naturally. Students first need to become familiar with the framework and process of literature circles. Daniels (2002) suggests that role sheets provide a scaffold or initial support structure for peer-led discussions. Campbell Hill, Johnson & Schlick Noe (1995) are advocates of students completing response log entries to focus their discussions. However, Daniels (2002) acknowledges that once students become familiar and comfortable with the framework, role sheets should be abandoned in favour of response logs.

The main components of the literature circle discussion framework include:

- asking and responding to open-ended questions based on the reading to confirm and clarify their understanding, share their opinions, make predictions;
- identifying vocabulary/phrases/sections of text to explore the meanings of words/phrases/sentences, pronunciation of words, discussing the author's craft, and/or literary elements;
- presenting a summary of the reading;
- discussing an artistic representation of their understanding; and
- sharing their personal connections to the text.

Other discussion elements may be included as students become comfortable with the framework.

Short group projects and presentations provide each group of students with an opportunity to share their selected reading with the class and provide closure for the group. These presentations can take a variety of forms. Some examples of possible projects include dramatizations, readers' theatre presentations, dioramas, posters to advertise the text, reviews, collages, interviews, poems, news broadcasts, puppet shows, board games, research on the time period, CD covers, and recommendations.

## The Literature Circle Process

- Students select text choices and submit them to the teacher.
- Groups are organized based on text selection.
- Initial group meeting: students make decisions on how much they will read for each literature circle session; how they will read (independently, in partners, as a group); begin reading and prepare for the discussion.
- Subsequent group meetings: discuss, read, and prepare for the next discussion.
- Final group meetings: prepare for presentation; make presentation to class.



## The Role of the Teacher in Literature Circles

- Collect multiple copies of novels, short stories, articles, non-fiction texts (optimal group size is 4-5 students).
- Model the framework and process.
- Introduce the texts offered through book talks.
- Make a schedule; select a start and end date for completion of the text; schedule a block of time for each literature circle.
- Facilitate groups; sit in on different groups as an observer.
- Provide feedback on group cooperation, discussions, and main components.
- Assess progress: teacher evaluation and student/group self-evaluation (rubrics, observation notes, anecdotal records, role sheets/response logs, presentations).
- Be patient: Literature circles evolve over time.

## Assigned Roles and Tasks

- The *Discussion Director's* role is to develop a list of questions for the group to discuss. The focus should be on the big ideas of the reading. The questions developed should make others think carefully about what they read.
- The *Illustrator* draws sketches or charts, creates a cartoon, or finds a visual that captures the essence of the assigned reading. The representation should fit with the reading and generate discussion for the group.
- The *Connector* shows how the selection connects the reader's life beyond the assignment, for example, another book that was read, an event, a show, something happening at school or in the community, or other similar events at other times.
- The *Passage Master's* role is to discover interesting, humorous, or puzzling passages in the reading. Then you decide how to bring these to the attention of the group. They may reread the section or you may have them read together or you may read the section to the group.
- The *Summarizer* tells the main things that have happened in the reading. Group members may add to the points made. This can be presented as a reflective journal entry.



## Literature Circles as a Strategy to Engage Boys

Recent research suggests that literature circles are an appropriate strategy to engage boys in literacy. Resources such as *Even Hockey Players Read: Boys, Literacy and Learning* (Booth, 2002) and *Boys' and Girls' Literacy: Closing the Gap* (Richmond and Miles, 2004), featuring research conducted in New Brunswick; present the benefits of this literacy strategy for boys. Similar to literature circles, “boy book clubs” are another strategy to engage boys in the reading process.



## Writing Engagement

Writing can become interactive and engaging for students, with creativity and enthusiasm. In *Reading, Writing, and Gender*, Goldberg and Roswell (2002) present activities that provide students with opportunities to respond to text and talk about text in a variety of ways. One such activity is “*Rave Reviews and Book Boos*”. This activity offers students a creative way to share their opinions of a book they have read by writing reviews to explain why they did or did not like the book. Responses are supported with opinions in a rave review column or book “boo” column.

Boys often become more engaged in the writing process when it is part of an activity. For example, link the writing to a role play or a purpose. Ask students to write the instructions of how to get home from, or go to, school. Build on experiences at school and at home. Encourage writing with a variety of materials, from writing in sand, writing with finger paints, or using smart boards. Wordless picture books can often provide students with writing ideas.

Below are other approaches to help students maximize their writing potential.

