

# **Boys' Literacy Attainment: Research and Related Practice**

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## **Research and Related Practice**

During the past ten years, there has been a great deal of assessment, research, and critical examination of the issue of boys' literacy attainment, in Canada, the United Kingdom, Australia, and New Zealand, and there is growing awareness in the United States. Much documentation has been carried out by government ministries, universities, researchers, educators and authors specializing in the field of gender and literacy. Schools are implementing different strategies to improve the literacy performance of students, and while scores have improved for both girls and boys, girls continue to outperform boys on standardized assessment procedures: the gender gap remains. The gender gap appears to be stabilizing after widening for a short period, and many boys achieve extremely well in all areas, while some girls underachieve. In many schools, "the core of the issue revolves around a minority of pupils" (Younger and Warrington 2005). Literacy is a complex area and, in addition to variation in assessment practices or concerns around test implementation, the debate is complicated by the variety of evidence employed: commercial tests such as SATs, GREs, LSATs, GMATs or TESLs; provincial, national or international tests (including EQAO and OECD data); teacher action research; observational data and clinical studies. Boys score lower in all measures of literacy (Donahue et al 2001, Newkirk 2000, Smith and Wilhelm, 2002, Taylor 2004). There are strong relationships between literacy achievement, inattentive/disruptive behaviours in the classroom and auditory processing capacity (APC), at early to middle age/grade levels of elementary and secondary schooling. Boys are more delayed in their development of APC than girls up to the age of 10, being about 1 year behind for the median value. On average, children with a language background other than English are typically 2 years behind their English-speaking background counterparts (Rowe and Rowe 2006). National and international results show that male elementary and secondary students do not do as well as girls in reading or writing, appear in special education or drop out statistics more often, and are less likely to become university students. Rutter (2004) also found that males were more likely to have a reading disability, and were twice as likely to have a learning disability. Boys are more likely than girls to attend special schools, and boys are four times as likely as girls to be identified as having a behavioural, emotional and social difficulty. Fewer boys are graduating from secondary schools and fewer boys than girls are going to postsecondary education (Allen and Vaillancourt 2004).

## **International Research**

This report offers first a brief summary of the findings on patterns of achievement in compulsory standardized tests in literacy from international researchers exploring the dilemmas and debates around the gender gap.

Using PISA data, the 2007 *State of Learning in Canada: No Time for Complacency* report found that for 2000, 2003 and 2006, girls score on average 32 points higher than boys in reading, and that boys have more difficulties in language and learning. Also, more males declared themselves to be "non readers" and were more likely to be secondary school dropouts (66%). In 2002 (Raymond 2008), 11% more female students than males met the expected level in writing. In 2000, while Canada ranked second in reading, (the UK ranked seventh, the US fifteenth, and Germany 21st), more alarming is

that PISA confirmed the significant gender gap in reading and writing in all participating countries. In every country, girls performed significantly better than boys on reading and writing tests: in top-ranked Finland, girls scored 51 points higher in reading; in Canada girls scored 32 points higher, and in the USA, although students scored 53 points behind Finland, boys still scored 28 points lower than girls.

In Ontario, in grade 3 Education Quality and Accountability Office (EQAO) Literacy Test Scores, English-speaking boys scored 21% and 17% lower (for *reading* and *writing* respectively) than girls (2003/04), with only 48% and 50% meeting the provincial standard (Government of Ontario 2006). For grade 6, scores were better, but boys still scored 14% and 9% lower and only 51% and 45% met provincial standards. While French-speaking boys fare better initially than their English speaking counterparts, scoring 14% and 17% lower than girls in grade 3, the gap widens with their scores deteriorating further in grade 6, to 16% and 18% lower. On the 2003/04 Ontario Secondary School Literacy Test, 7% more English-speaking boys failed than girls (French-speaking, 11% more).

Also, similar to other Canadian provinces, the US, the UK and Australia, Ontario teachers (Bodkin 2004) identify persistent differences between boys' and girls' scores in both achievement and attitude in reading and writing. The April 2005 edition of *Curriculum Update* (Ontario Ministry of Education) identifies contributors to the problem: compared to girls, boys tend to take longer to learn to read, read less, estimate their reading abilities lower than girls, are more likely to give themselves the label of 'non-reader', express less enthusiasm about reading and do not value reading as an activity.

The New Brunswick English Language Arts Proficiency Assessment (Miles and Richmond 2002) also reveals boys are significantly less successful than girls. In 1999 on the provincial Grade 8 Language Arts test, 40% of Core English Fredericton boys were unsuccessful compared to 31% of girls. The 2000 results show little change and call for intervention.

In the US 1998 National Assessment of Education Progress (NAEP) results, 16% more female students scored proficient in writing and 10% more in reading, and in 2000, females outperformed boys at all age levels, a larger gap than in 1998, despite accommodations (Donahue et al 2001). In 2002, while Massachusetts and Connecticut have improved across the board, males score on average 24 points lower than females by the 12<sup>th</sup> grade, and 75% of this gap was apparent by grade four. This is the same gap between African-American and white students, without the unfortunate but logical explanation afforded by social inequities (Newkirk 2003). The 2005 NAEP results replicated this worrisome trend toward a gender literacy gap, finding a 16% gap in writing, and a 12% gap in reading (Baer 2007, Donahue et al 1999, 2001, Lee et al 2007, O'Sullivan et al 2003, Salah-Din 2008, Taylor 2004).

Since the early 1990s, boys' underachievement has received its requisite attention in England where, similar to other OECD countries, the large gender gap has been stable over two decades (Healey 2005). Girls in England are ahead of boys at all levels of

education starting in the early years, with the highest difference in Key Stage 2 English and Key Stage 4 results. Girls have also consistently out-performed boys on the GCSEs since they were first introduced in 1988. Healey (2005) asserts that girls' literacy results in England have been relatively stable over the past 25 years, until now girls achieve higher average marks in a majority of Year 12 subjects, while boys' results have decreased to the point where 35% of 14-year-old boys fail to reach basic literacy benchmarks. Similar to Canada, "Boys' literacy achievement in years 3 and 5 now lags behind that of girls by 4.5 percentage points. Year 12 retention rates are 11 per cent higher for girls, driving a 6 per cent higher rate of university entry" (Healey 2005). The 2007 report *Gender and education: The evidence on pupils in England* by the Department for Children, Schools and Family (DCSF) supports these conclusions. Also, a large-scale collaborative study between the University of Warwick and King's College (Rutter et al 2004), found that boys are more likely to have developmental difficulties and of the 15 percent of children with a learning disability, boys are twice as likely to have dyslexia. Contrary to research that is open to criticism (attributing results to boys' disruptive behavior), they did not focus on children diagnosed with learning difficulties, but used a representative sample, providing support for gender differences. In March 2005, not only were boys again performing lower than girls in all literacy related tasks, with girls under five doing better in every area of learning, but the DCSF released the information that four decades ago, administrators set a lower cut off point for boys in the 11-plus examination, in order to balance the numbers of each gender going on to grammar schools, because girls were doing better.