### Writers’ Workshop:

Writers’ workshop connects reading, writing, and literature. Throughout the workshop, basic skills are supported and the writing process is emphasized for instruction in grammar, spelling, punctuation, organization, and style.

**Visit:** [http://www.saskschools.ca/curr\\_content/bestpractice/writer/index.html](http://www.saskschools.ca/curr_content/bestpractice/writer/index.html)

### Six Traits of Writing:

The model incorporates the six key traits of successful writers into an instructional framework that allows students and teachers to focus on a single trait. With the writing process as the foundation, concentration on the specific traits of writing through the different forms results in improved writing performance. For additional information on the six traits of writing, read *6 + 1 Traits of Reading* by Ruth Culham (Scholastic, 2003) or *Books, Lessons, Ideas for Teaching the Six Traits: Writing in the Elementary and Middle Grades* by Vicki Spandel (2001).

**Also visit:** <http://www.nwrel.org/assessment/toolkit98/traits/index.html>





## R.A.F.T. (Role, Audience, Format, Topic)

Through writing practice and information processing, R.A.F.T is motivational and encourages creative writing. Students write from a particular viewpoint, to a specified audience, in a chosen format, to respond to a given topic, with a strong verb.

Visit: <http://olc.spsd.sk.ca/DE/PD/instr/strats/raft/>

Example:

Role	Audience	Format	Topic
Grade 4 student	Next year's teacher	Poem	Reading Interests



There are two basic types of motorcycles. One type is made for riding on smooth surfaces like roads or paved race tracks. These motorcycles are called road bikes. They are heavier, faster, and powerier than off-road bikes. Off-road motorcycles or dirt bikes are lighter than road bikes and they handle rough terrain like dirt, mud and rocks. My favorite kind of road bike in the world is a Harley Davidson.

“Providing students with “choices” gives them opportunities and impetus to build on their strengths in order to take some new risks, venture into new territory, and expand their writing repertoires.”

Goldberg and Roswell (2002).  
*Reading, Writing, and Gender*, p. 126.



## Writing – Comic Books

**“A boy’s day is like a comic strip, full of conquest and bravado. Every boy is a superhero. But ask most boys and they’ll say they’d rather live the adventure than read about it. I used to think it’s uncool but now I just read books. And on my list in my brain it’s a cool thing to do.”**

**From: In-depth Gender Gap – Boy’s Own Story – Susan Ormiston  
November 25, 2003. CBC**

Dr. Heather Richmond, a literacy researcher from Atlantic Canada, has worked on literacy projects that create interest, have a purpose, and challenge students to engage in the reading and writing process. Recently, she has worked on a writing literacy project involving the comic book format. The overarching goal of the research is to connect everyday literacy interests with school literacy. The project sets out to develop purposeful ways of doing literacy in school (Wilhelm, 2000). This includes providing academic support (Bitz, 2000) for students struggling with in-school literacy. A further objective is to explore student interests by examining the stories and themes chosen.

The preliminary results reveal that the comic book may be considered an everyday form of new literacy (Hamilton & Barton, 2000; Willinsky, 1999). The in-school practice connects adolescents to literacy through a process of visual arts resulting in the creation of a product. The stories and themes, including bullying, smoking, cultural diversity, and travel/adventure, inform teachers of student interests and enables literacy growth.

*Middle school literacy: Comic Relief* has been launched in a course for pre-service teachers at St. Thomas University. The comic writing project began with university students in the fall of 2004. The students developed story ideas, drafted, drew, revised and edited their own comic panels. The pre-service teachers are then taking this idea to the schools during their teaching practice. (See samples that follow.)



# Comic Strip Sample

Reprinted with permission.



## Writing – Graphic Organizers

Marzano (2001), in *Classroom Instruction That Works*, states that “Graphic organizers are perhaps the most common way to help students generate non-linguistic representations.” (p. 75.) Graphic organizers are visual representations of information and can serve as a helpful tool in any content area. They are a beneficial aid in enhancing the development and organization of content.

Incorporating the use of graphic organizers is often beneficial for all students; in particular, for reluctant writers or students who are strong visual learners. Graphic organizers often assist in early phases of the writing process by helping students generate ideas. For example, in prewriting activities, Venn diagrams enable students to organize similarities and differences visually prior to writing a compare and contrast essay. Also, through illustrations with story boards, students recall major events of a story and illustrate them in the squares provided on the board. For boys especially, these graphic organizers are effective as they appeal to a boy’s desire to make more use of pictures and graphics. They often serve as a springboard to writing.