Also in England, the Office for Standards in Education (Ofsted) report, *The Gender Divide*, first identified boys' lack of engagement with literacy as significant (Ofsted/EOC 1996). The Centre for Language in Primary Education (now the Centre for Literacy in Primary Education) also found problems related to motivation or frustration with extended reading or rewriting (Barrs, 1998, Barrs and Pidgeon 1993, 2002, Safford, O'Sullivan and Barrs 2004).

*The National Literacy Strategy: The first four years 1998-2002* report by Ofsted praised the overall impact of the literacy strategy implementation overall in reducing the difference in achievement between boys and girls over the four years, from a 16 percentage point difference at the end of 1998 to 9 percentage points in 2002. However, it also noted that the gap in attainment continues to be an issue. Since boys are already behind in English on entering secondary school, the gap does not disappear during the secondary years. Measures of boys' attainment in England show they continue to lag behind (Ofsted 2003a, 2003b).

Using data from more than a million students in 3000-plus schools, the 2003 British report, *Girls Rock, Boys Roll: An Analysis of the Age 14-16 Gender Gap in English Schools*, also found that differences in literacy performance drive the achievement gap (Burgess et al 2003).

However, the 1998 Ofsted report warned against blanket statements regarding attitudes or attainment in dealing with complex underachievement problems in literacy (Arnot et al

1998). Moss (2000) also warned against generalizing about all boys, and noted that only some boys encounter problems in their approach to literacy. In 2003, Ofsted reported on schools where boys do well in writing and their investigation into boys' achievement pointed to "best practice" as the answer, "not gender-specific" strategies (Ofsted 2003a, 2003b).

A research report from Strathclyde University found that in Scottish schools, girls outperform boys at all levels. Also, written policies on gender equality were rarely found and significant gender-related inequalities were present. The most successful initiatives observed by the research team were in pre-5 and primary schools. Where development of a gender-related initiative was shared between schools, there was a greater chance of progression and continuity occurring. The most successful practice engaged all stakeholders, particularly parents and communities. Where staff development was most effective, it was in situations where the staff had a degree of ownership and were supported by practical guidance and advice (Condie 2006).

The 2001 research paper by the Northern Ireland Assembly also reviewed literature into the "gender gap" in educational attainment, and focused on strategies to prevent underachievement in boys (NIA 2001). Girls outperformed boys in terms of the highest level of qualification achieved with 33.3% of girls achieving three or more A levels or equivalent in 1999-2000 compared to 22.7% of boys, and 41.9% of girls achieving at least two A levels or equivalent compared to 28.8% of boys.

Wales, in attempting to rectify the extreme literacy gap between boys and girls, conducted research into the issues and came to these conclusions:

The most crucial factor in explaining the greater difficulty that some boys have in coping with the demands of learning and teaching in school is that fewer boys than girls acquire the level of literacy necessary to succeed. This is especially the case in relation to writing and, to a lesser extent, to reading. Literacy is critical for educational success at school. Because more boys have trouble with literacy than girls they also have problems in accessing the wider curriculum. This difficulty affects progress not only in subjects that are highly language-based, such as Welsh or English and history, but across the whole curriculum, because reading and recording skills are important in all subjects. By the age of 14, a significant minority of boys cannot keep pace with much of the work at school and experience an increasing sense of frustration and failure as a result.

(Estyn 2008)

In 2004-2005, the University of Western Sydney in Australia (DEST 2005) studied boys from Indigenous, low socioeconomic, rural and isolated backgrounds regarding research into motivation, engagement and socio-academic outcomes. They suggest that there is no cohesive sense of 'boyhood' and that focusing on 'boys' as a single category conceals more than it reveals. Commencing in 1999, the Australian Longitudinal Literacy and Numeracy Study (LLANS) undertook research of almost 1000 children (over all states and territories) into the nature of literacy and numeracy development for

children's first seven years of schooling. Findings for the first three years showed that girls achieved better literacy results than boys (the results reversed for math) (Meiers et al 2006).

Turning to a discussion of statistics on dropouts, graduation and post-secondary enrolment, Statistics Canada (October 2004) reported that undergraduate enrolment for males dropped five per cent, decreasing from 47% to 42% between 1993 and 2002 (Allen and Vaillancourt 2004). Healey (2005) reports a repeat of the gender gap trend at English universities, with higher retention rates for girls (Year 12 completion, 11% higher, university entry, 6% higher). Younger (2002), however, notes that despite boys' poor showings at university, middle-class boys in England still perform better than working class girls: one-third of the 40,000 16-year-old drop-outs every year are female, the majority in poor economic situations. He observes that gender only ranks fifth amongst determinants of academic performance, far behind past performance and social background. Ultimately, he sees the biggest obstacle to literacy as poverty, with factors related to race playing a lesser but important role.

In the US, Coley (2001) found that males were less likely to complete high school than female white and Hispanic students (a gap that is increasing) and were also less likely to complete college preparatory courses than female college-bound students. Furthermore, males were less likely to attend and complete college than females in all racial/ethnic groups except Asian/American students. In fact, females have outnumbered males at US universities since 1976, and a procedure called "gender weighting" has attempted to redress the imbalance. Distressingly, in the face of a huge disparity between the genders (70% of girls accepted vs. 30% of boys), Chicago's eight selective-enrollment college prep high schools are now considering implementing a similar weighting policy (Rossi 2006). The American Council on Education (ACE) in its 2006 report on *Gender Equity*, found that among the 40 percent of undergraduates over 25, women outnumber men two to one (King 2006).

### **Interpreting the Data**

Although there is no simple explanation for the gender gap in literacy (Arnot et al 2003), formal assessment results are most often used as the reason for incorporating "best practices" into classrooms, school, districts, provinces, or national initiatives. Some question this approach to the reform agenda, citing a lack of focus on "the root causes of the problem of gender identity and structural inequality" (Martino and Kehler 2007). Some researchers feel that, particularly in England over the last decade, issues of equal opportunity have been subverted by a paramount concern for addressing boys' 'underachievement', and criticize the emphasis on short-term, essentialist responses which assume homogeneous gender constructions and perpetuate conventional masculine stereotypes (Francis and Skelton 2005). Other researchers feel some approaches fail to give adequate consideration to alternative conceptions of masculinity and femininity (Epstein et al 1998, Frosh et al 2002, Frank et al 2003, Martino and Pallotta-Chiarolli 2003), or to acknowledge the need for policy directions and practical strategies which emphasize a diversity and multiplicity of gender constructions (Younger et al 2005b, Younger 2007).

It is clear that an approach that ignores differentiation among boys and in their literacy successes and failures would offer few possibilities for implementing effective change. It may be of help, especially to those concerned with the results of test scores, to examine the body of research and writing that has accrued in different geographical areas, in order to focus further study on relevant and significant areas of inquiry into “the literacy gap” between boys and girls. As we develop pedagogy and policies to support literacy competence for all our students, there needs to be continuing research to examine the many different explanations for the problems many boys are exhibiting in literacy attainment, including: gender identity; social and cultural issues; religion; the changing definition of literacy; school cultures; technology; teaching styles; curriculum documents; the place of standardized evaluations, and pre-service and in-service teacher education courses. Compelling questions arise concerning how these factors are intricately interwoven with regard to school performance in order to explain these results, and more important, to reveal how we can move forward in our educational programs to support every student (Brown 2006, Francis and Skelton 2005, Lingard, Martino, Mills and Bahr 2002, Martino and Kehler 2007).

There is legitimate concern in many countries, supported by research findings, that the reading achievements of some boys need to be examined. However, if we consider the impact of a range of factors on the literacy performance of boys, then “a more differentiated picture emerges which demands that questions be addressed about which groups of boys and girls are most disadvantaged, how and what forms this disadvantage may take, and why this disadvantage occurs” (Collins et al 2000).

It is vital that efforts to support and improve boys’ levels of achievement in literacy should not, inadvertently or otherwise, disadvantage girls. Hammett and Sanford (2008) emphasize that while their intent is by no means to disparage attempts to address literacy learning initiatives for boys, they see the need for practices that engage all children in learning as essential as essential, “with context-appropriate curricular and pedagogical activities, not ‘band-aid’ innovations that group boys into one homogenous mass.”

Smith and Wilhelm (2002) have cited compelling findings from the long tradition of extensive research that has examined the differences between boys’ and girls’ engagement on literacy tasks. However, despite such findings in, for example, the areas of Achievement, Attitude, Choice, and Response, educators still experience frequent difficulties in understanding how boys in contemporary classrooms may become successfully engaged in meaningful literacy learning.

Grouping and educating boys as if they were a ‘homogenous’ category does them serious injustice. For example, not *all* boys are failing standardized tests, doing less well than girls, or ‘hate’ to read. It is therefore important to ask, “Which boys?” (are/are not learning), in order to avoid a ‘one-size fits all’ approach to instruction. Spence (2008) reminds us all that, “Too often, we deal with generalities without recognizing the diversity in our students” (p. 9).

However, the research report *Raising Boys' Achievements* states that “there are typical patterns of behaviour to which many boys conform, and that although boys are not an undifferentiated group, there are broad similarities within subgroups which allow valid generalizations to be made, and if similar groups of boys are compared with similar groups of girls, there is evidence of lower levels of attainment by boys” (Younger and Warrington 2005a, p. 19).

### **Re-defining Literacy**

In her online opinion column, Sanford looks at the intersections and gaps between school literacies (mostly print-based texts) and out-of-school literacies (often non-print texts, media and technology-based texts), and the intersections that exist between gender, school literacy, and out-of-school ‘life’ literacy.

It is evident that boys can read, but are selective in what they read; they use reading strategies that they have adopted in school and have morphed them to help make sense of new literacies that appeal to them. Teachers need to transform our ideas about literacy to help boys recognize their strengths and move them beyond their own to broader, more global literacies. We need to better understand their "morphing literacies", critique the arguments that would position them as failing and remind ourselves that there are multiple definitions of literacy and multiple paths to becoming literate. We need to deepen our understandings of the subjectivity of literacies for both boys and girls given the socio-cultural configurations from which they emerge. We need to encourage our students to see the multiplicities of perspective and recognize the morphing of their own literacy practices.

(Sanford 2002)

Martino (2003) also suggests that boys may be engaging in literate practices outside school that are not reflected in their poor literacy test results, and that “the boys may be advantaged with electronic forms of literate practice useful in the changing post-industrial labour market” (p. 23). Tapscott, in his new book, *Grown up Digital* (2009), strengthens this argument:

Net Geners who have grown up digital have learned how to read images, like pictures, graphs, and icons. They may be more visual than their parents are (Sternberg and Preiss 2005). A study of Net Gen college students showed that they learned much better from visual images than from text-based ones. Students of a Library 1010 class at California State University (Hayward) tended to ignore lengthy step-by-step text instructions for their homework assignments, until the instructors switched their teaching methods to incorporate more images. The results were dramatic: students' scores increased by 11 to 16 percent. (Roos 2008).

(2009, p.106).

Smith and Wilhelm (2002) summarize the situation:

*With respect to achievement.*

- Boys take longer to learn to read than girls do



- Boys read less than girls
- Girls tend to comprehend narrative texts and most expository texts significantly better than boys do.
- Boys tend to be better at information retrieval and work-related literacy task than girls are.

*With respect to attitude:*

- Boys generally provide lower estimations of their reading abilities than girls do
- Boys value reading as an activity less than girls do
- Boys have much less interest in leisure reading and are far more likely to read for utilitarian purposes than girls are.
- Significantly more boys than girls declare themselves 'non-readers'.
- Boys spend less time reading and express less enthusiasm for reading than girls do.
- Boys increasingly consider themselves to be 'non-readers' as they get older; very few designate themselves as such early in their schooling, but nearly 50 percent make that designation by high school.

(Smith and Wilhelm 2002, p. 10-11)

Paradoxically, as teaching strategies improve and distractions decrease, results for both genders increase, with girls benefiting more than boys. Thus the achievement gap may actually increase, making closing the gap a difficult and complex goal.

### **Challenges and Opportunities**

Some of the different perspectives that have been used in examining boys' underachievement in literacy include: the shifting complexities of masculinity (Martino 2003, Taylor 2004); cognitive development (Rowe and Rowe 2006); motivation, or its absence (Ofsted 1993 and 2003); the lack of male role models (Barrs and Pidgeon 1993); single sex schools and classrooms (Sanford and Blair 2002b); teachers' observations or perceptions of behaviour (Myhill 2002); classroom approaches (Frater 2000, PNS/UKLA 2004); the content of the literacy curriculum (Marsh and Millard 2000); choice of texts (Brozo 2002, Pirie 2002), and class and ethnicity (Gillborn and Mirza 2000). Alongside these variations, literacy itself is a shifting concept within research perspectives (Bearne 2004).