**Story maps** — Story maps are sometimes used by students as one way of conveying information learned. Students provide written responses in a story frame to display their understanding of the story plot. Story maps can be used for book chapters or for an entire book.

Story Map - Example	
Title:	The Hidden by M. Peterson
Setting:	Future World
Characters:	Boy Family Neighbours
Problem:	Families are only allowed to have two children.
Event 1	We meet the protagonist - hidden from outside world
Event 2	He meets another third child
Solution	To fight against the Government Restriction



## General Strategies Across All Curricular Areas

Ideas to assist teachers in making learning more engaging for both boys and girls



- providing materials across genres that reflect boys' and girls' interests and preferred learning styles
- incorporating teaching strategies that accommodate the different learning styles of boys and girls
- choosing reading materials with varying readability levels
- extending reading development strategies from the early grades across all grades and subject areas (e.g., a variety of reading materials for all students)
- encouraging reading for purpose
- using the newspaper: Newspapers provide a vehicle to the real world, enriching vocabulary and conversation, and motivating boys and girls
- collaborating with language arts teachers to identify books of interest
- making use of instructional strategies to motivate and interest both boys and girls
- clarifying with students the different organizational and presentation forms (e.g., non-fiction – mathematics text, history text, or science text)



- utilizing graphic organizers and stressing how they connect information
- continuing to read aloud to students throughout all grades and emphasizing to parents the importance of reading aloud to their children
- stressing how students' home reading, especially in information text, can be used to encourage and develop more effective reading strategies, increase reading comprehension, and promote a greater enjoyment of reading



- recognizing the strong connection between literacy and the use of technology as a means to engage boys and girls in reading, writing, and visual literacy
- incorporating choice in classroom texts, assignments, and projects
- offering more discussion, role play, and story telling
- providing models and frameworks to support different kinds of writing
- offering some student choice and control over what students read
- providing greater wait time for students to respond to questions
- using “walk around” quizzes that allow students to move to different areas of the classroom to complete work



- introducing positive male role models (e.g., inviting male authors to conduct readings)
- integrating literacy across the curriculum

A good resource for teachers of “Best Practices” can be found at [http://www.saskschools.ca/curr\\_content/bestpractice/index.html](http://www.saskschools.ca/curr_content/bestpractice/index.html). This site presents instructional strategies to encourage active, student-centered learning.

For educators, it is important to reflect on both how you teach and the strategies that work well for both boys and girls. According to Barbara Bodkin (2004), the “differences among boys are greater than the differences between girls and boys, and indeed many strategies which might be promising for raising the achievement of boys, in fact, are strong and effective practices for all students.” Educators who apply what they know about learning and student needs in a comprehensive approach will enhance the learning for all.

“There is clearly no single cause for boys’ relative under-achievement in education, nor is there a simple solution.” (*Boys Getting It Right: report on the inquiry into the education of boys, 2002, Australia*).

*In my position as a Resource teacher, I use the research about language acquisition in boys and emphasize “boy books” whenever possible.*

*Resource Teacher*

*I learned the latest research on differences/similarities on gender issues. This has affected my teaching. I set up a study group (12 teachers) with the goal to increase comprehension through the **Think Aloud** strategy. Results have shown evidence of the modeling technique showing up in student’s work (boys more so than girls).*

*Elementary Supervisor*

*I use the knowledge I’ve learned in studying how boys and girls learn, when I plan my lessons for my grade 4 class. I make an effort to think more consciously about how the boys will respond to the activities, and the reading material. I now have available more varied selections for **free choice reading**. (e.g. National Geographic for kids’ magazines, Guinness World Records). I also realize the need for more “boy friendly books’ for our school.*

*Grade 4 Teacher*

*In my science classroom, I have looked at my lesson planning with greater awareness. As a result, I have created more movement, incorporated the interests of the students, and looked at clarifying the language. This has had an impact on discipline issues in the class.*

*Grade 10 Science Teacher*





# **Resources That Work**

## What Books Do Boys Like to Read?

**“Creating classroom environments in which successful reading is the norm – for all children – will mean creating classrooms in which children are well matched to the books they are reading. One-size-fits-all curriculum plans, expecting every child to read the same books, cannot produce a consistent pattern of successful reading.”**

**Richard Allington and Anne McGill-Franzen (2003).**

Reading selections of boys often differ from those of girls. While girls frequently prefer fiction, boys commonly prefer non-fiction. While girls like books that provide them with an opportunity to be analytical of characters, create emotion, and examine relationships, boys often become engaged in books that contain action, descriptions of events, and illustrations of the way things work (Jobe, 2002).