Much more research needs to be done on *school culture* (Spence, 2008, and also cited extensively in Smith and Wilhelm (2002, 2006), and on providing anecdotal data of 'voices' of young men who participate. Spence (2008) suggests whole school approaches to a *gendered lens* is a useful framework for examining teaching and learning of literacy – i.e., *all* curriculum areas, *all* grade levels, and across the broader *school community*. Whole school planning would be the starting point for action research: analysis of school data leading to gap analysis and understanding of *differences* in performance. Components of this kind of whole-school planning will involve negotiating priorities, developing an action plan, implementing the plan, locating resources, evaluation and ongoing review. For example, "Igniting the writing of boys is our goal; achieving it depends, at least in part, on our understanding and working at the

challenges it presents to boys from *their perspectives*" (Spence 2008, p. 41). High expectations are seen as meaning more than simply 'raising the bar'; it also means teachers must be willing to re-group, re-teach, re-visit, to provide support and seriously examine motivations, attitudes, purposes, and strategies for a *writing culture*.

Understanding the gendered nature of behavior offers new hope for more effective teaching and learning, but only if we better understand what literacy looks like for boys and how our classroom practices relate to what boys are (or are not) learning. For example, how much do teachers really know about boys' self-image of as writers? (or the sources of and the influences on, their development as writers?) Spence sees *teacher education* for promoting boys' literacy as including research *and* practice, opportunities for more explicit modeling of teachers' own reading and writing in classroom practices. While 'not everyone is an Eric Walters', how can we (as educators) learn from what he has found works well in classrooms? What are teachers (pre-service *and* in-service) learning about classroom environments for writing? effective instructional frameworks? authentic pedagogy? and teaching/learning strategies for promoting writing in *contemporary* classrooms?

*Even Hockey Players Read* makes this appeal to teachers:

Work against stereotype and move towards archetype. Value and accept boys' responses, and find ways to stretch and deepen them. Help them to find their own emotional selves inside the texts we share, in safe ways, together. Stand for all of the literacies in all the forms and shapes they take, mindful of print's own and particular value. Model what you want them to become – print-strong men who believe in equity. Question and wonder about all the texts you meet, and include boys in the tentative process of meaning making. Let them know that there are different types of literate men and that we value all of them.

(Booth 2005, p. 101).

How then might we promote and further develop 'boy-friendly' environments in our classrooms and schools that recognize these differences and support the kinds of climates for learning where research shows boys respond positively? Smith and Wilhelm (2002) strongly suggest we look carefully at the "...individual differences, variety, and plurality that make diversity a strength of our classrooms" (p.184), rather than identifying achievements and needs only through test scores and statistical averages in which those differences quickly become lost.

As part of re-thinking our goals and *why* we teach, we need to be asking questions about "What counts?" as literacy (for ourselves and our students). We must also be willing to re-examine and re-vision our definitions and conceptions of literacy in order to make instruction more meaningful for the students we teach. In their study, Smith and Wilhelm (2002), found that while caring and connecting were essential pre-requisites of any meaningful instruction, knowledge and expertise were equally essential. We must know both our students *and* our subject.

Smith and Wilhelm's data also raises questions for us about *what* we teach, and the importance of engaging students in problem solving and thinking through ideas that actually matter to their lives. In *Going with the Flow* (Smith and Wilhelm 2006), convincing arguments are developed for the power of genuine inquiry as a way to a) organize literacy curricula and b) organize inquiry-oriented instruction around essential questions. This approach offers exciting and innovative ways to communicate with adolescent readers and writers (both male and female): problem-solving becomes motivation; students engage with ideas that matter to them; notions of texts (and texts available for reading) are expanded; and knowledge is immediately situated and applicable. Smith and Wilhelm draw upon the work of Hillocks (1999), Beach and Myers (2001) and Smagorinsky (2002a, 2002b), to present a compelling case for organizing literacy curricula around inquiry: "These researchers critique traditional forms of literacy as being disconnected from students' immediate interests and the demands of their lives" (2002, p. 189).

Five features of 'flow' theory, adapted from the work of Csikszentmihalyi, are discussed throughout Smith and Wilhelm's work (2002, 2006). Specifically, these features were regarded as characteristic of why boys in their groundbreaking study liked to do the things they did, and were also seen as explanatory of boys' literate engagement both in and out of school:

- *Competence and control* (e.g., presentation of interesting and manageable challenges or problems)
- *Appropriate levels of difficulty* (e.g., clearly defined levels of difficulty)
- *Clear and immediate feedback*
- *Enjoyment of losing oneself in the 'immediate experience'*
- *Central importance of the social*

Possibly more than any one single idea about re-thinking *how* we teach, the unproductive and unnecessary notion of 'habitus' reverberates through Smith and Wilhelm's work – i.e., the "notion that the way things are is just the way they have to be" (2006, p.155). They argue that we must avoid attitudes akin to 'habitus' if we are to make genuine progress in improving experience of, and achievement in, literacy for boys. For example, are we sufficiently aware of the centrality of social relations in the lives of our male students? And how is this reality taken up and woven into the fabric of the learning environment in contemporary classrooms? Throughout their research report, Smith and Wilhelm argue that literacy in school needs to be more like literacy in life, and they provide extensive curricular and instructional examples of learning-centred, problem-oriented, inquiry driven approaches to teaching, learning, and assessment as a way to begin re-thinking approaches to teaching and learning of literacy with boys:

Habitus undermines student learning and deprofessionalizes teaching. Habitus, we might say, works against flow experiences, that feeling of total immersion that occurs when we are appropriately challenged, developing new competence, and engaged in significant, purposeful work with other people (2006, p. 155).

## **Future Directions**

Some cause for optimism appears close on the horizon. In a project guided by a team from the Ontario Institute for Studies in Education (OISE), schools were involved in a large-scale collaborative teacher inquiry project designed to address the gender gap in literacy achievement from autumn 2005 through summer 2008 (forthcoming). One hundred and three teams, involving one hundred forty five schools from English-language boards, were involved in the *Boys' Literacy Achievement Teacher Inquiry Project*. A parallel project was undertaken in French-language boards and included forty inquiry teams. Included were both elementary and secondary schools that worked with small samples of boys as well as several projects that involved the entire population of boys in the school. Teachers and administrators examined which strategies mattered most in affecting boys' engagement with, and achievement in, literacy development. In winter 2009, *The Road Ahead: Boys' Literacy Teacher Inquiry Project* will be released. Contained in it are significant findings on teaching practices, which yield promising results for boys. By all accounts, the projects have been overwhelmingly successful demonstrating improvement in boys' interest, engagement and achievement in reading, writing and oral language.

Also in winter 2009, *Me Read? And How!*, a sequel to the successful *Me Read? No Way!* (Ontario Ministry of Education 2004) will be published. It will draw from the broad range of learning on boys' literacy emerging from the inquiry teams, using quotes and ideas from the final inquiry team reports. The sequel promotes user-friendly specific strategies, learned in Ontario schools over the last three years of this project. Links can be made to other provincial work on literacy and instructional leadership.

## **Conclusions**

While there are differing views on the issues of boys' literacy achievements, depending on how schools handle the education of students, the available international evidence suggests that the future may hold complex and even unfortunate outcomes. Governments, policy makers, administrators, teachers and parents need to examine the available research-based strategies and interventions that can support boys and girls in their literacy development. While boys' achievement is improving, the problems of gender difference are connected to a range of factors situated in the society in which the boys live, the complex interactions of the variables in their lives, the nature of the individual, the culture of the peer group, the relationship of home and schooling, the philosophy of the school, the availability of resources, the strategies the teacher incorporates in the classroom program, and the changing nature of literacy. The futures of the students depend on today's mandate for authentic change in literacy education.

## REFERENCES and PROFESSIONAL READING/RESOURCES

- Abraham, J.A. (2008) Back to the future on gender and anti-school boys: a response to Jeffrey Smith. *Gender and Education*. 20(1), January 2008, 89-94.
- Allen, Mary and Vaillancourt, Chantal (2004) *Class of 2000: Profile of Postsecondary Graduates and Student Debt*. Statistics Canada (81-595-MIE2004016). Downloaded from: <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2004016-eng.pdf>
- Alloway, N., Freebody, P., Gilbert, P. and Muspratt, S. (2002). *Boys, literacy and schooling: Expanding the repertoires of practice*. Nathan, Australia: Commonwealth Department of Education Science & Training. Downloaded from: <http://www.dest.gov.au/NR/rdonlyres/835D5DAC-D69C-4716-91EE-CB6E2DCDA934/1564/BoysLiteracy.pdf>
- Applebee, Arthur N. and Langer, Judith A. (2006) *The State of Writing Instruction in America's Schools: What Existing Data Tell Us*. Center on English Learning & Achievement, University at Albany, State University of New York. Downloaded from: <http://www.albany.edu/aire/news/State%20of%20Writing%20Instruction.pdf>
- Arnot, M., Gray, J., James, M. and Rudduck, J. (1998) *Recent Research on Gender and Educational Performance*, London: Office for Standards in Education
- Baer, Justin, Baldi, Stéphane, Ayotte, Kaylin and Green, Patricia J. (2007) *The Reading Literacy of U.S. Fourth-Grade Students in an International Context Results From the 2001 and 2006 Progress in International Reading Literacy Study (PIRLS)*. U.S. Department of Education, Institute of Education Sciences. Downloaded from: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008017>
- Barrs, M. (1998) *Texts and Subtexts in Boys and Reading*, London: Centre for Language in Primary Education.
- Barrs, M. and Pidgeon, S. (eds.) (1993) *Reading the Difference: Gender and Reading in the Primary School*, London: Centre for Language in Primary Education/London Borough of Southwark.
- Barrs, M. and Pidgeon, S. (eds.) (2002) *Boys and Writing*, London: Centre for Literacy in Primary Education
- Beach, R. & Myers, J. (2001). *Inquiry-based English instruction: Engaging students in life and literature*. New York: Teachers College Press.
- Bearne, E. (2004) Raising Boys' Achievements in Literacy. Work in progress. September 2004. Downloaded from: <http://www-rba.educ.cam.ac.uk/Paper%20EB.pdf>
- Beers, K. G. (1996) No Time, No Interest, No Way! The 3 Voices of Aliteracy. *School Library Journal*, March 1996.
- Blair, H. and Sanford, K. (2004) *Morphing Literacy: Boys Reshaping Their Literacy Practices*. University of Alberta. Downloaded from: [http://www.onlineopinion.com.au/documents/articles/morphing\\_literacy.pdf](http://www.onlineopinion.com.au/documents/articles/morphing_literacy.pdf)
- Bodkin, B. (2004) Responding to the Complexity of Boys' Learning: Promising Practices from School Districts. *Orbit*, 34(1). Downloaded from: <http://www.oise.utoronto.ca/documents/barbara.pdf>
- Booth, D. (2002) *Even hockey players read: Boys, literacy and learning*. Toronto: Pembroke Publishers
- Brown, L. (2006, June 23). Dropout, failure rates linked to language. *Toronto Star*, A01. Downloaded from: <http://proquest.umi.com/pqdweb?did=1065164161&sid=1&Fmt=3&clientId=11263&RQT=309&VName=PQD&cfc=1>
- Burgess, S., McConnell, B., Propper C. and Wilson, D. (2003). *Girls rock, boys roll: An analysis of the age 14-16 gender gap in English schools*. CMPO Working Paper Series No 03/084. Bristol: University of Bristol, CMPO. Downloaded from: [www.bris.ac.uk](http://www.bris.ac.uk)
- Brozo, W.G. (2002). *To be a boy, to be a reader*. Newark, DE: International Reading Association.