Research has provided us with the following insights:

- Boys have much less interest in leisure reading than girls.
- Boys are more inclined to read informational texts.
- Boys are more inclined to read magazine and newspaper articles.
- Boys are more inclined to read comic books and graphic novels than girls.
- Boys like to read about hobbies, sports, and things they do or want to do.
- Boys tend to enjoy escapism and humour.
- Boys don't comprehend narrative (fiction) as well as girls.
- Some groups of boys are passionate about science fiction or fantasy.
- The appearance of a book and cover is important to boys

*(Teacher Librarian, Volume 30, February 2003)*

To encourage and foster reading among boys, we must expand the definition of reading, going beyond the traditional school emphasis on literary fiction to include humour, non-fiction, magazines, comics, adult mass market, and the like. If we are going to keep boys excited about books and reading, we have to make sure that we have books that boys want to read; stories with action and suspense, novels with interesting young males as central characters, and non-fiction that meets their needs and interests. Allow boys (and girls too!) to read what they love to read, and to read for the love of reading. Keep in mind the following:

- “... you can't fall in love with books that someone stuffs down your throat.”  
(Daniels, 1994)
- “... it looks as though school, no matter the age or nation, has had only one role. And that's to teach the mastery of technique and critical commentary and to cut off spontaneous contact with books by discouraging the pleasure of reading.”  
(Pennac, 1999)
- “...fear of not understanding, fear of the wrong answer, fear of the reading police ... fear smears the sentences of the books and drowns the meaning in details.”  
(Pennac, 1999)



Above all, we wish to encourage and support reading for our students.

One avenue to determine what boys most like to read is ... to ask them!! Reading interest inventories are ideal for discovering what reading most interests the students in your class, both boys and girls. A simple questionnaire, incorporating queries such as the following, will help you to determine what books and forms of text might appeal to each student.

**Information Books:** Many boys believe that fiction is not relevant to their lives, preferring to read information books that provide facts related to topics of interest to them. As there are an overwhelming number of information books available, it is vital to select those of high quality. Most importantly, information should be clearly presented, current, and accurate. An index is essential as are illustrations, photos which enhance and extend the text. Small chunks of text that can be read in a random order and detailed photographs and illustrations are preferred.

This is what might be considered when looking for books for boys: look for books with lists; look for books with facts; look for books about the sciences; look for books with action; look for books with humor; if the book grosses out a girl, a boy will probably find it engrossing.

The following are examples ([www.nbs.com](http://www.nbs.com)) of quality information books for boys of almost any age:

- *Guinness World Records*
- *Ripley's Believe It or Not!*
- *The Way Things Work*
- Eyewitness Books
- Eyewitness Visual Dictionaries
- *The World Almanac for Kids 200 ...*
- *The World Almanac and Book of Facts 200...*
- *The Coolest Cross-Sections Ever!* by Richard Platt
- *Steven Biesty's Incredible Explosions: Exploded Views of Astonishing Things* by Richard Platt
- *You Asked For It! Strange But True Answers to 99 Wacky Questions* by Marg Meikle
- *What? What? What? Astounding, Weird, Wonderful and Just Plain Unbelievable Facts* by Lyn Thomas
- *Uncle John's Bathroom Reader(s)* by The Bathroom Readers' Institute
- *Boys Who Rocked the World: From King Tut to Tiger Woods* by Beyond Words Publishing (Editor)

### Sample Interest Inventory Questions:

- What is the best book ever read to you?
- What is the best book you ever read?
- Do you most enjoy books with stories or books with information?
- What are your favourite magazines?
- What are your favourite web sites?
- What are your favourite hobbies?
- What are your favourite movies?
- What are your favourite television shows?
- What are your favourite subjects in school?
- What are your favourite pets?
- What are your favourite sports?
- Where would you go and what would you do if you could go on your fantasy vacation?