- Canadian Council on Learning. (2007) *State of Learning in Canada – No time for complacency*. Report on Learning in Canada 2007. Ottawa. Downloaded from: [http://www.ccl-cca.ca/NR/rdonlyres/5ECA2E9-D5E4-43B9-94E4-84D6D31BC5BC/0/NewSOLR\\_Report.pdf](http://www.ccl-cca.ca/NR/rdonlyres/5ECA2E9-D5E4-43B9-94E4-84D6D31BC5BC/0/NewSOLR_Report.pdf)
- Cherland, Meredith (2008) Harry's Girls: Harry Potter and the Discourse of Gender. *Journal of Adolescent & Adult Literacy* December 2008/January 2009, 52(4), 273–282.
- Clay, Victoria (2003) *Why take a different approach to literacy just for boys?* Boys in School program, Family Action Centre, University of Newcastle. Downloaded from: [http://www.newcastle.edu.au/centre/fac/binsp/downloads/boys\\_literacy.pdf](http://www.newcastle.edu.au/centre/fac/binsp/downloads/boys_literacy.pdf)
- Coles, M., and Hall, C. (2001). Boys, books and breaking boundaries: Developing literacy in and out of school. In W. Martino and B. Meyenn (eds.), *What about the boys? Issues of masculinity in schools*. Buckingham, UK: Open University Press, 211-221.
- Coley, R. (2001) *Differences in the Gender Gap: Comparisons Across Racial/Ethnic Groups in Education and Work*. Princeton: Educational Testing Service, Policy Information Center. Downloaded from: <http://www.ets.org/research/pic>
- Collins, Cherry, Kenway, Jane and McLeod, Julie (2000) *Factors Influencing the Educational Performance of Males and Females in School and their Initial Destinations after Leaving School*. Commonwealth of Australia. DEST(Aus.). Downloaded from: [http://www.dest.gov.au/sectors/school\\_education/publications\\_resources/profiles/factors\\_influencing\\_educational\\_performance.htm#publication](http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/factors_influencing_educational_performance.htm#publication)
- Condie, R. (2006) *Review of Strategies to Address Gender Inequalities in Scottish Schools*. Scottish Executive Social Research. Downloaded from: <http://www.scotland.gov.uk/Resource/Doc/113793/0027652.pdf>
- Croxford, Linda, Tinklin, Teresa, Ducklin, A., and Frame, B. (2001) *Gender and Pupil Performance in Scotland's Schools*. Centre for Educational Sociology, Edinburgh University. Downloaded from: [http://www.ces.ed.ac.uk/PDF%20Files/Gender\\_Report.pdf](http://www.ces.ed.ac.uk/PDF%20Files/Gender_Report.pdf)
- DCSF (2007) *Gender and education: the evidence on pupils in England*. Downloaded from: [www.standards.dfes.gov.uk/genderandachievement/goodpractice/](http://www.standards.dfes.gov.uk/genderandachievement/goodpractice/)
- DEST (2006) *Motivation and Engagement of Boys: Evidence-based Teaching Practices*. Australian Government. Downloaded from: [http://www.dest.gov.au/sectors/research\\_sector/publications\\_resources/profiles/motivation\\_engagement\\_boys.htm](http://www.dest.gov.au/sectors/research_sector/publications_resources/profiles/motivation_engagement_boys.htm)
- DfEE (2001) *Schools Building on Success - Raising Standards, Promoting Diversity, Achieving Results*. CM 5050. Downloaded from: <http://www.archive.official-documents.co.uk/document/cm50/5050/5050.htm>
- Daly, C. (2002). *Literature search on improving boys' writing*. London: Ofsted. Downloaded from: [www.basic-skills-observatory.co.uk](http://www.basic-skills-observatory.co.uk)
- Donahue, Patricia L., Voelkl, Kristin E., Campbell, Jay R. and Mazzeo, John (1999) NAEP 1998 Reading Report Card for the Nation and the States. *Education Statistics Quarterly* 1(2). July 1999. Downloaded from: [http://nces.ed.gov/programs/quarterly/Vol\\_1/1\\_2/3-esq12-a.asp](http://nces.ed.gov/programs/quarterly/Vol_1/1_2/3-esq12-a.asp)
- Donahue, P., Finnegan, R., Lutkus, A., Allen, N., and Campbell, J. (2001). *The nation's report card: Fourth-grade reading 2000* (NCES 2001-499). Washington, DC: U.S. Government Printing Office. Downloaded from: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001499>
- Epstein, D., Elwood, J. Hey, V., and Maw, J. (eds.) (1998). *Failing boys?: Issues in gender and achievement*. Buckingham, UK: Open University Press.
- Estyn (2008) *Closing the gap between boys' and girls' attainment in schools*. Her Majesty's Inspectorate for Education and Training in Wales. March 2008. Downloaded from: [http://www.estyn.gov.uk/publications/Gender\\_Gap\\_Report\\_March\\_2008.pdf](http://www.estyn.gov.uk/publications/Gender_Gap_Report_March_2008.pdf)
- Francis, B. and Skelton, C. (2005) *Reassessing gender and achievement*. Routledge , London

- Frank, B., Kehler, M., Lovell, T. and Davison, K. (2003) A tangle of trouble: boys, masculinity and schooling—future directions, *Educational Review*, 55(2), 119–133.
- Frater, G. (1997) *Improving Boys' Literacy: a survey of effective practice in secondary schools*, Basic Skills Agency, London.
- Frater, Graham (2000) *Securing Boys' Literacy: a survey of effective practice in primary schools*. London, Basic Skills Agency.
- Frosh, S., Phoenix, A. and Pattman, R. (2002) *Young masculinities*. Basingstoke: Palgrave.
- Gee, J.P. (2003). *What Video Games Have to Teach Us About Learning and Literacy*. New York: Palgrave Macmillan.
- Gillborn, D. and Mirza, H.S. (2000) *Education Inequality: Mapping race, class and gender: A Synthesis of Research Evidence*. London: Ofsted. Downloaded from: [http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Inclusion/Minority-ethnic-children/Educational-inequality-mapping-race-class-and-gender/\(language\)/eng-GB](http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Inclusion/Minority-ethnic-children/Educational-inequality-mapping-race-class-and-gender/(language)/eng-GB)
- Goodson, I, Knobel, M., Lankshear, C., Mangan, M. (2002) *Cyber Spaces/Social Spaces: Culture Clash in Computerized Classrooms*. New York: Palgrave Macmillan.
- Government of Ontario (2006) McGuinty government helps close gender gap in reading and writing. *Backgrounder*, January 19, 2005, Toronto: Queen's Printer for Ontario. Downloaded from: <http://www.premier.gov.on.ca/news/Product.asp?ProductID=205>
- Gurian, M. (1998). *A fine young man: What parents, mentors and educators can do to shape adolescent boys into exceptional men*. New York: J.P. Tarcher.
- Hammett, R.F. and Sanford, K. (eds.) (2008) *Boys and girls and the myths of literacies and learning*. Toronto: Canadian Scholars' Press.
- Healey, J. (ed.) (2005) *Masculinity: Men and Boys*. Thirroul, NSW, Australia: Spinney Press.
- Hillocks, G. (1999). *Ways of thinking, ways of teaching*. New York: Teachers College Press.
- Jenkinson, Dave (1998) Profile: Eric Walters. *Canadian Review of Materials*. Interview conducted in Mississauga, ON, on Sept. 26, 1998. Downloaded from: <http://www.umanitoba.ca/cm/profiles/walters.html> (See also: [www.ericwalters.net/](http://www.ericwalters.net/))
- Kavanagh, Jeannette (2007) Literacy Gap Between Boys & Girls. Boy-friendly Educational Approaches for Disinterested Male Students. *Boys' Education Website*. Apr 12, 2007. Downloaded from: <http://boyseducation.blogspot.com/2008/02/literacy-gap-between-boys-girls-boy.html>
- Kindlon, D., and Thompson, M. (1999). *Raising Cain: Protecting the emotional life of boys*. New York: Ballantine.
- King, J.E. (2006) *Gender Equity in Higher Education*. American Council on Education, Center for Policy Analysis.
- Lee, Jihyun, Grigg, Wendy S., and Donahue, Patricia L. (2007) *The Nation's Report Card: Reading 2007*. U.S. Department of Education, Institute of Education Sciences. September 2007. Downloaded from: <http://nces.ed.gov/nationsreportcard/pubs/main2007/2007496.asp#pdflist>
- Lingard, B., Martino, W., Mills, M., and Bahr, M. (2002). *Addressing the educational needs of boys*. Canberra: Department of Education, Science and Training. Retrieved on June 18, 2007, from [http://www.dest.gov.au/sectors/school\\_education/publications\\_resources/profiles/addressing\\_educational\\_needs\\_of\\_boys.htm](http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/addressing_educational_needs_of_boys.htm)
- Macdonald, Barry (2005) Excerpts from Boy Smarts – Mentoring boys for Success at School. *Mentoring Boys Website*. Downloaded from: <http://www.mentoringboys.com/literacy.html>
- Manguel, A. (1996). *A History of Reading*. New York: Viking Press.

- Marsh, J., & Millard, E. (2000). *Literacy and popular culture: Using children's culture in the classroom*. London: Paul Chapman/Sage.
- Martino, W. (2003) Boys, Masculinities, and Literacy: Addressing the Issues. *Australian Journal of Language and Literacy* 26(3), 9-27.
- Martino, W. and Kehler, M. (2006). Male teachers and the 'boy problem: An issue of recuperative masculinity politics. *McGill Journal of Education*, 41(2), 113-131.
- Martino W. and Kehler, M. (2007) Gender-Based Literacy Reform: A Question of Challenging or Recuperating Gender Binaries. *Canadian Journal of Education*. 30(2), 406-431
- Martino, W., and Pallotta-Chiarolli, M. (2003). *So what's a boy? Addressing issues of masculinity and schooling*. Buckingham: Open University Press.
- Matthews, B. (2005) *Engaging Education: Developing Emotional Literacy, Equity and Co-education* Buckingham: McGraw-Hill/Open University Press.
- Meiers, M., Khoo, S.T., Rowe, K., Stephanou, A., Anderson, P. and Nolan K. (2006) Growth in Literacy and Numeracy in the First Three Years of School. ACER Research Monograph No. 61. ED496525. ACER Press (Australian Council for Educational Research). June 2006. Downloaded from: <http://www.acer.edu.au>
- Miles, Cheryl and Richmond, Heather (2002) *Boys' and Girls' Literacy: Closing the Gap*. Roundtable Discussion, Presented at the Literacy Conference, University of British Columbia, July 8-10, 2002. Downloaded from: <http://www.pkp.ubc.ca/ocs/literacyproceedings/paper.php?pid=13>
- Moss, G. (2000) Raising Boys' Attainment in Literacy: some principles for intervention *Reading* 34(3), 101-106.
- Myhill, D. (2002) Boy zones and girl power: patterns of interaction and response in whole class teaching. *British Educational Research Journal*, 28(3).
- NIA (2001) 2001 A-level and GCSE Results. Briefing note on the 2001 A-level and GSCE examination results in Northern Ireland and the causes of the "gender gap". *Briefing Note*. Research and Library Service, Research Paper 05/01, 22 August 2001. Downloaded from: <http://www.niassembly.gov.uk/io/research/0501.pdf>
- Newkirk, T. (2000). Misreading masculinity: Speculations on the great gender gap in writing. *Language Arts*, 77, 294-300.
- Newkirk, T. (2002). *Misreading masculinity: Boys, literacy, and popular culture*. Portsmouth, NH: Heinemann.
- Newkirk, Thomas (2003) The Quiet Crisis in Boys' Literacy. *Education Week* [Washington], vol.23, no.2, 34, September 10, 2003
- Newkirk, Thomas (2006) Media and Literacy. *Educational Leadership*. September 2006, 62-66.
- Ofsted/EOC (1996) *The gender divide*. London: HMSO
- Ofsted (2002) *The National Literacy Strategy: the first four years 1998-2002*. DFES Website. Downloaded from: [http://www.standards.dfes.gov.uk/primary/publications/literacy/63649/hmi555\\_nls\\_first4years.pdf](http://www.standards.dfes.gov.uk/primary/publications/literacy/63649/hmi555_nls_first4years.pdf)



- Ofsted (2003a) *Yes he can: Schools where boys write well*. July 2003. HMI 505. Downloaded from: [http://www.standards.dfes.gov.uk/primary/publications/literacy/765289/hmi505\\_nls\\_boyswritewell.pdf](http://www.standards.dfes.gov.uk/primary/publications/literacy/765289/hmi505_nls_boyswritewell.pdf)
- Ofsted (2003b) *Boys' Achievement in Secondary Schools*. July 2003. HMI: 1659. Ofsted Publications Centre. Downloaded from: [http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Pupils/Boys-achievement-in-secondary-schools/\(language\)/eng-GB](http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Pupils/Boys-achievement-in-secondary-schools/(language)/eng-GB)
- Office of the Premier (2005a) McGuinty Government Helps Close Gender Gap in Reading and Writing. *Backgrounder*, January 19, 2005. Downloaded from: <http://www.premier.gov.on.ca/news/Product.asp?ProductID=205>
- Office of the Premier (2005b) Premier Congratulates Students on Higher Literacy Test Scores. *Backgrounder*, May 5, 2005. Downloaded from: <http://www.premier.gov.on.ca/news/Product.asp?ProductID=127>
- Office of the Premier (2005c) McGuinty Government helps Improve Student Literacy and Numeracy Skills. *Backgrounder*, May 5, 2005. Downloaded from: <http://www.premier.gov.on.ca/news/Product.asp?ProductID=128>
- Office of the Premier (2005d) Closing the Reading Gap. *Backgrounder*, January 19, 2005. Downloaded from: <http://www.premier.gov.on.ca/news/Product.asp?ProductID=204>
- Ontario Ministry of Education (2004) *Me Read? NoWay! A practical guide to improving boys' literacy skills* Toronto: Queens Printer.
- Organization for Economic Co-operation and Development. (2004). *Messages from PISA 2000*. Paris: OECD Publications.
- O'Sullivan, C.Y., Lauko, M.A., Grigg, W.S., Qian J. and Zhang, J. (2003) The Nation's Report Card: Science 2000. *Education Statistics Quarterly*, 5(1) 43-47. Downloaded from: [http://nces.ed.gov/programs/quarterly/vol\\_5/5\\_1/q4\\_1.asp](http://nces.ed.gov/programs/quarterly/vol_5/5_1/q4_1.asp)
- O'Sullivan, Brown and Jones (2004) *Effective teaching to raise boys' literacy learning and achievement*. Centre for Literacy in Primary Education. Downloaded from: <http://www.standards.dfes.gov.uk/ntrp/lib/pdf/O'Sullivan.pdf>
- Pirie, B. (2002). *Teenage boys and high school English*. Portsmouth, NH: Heinemann
- PNS/UKLA (2004) *Raising boys' achievements in writing*. Joint Research Project, United Kingdom Literacy Association, Supported by Primary National Strategy, October 2004, Royston, UK: UKLA. Downloaded from: [http://www.standards.dfes.gov.uk/primary/publications/literacy/1094843/pns\\_ukla\\_boys094304report.pdf](http://www.standards.dfes.gov.uk/primary/publications/literacy/1094843/pns_ukla_boys094304report.pdf)
- Pollack, W. (1998). *Real boys: Rescuing our sons from the myths of boyhood*. New York: Random House.
- Prensky, M. (2001). *Digital Game-Based Learning* New York: McGraw-Hill.
- Raymond, Mélanie (2008) *High School Dropouts Returning to School*. Culture, Tourism and the Centre for Education Statistics, Statistics Canada. (81-595-M-No. 055) Ottawa: Minister of Industry. Downloaded from: <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2008055-eng.pdf>
- Roos, Dave (2008) How Net Generation Students Learn and Work. *Howstuffworks*, May 5, 2008, <http://communication.howstuffworks.com/how-net-generation-students-work1.htm>
- Rossi, R. (2006) Where the Boys Aren't. *Chicago Sun Times*. May 3, 2006, 16-17