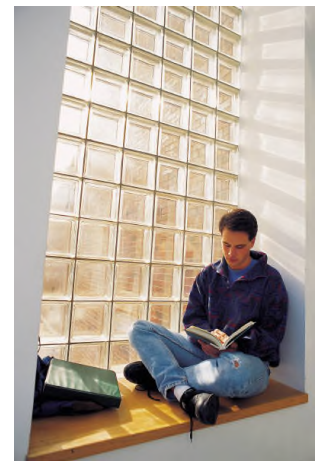




In addition, young boys often develop an intense interest in one subject – sports, dinosaurs, animals, bugs, outer space, etc. Such curiosity should be encouraged and appropriate reading materials provided to allow for extensive reading in the area of interest. The fact that an individual's reading is somewhat narrowed at this point is not a concern as it will broaden as interests change (Routman, 1994). What is of paramount importance is to encourage reading.

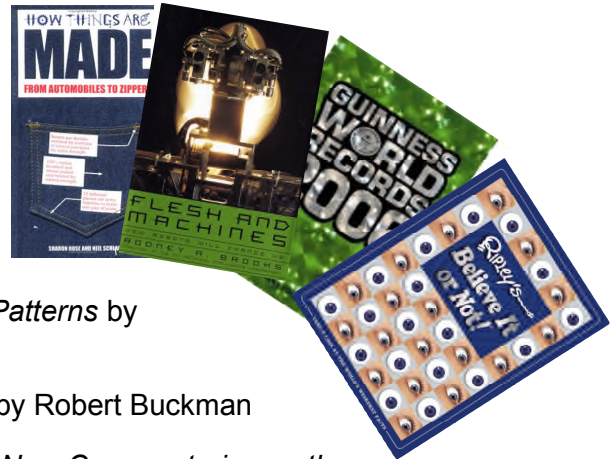
Older boys, who prefer information texts, also may concentrate on specific areas of interest, but usually have more than one focus. There are many series of information books of high quality that appeal to the interest areas of older readers. For example:

- Issues in Focus Series – e.g. *Human Genome Project*
- 100 Series – e.g. *One Hundred Scientists Who Shaped World History*
- People Who Changed the World Series – e.g. *100 Scientists Who Changed the World*
- People Who Made History Series – e.g. *Galileo*
- Out of This World Series – e.g. *The Hubble Space Telescope*
- Living Earth Series – e.g. *Quakes, Eruptions and Other Geologic Cataclysms: Revealing the Earth's Hazards*
- Natural Disaster Series – e.g. *Volcanoes*
- Contemporary Issues Companion Series – e.g. *Cloning*
- Mystery Library Series – e.g. *Bermuda Triangle*
- For Dummies Series – e.g. *Photoshop for Dummies*
- The Idiot's Guide Series – e.g. *The Idiot's Guide to Computer Repair*
- Drugs, the Straight Facts Series – e.g. *Marijuana*



As well, a proliferation of individual information titles on a wide variety of topics exists for older students. A very few examples would include:

- *The Top Ten of Everything* by Russell Ash
- *The Book of Lists For Teens* by Harry Choron and Sandra Choron
- *How Things are Made: From Automobiles to Zippers* by Sharon Rose and Neil Schlager
- *High Tech IDs: From Finger Scans to Voice Patterns* by Salvatore Tocci
- *Human Wild Life: The Life That Lives On Us* by Robert Buckman
- *That's the Way the Cookie Crumbles: 62 All- New Commentaries on the Fascinating Chemistry of Everyday* by Joe Schwarcz
- *Flesh and Machines: How Robots Will Change Us* by Rodney Brooks
- *The Physics of Hockey* by Alain Hache
- *The Coming Storm: The True Causes of Freak Weather- and Why It's Going to Get Worse* by Mark Maslin



**Fiction:** Young boys and girls appreciate an extensive variety of picture books. By upper elementary school (grade 3+), indications of preferences for specific forms and types of stories become apparent among boys. In middle school, these preferences become more distinct and pronounced. By high school, boys as well as girls appreciate a wide range of popular fiction, with boys tending to prefer action, mystery, horror, and the supernatural.

The following (from [www.guysread.com](http://www.guysread.com)) have been **identified by boys as the 'best ten list'** of fiction for boys in upper elementary and middle school:



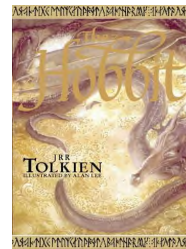
- *Holes* by Louis Sachar
- *Hatchet* by Gary Paulsen
- *Captain Underpants* series by Dav Pilkey
- *Time Warp Trio* series by Jon Scieszka
- *Harry Potter* series by J. K. Rowling
- *Redwall* series by Brian Jacques
- *Maniac McGee, The Loser, The Library Card* by Jerry Spinelli



- Almost everything by Roald Dahl - Votes for *The BFG*, *The Twits*, *James and the Giant Peach*, *Charlie and the Chocolate Factory*, *The Enormous Crocodile*, *George's Marvelous Medicine* . . .
- *The Golden Compass*, *The Subtle Knife*, *The Amber Spyglass* by Philip Pullman
- A Five-Way Tie:  
*A Series of Unfortunate Events* by Lemony Snickett  
*The Watsons Go to Birmingham; Bud, Not Buddy* by Christopher Paul Curtis  
*Babe and Me; Honus and Me; Jackie and Me* by Dan Gutman  
*Monster; Bad Boy* by Walter Dean Myers  
*Joey Pigza Loses Control; Joey Pigza Swallowed the Key* by Jack Gantos

Also receiving many recommendations were:

- *The Lord of the Rings* trilogy by J.R.R. Tolkien
- *The Hobbit* by J.R.R. Tolkien  
*The Giver* by Lois Lowry  
*Skelli, Kit's Wilderness* by David Almond



- *Rats* by Paul Zindel  
*Brian's Winter, The River, Harris and Me* by Gary Paulsen  
*Midnight Magic, Poppy, Poppy and Rye, Nothing But The Truth, The Christmas Rat* by Avi  
*My Side of the Mountain* by Jean Craighead George  
*This Can't Be Happening at MacDonal'd Hall, No More Dead Dogs, Sixth Grade Nickname Game* by Gordon Korman

- All series by Gordon Korman  
*Rats Saw God* by Rob Thomas  
*Ironman, Stotan!* by Chris Crutcher  
*Extreme Elvin, Slot Machine* by Chris Lynch  
*Burger Wuss* by M.T. Anderson



- *Baseball Flyhawk, Catcher with a Glass Arm, The Counterfeit Tackle, Shoot for the Hoop, Skateboard Tough* by Matt Christopher

- All series by Matt Christopher



- *Aliens Ate My Homework, My Teacher Fried My Brains, My Teacher Glows in the Dark, My Teacher is an Alien* by Bruce Coville



Boys of high school age appreciate mass market popular novels. Authors such as Stephen King, John Grisham, Dean Koontz, and Robert Ludlum appeal to many young male readers. Every effort should be made to have current popular fiction available within the classroom and to provide in-class time for reading. Preferably, this reading should occur in a literature circle format, as adolescents greatly benefit from the opportunity to discuss and reflect upon their reading with peers. Independent reading with a 'no-strings-attached' (i.e. no chapter questions, reports or written response required) approach also encourages young males to read fiction for pleasure. We wish to avoid situations which result in the adult male comment that, "...school reading consisted of enforced reading of long, difficult books with extended passages of text that held little interest ..." (Booth, 2002).

In addition, magazines should be considered not only a valid but a valuable reading resource for boys as they provide a source of information reading in a format boys enjoy. There are many high quality magazines available on topics of interest to boys – music, science, computers, electronic games, sports, science fiction, humour, etc. Magazines, at a variety of reading levels, should be available in all classrooms. Often it is possible for subject teachers to find magazines directly related to their subject content. As many textbooks, especially at the high school level, are written at a reading level beyond many of the students' abilities, providing an alternate source of information at a lower reading level is beneficial to the students, as well as to teachers, as they strive to have students gain knowledge within their content area.

Another source of reading which has appeal to male readers of all ages is the Internet. Boys enjoy the interactive aspect, as well as the variety of information available on the Internet. Care must be taken to instruct students in evaluating the validity of sites to ensure they are fully aware that not all information found on the Internet is accurate and/or unbiased.

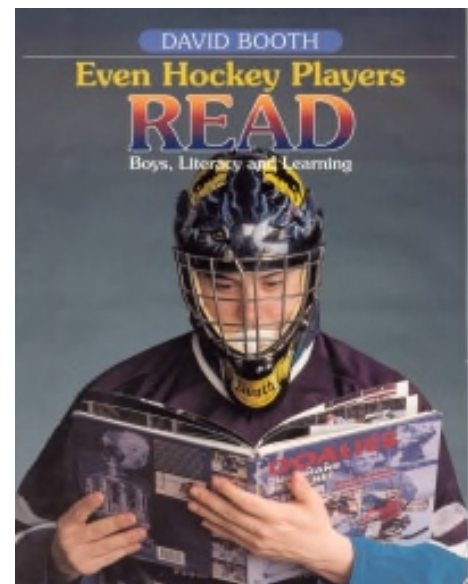


A final note – many websites contain lists of books recommended for boys. You may wish to view any of the following:

- <http://www.ala.org> - use the search feature to find “books for boys”
- <http://www.elmhurst.lib.il.us/kids/> - lists by grade level
- <http://tln.lib.mi.us/~amutch/jen/> - section entitled “Boy Meets Book”
- <http://www.guysread.com/> - a site with the goal of “connecting boys with books they want to read.”
- <http://www.nbs.com/nbshome.htm> - Canadian wholesale supplier of books, but with many lists of books for specific audiences
- <http://www.randomhouse.com/BB/promos/greatbooks/boys/booklist.html> - 17 highly recommended books for boys, primary to middle school.
- <http://www.neutralbay-p.schools.nsw.edu.au/library/bibboys.htm> - lists authors, series and individual titles for boys, elementary to middle school.
- <http://www.lfpl.org/teenpages/booklists/boys.htm> - list for middle level boys

You may also wish to consult the extensive list, *Recommended Books for Boys*, found on pages 117 to 125 in *Even Hockey Players Read* by David Booth and those on pages 112 to 125 in *Info-Kids* by Jobe and Dayton-Sakari. Also of benefit is the practice of having students rate books as they read them so that you have this information for subsequent groups.

Finding books for boys is not a difficult task now that there exists an understanding of how boys’ reading may differ from that of girls’. We must provide all students with reading materials they will enjoy reading and, above all, we must instill a love of reading. “Reading is a gift” (Pennac, 1999), perhaps the greatest gift we can give our students.





## Recommended Resources...Recommended Websites for Educators and Parents

### Books

- Booth, D. (2002). *Even Hockey Players Read: Boys, Literacy and Learning*. Markham, ON: Pembroke Publishers.
- Booth, D., Green, J. & Booth, J. (2004). *I Want To Read!*. Harcourt Canada.
- Brozo, G. W. (2002). *To Be a Boy, to Be a Reader. Engaging Teen and Preteen Boys in Active Literacy*. International Reading Association, Newark, Delaware, USA. [www.reading.org](http://www.reading.org)
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- Jobe, R. & Dayton-Sakari, M. (2002). *Info-Kids: How to Use Non Fiction to Turn Reluctant Readers into Enthusiastic Learners*. Markham, ON: Pembroke Publishers Ltd.



- Kirk, T. (2002). *Misreading Masculinity: Boys, Literacy and Popular Culture*. Heinemann. Portsmouth, NH.
- Lemery, J. (2004). *Les garçons à l'école: une autre façon d'apprendre et de réussir*. Chenelière McGraw-Hill, Montreal PQ .
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- Morris, B. & Perlenfein, D. (2003). *Literature Circles: The Way to Go and How to Get There, Grades 4-8*. Teacher Created Materials, Inc.
- Nadon, Y. (2002). *Lire et écrire en première année et pour le reste de sa vie*. Chenelière McGraw-Hill, Montreal PQ.
- Pirie, B. (2002). *Teenage Boys and High School English*. Heinemann Publishing.
- Pollack, W. (1998). *Real Boys*. Henry Holt and Company, Inc. New York
- Richmond, H. & Miles, C. (2004). *Boys' and Girls' Literacy: Closing the Gap*. Lakeville Corner, NB.
- Sax, L. (2005). *Why Gender Matters*. Doubleday.
- Smith, M. & Wilhelm, J. (2002). *Reading Don't Fix No Chevys: Literacy in the Lives of Young Men*. Heinemann.
- Sousa, D. (2<sup>nd</sup> Edition 2001). *How the Brain Learns*. Corwin Press. Thousand Oaks, CA.
- Sousa, D. (2002). *Un cerveau pour apprendre différemment*. Traduction et adaptation Gervais Sirois. Chenelière McGraw-Hill, Montreal PQ
- Spandel, V. (2001). *Books, Lessons, Ideas for Teaching the Six Traits: Writing in the Elementary and Middle Grades*. Wilmington, MA: Great Source Education Group.
- Spence, C. (2006). *Creating a Literacy Environment for Boys*. Thomson Nelson, Canada.
- Wilhelm, J. (2002). *Action Strategies for Deepening Comprehension*. Scholastic Inc.
- Wilhelm, J. (2001). *Improving Comprehension with Think-Aloud Strategies*. Scholastic Inc.
- Wolfe, P. (2001). *Brain Matters: Translating Research into Classroom Practice*. ASCD, Alexandria, VA



## Magazines

Orbit OISE/UT's Magazine for Schools Volume 34, Number 1, 2004 Girls, Boys, and Schooling  
[www.orbitmagazine.ca](http://www.orbitmagazine.ca)

Teacher Librarian [http://www.teacherlibrarian.com/tlmag/v\\_30/v\\_30\\_3.html](http://www.teacherlibrarian.com/tlmag/v_30/v_30_3.html)

## Websites

[www.education.ualberta.ca/boysandliteracy/index.htm](http://www.education.ualberta.ca/boysandliteracy/index.htm)

The Canadian Adolescent Boys and Literacy Web site. The three-year research project that provides support for this website has been supported by a Social Science and Humanities Research Council grant (Heather Blair, University of Alberta and Kathy Sanford, University of Victoria). This website provides ongoing discussion of their research findings and links to other researchers and practitioners interested in better understanding boys' literacies.

[www.canada.com/national/features/raiseareader/index.html](http://www.canada.com/national/features/raiseareader/index.html)

Raise-a-Reader is an award-winning national campaign that promotes reading to children at an early age, setting the groundwork for a lifetime of literacy skills and a healthy interest in reading.

[www.literaturecircles.com](http://www.literaturecircles.com)

A Web resource based on the work of H. Daniels, for educators interested in student-led book discussion groups. Features: book recommendations, classroom management ideas, links to related sites and organizations, and advice from colleagues.

[www.teacherlibrarian.com](http://www.teacherlibrarian.com)

Volume 30, Number 3, February 2003 - Overcoming the obstacle course: Teenage boys and reading Patrick Jones and Dawn Cartwright Fiorelli

[www.singlesexschools.org/differences.html](http://www.singlesexschools.org/differences.html)

National Association for Single Sex Public Education

[www.cbc.ca/news/background/gendergap](http://www.cbc.ca/news/background/gendergap)

Boy's Own Story, What is Literacy?, Books for boys

[www.guysread.com](http://www.guysread.com)

A website developed to promote reading for young males. Scieszka's Literacy Initiative for Boys: <http://www.elsegundousd.com/eshs/wasc/wasc2/guysread1.htm>

[www.boyslife.org/](http://www.boyslife.org/)

Boys' Life Magazine



[www.edu.gov.on.ca/eng/document/brochure/mereread/](http://www.edu.gov.on.ca/eng/document/brochure/mereread/)

Ontario Education- *Me Read? No Way!* A practical guide to improving boys' literacy skills

[www.comicbookproject.org](http://www.comicbookproject.org)

The Comic Book Project is an arts-based literacy and learning initiative hosted by Teachers College, Columbia University . Students write, design and produce original comic books.

## **Literacy across the Curriculum Resources:**

*Teaching Reading in the Content Areas: If Not Me, Then Who?* 2nd edition by Rachel Billmeyer Ph.D and Mary Lee Barton, M.Ed., 1998, McREL (can be purchased through ASCD)

*Teaching Reading in Science(A Supplement to Teaching Reading in the Content Areas) (2nd edition)* by Mary Lee Barton and Deborah L. Jordan, 2001, McREL (can be purchased through ASCD)

*Teaching Reading in Mathematics: A Supplement to Teaching Reading in the Content Areas (2nd edition)* by Mary Lee Barton & Clare Heidema, 2002, McREL (can be purchased through ASCD)

*Reading Strategies for the Content Areas, Volume 1: An ASCD Action Tool* by Sue Beers & Lou Howell, 2003, ASCD

*Reading for Academic Success: Powerful Strategies for Struggling, Average, and Advanced Readers, Grades 7-12* by Strong, Silver, Perinin and Tuculescu, 2002, Corwin Press, Inc.

*I Read It, but I Don't Get It: Comprehension Strategies for Adolescent Readers* by Cris Tovani, 2000, Stenhouse Publishers

*Strategies That Work: Teaching Comprehension to Enhance Understanding* by Stephanie Harvey and Anne Goudvis, 2000, Stenhouse Publishers

*Teaching Reading with Jamestown: Strategies and Instruction* by Jamestown Education, 2004, McGraw Hill Glencoe



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