- Rowan, E., Knobel, M., Bigum, C., and Lankshear, C. (2002). *Boys, literacies and schooling: The dangerous territories of gender-based literacy reform*. Buckingham, UK: Open University Press.
- Rowe, Ken and Rowe, Katherine (2006) *BIG issues in Boys' Education: Auditory Processing Capacity, literacy and behaviour*. Background paper to keynote address presented at the Second NZ "Boys in Education" conference, Massey University. Auckland, NZ, April 19-21, 2006
- Rushkoff, D., (1997) *Children of Chaos, Surviving the End of the World as We Know it*, London: HarperCollins.
- Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R. Maughan, B., Moffitt, T.E., Meltzer, H. and Carroll, J. (2004) Sex Differences in Developmental Reading Disability - New Findings From 4 Epidemiological Studies. *JAMA*. 291(16), April 28, 2004, 2007-2012.
- Safford, K., O'Sullivan, O. and Barrs, M. (2004) *Boys on the Margin: promoting boys' literacy and learning at Key Stage 2*, London: Centre for Literacy in Primary Education
- Salahu-Din, Debra, Persky, Hilary and Miller, Jessica (2008) *The Nation's Report Card: Writing 2007*. (NCES 2008468). [U.S. Department of Education, Institute of Education Sciences](http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008468). Downloaded from: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008468>
- Sanford, K. (2002). Popular media and school literacies: Adolescent expressions. In Hammett, R. and Barrell, B. *Digital Expressions: Media literacy and English language arts*. Calgary, AB: Detselig Enterprises Ltd., 21-48.
- Sanford, Kathy and Blair, Heather (2002a) *Morphing Literacy: Boys Reshaping Their Literacy Practices*. University of Alberta. Downloaded from: [http://www.onlineopinion.com.au/documents/articles/morphing\\_literacy.pdf](http://www.onlineopinion.com.au/documents/articles/morphing_literacy.pdf)
- Sanford, Kathy and Blair, Heather (2002b) Engendering Public Education: Single Sex Schooling in Western Canada. In A. Datnow and L. Hubbard (eds.) *Gender in Policy and Practice: Perspectives on Single Sex and Coeducational Schooling*. Routledge Falmer Press, 90-108. Downloaded from: <http://www.education.ualberta.ca/boysandliteracy/singlesex.htm>
- Schmidt, S. (2006) Boys Exhibit High Literacy Skills with Video Games. *UBC Website*. May 31, 2006. Downloaded from: <http://www.canada.com/vancouver/news/story.html?id=d91eb782-4169-4a6b-ad09-1868d2a2783b>  
(See also [www.jsworldwide.com/guys\\_read.html](http://www.jsworldwide.com/guys_read.html) or <http://www.guysread.com/>)
- Smagorinsky (2002a) Acquiescence, Accommodation, and Resistance in Learning To Teach within a Prescribed Curriculum. *English Education*, April 2002, 34(3) 187-213.
- Smagorinsky (2002b) *Teaching English through principled practice*. Upper Saddle River, NH: Merrill/Prentice Hall.
- Smith, M., and Wilhelm, J. (2002). *"Reading don't fix no Chevys": Literacy in the lives of young men*. Portsmouth, NH: Heinemann.
- Smith, M.W., and Wilhelm, J.D. (2006) *Going with the Flow - How to Engage Boys (and Girls) in Their Literacy Learning*. Portsmouth, NH: Heinemann
- Spence, C.M. (2008) *The Joys of Teaching Boys*. Markham: Pembroke Publishers. Downloaded from: <http://www.stenhouse.com/assets/pdfs/8230fm.pdf>
- Sternberg, Robert J. and Preiss, David (eds.) (2005) *Intelligence and Technology*, Florence, Ky: Routledge.
- Street, B. (ed.) (1993) *Cross-cultural approaches to literacy*. Cambridge: Cambridge University Press.
- Tapscott, D. (2009) *Grown Up Digital*. New York: McGraw-Hill.
- Taylor, Donna Lester (2004) "Not just boring stories": Reconsidering the gender gap for boys *Journal of Adolescent & Adult Literacy*. Dec 2004/Jan 2005, Vol. 48, No. 4, 290-298. Downloaded from: [http://www.accessmylibrary.com/coms2/summary\\_0286-11881334\\_ITM](http://www.accessmylibrary.com/coms2/summary_0286-11881334_ITM)

- Turkle, S., (1997). *Life on the Screen, Identity in the Age of the Internet*, New York, Simon & Schuster.
- Trent, F. and Slade, M. (2008) *Declining rates of achievement and retention: the perceptions of adolescent males*. Department of Education, Science and Training (AUS). Downloaded from: [http://www.dest.gov.au/archive/highered/eippubs/eip01\\_6/default.htm](http://www.dest.gov.au/archive/highered/eippubs/eip01_6/default.htm)
- Younger, M. (2007) The gender agenda in secondary ITET in England: forgotten, misconceived or what? *Gender and Education*, 19(3) May 2007, 387–414. Downloaded from: <http://www.ingentaconnect.com/content/routledg/cgee/2007/00000019/00000003/art00007>
- Younger, M. and Warrington, M. (2002) Single-sex teaching in a Co-Educational Comprehensive School in England: an evaluation based upon students' performance and classroom interactions, *British Educational Research Journal*, 28, 353-374
- Younger, M. and Warrington, M. (2005a) *Raising Boys' Achievement*. Research Report RR636, DFES and University of Cambridge, Faculty of Education. Downloaded from: <http://www.dcsf.gov.uk/research/data/uploadfiles/RR636.pdf>
- Younger, M. and Warrington, M., with McLellan, R. (2005b) *Raising boys' achievements in secondary school: issues, dilemmas and opportunities*. Maidenhead: Open University Press.
- Veen, W. (2003). A new force for change: Homo Zappiens. *The Learning Citizen*, 7, 5-7.
- Waters, Jen (2005) Book Review: *Guys Write for Guys Read* edited by Jon Scieszka. (New York, NY: Viking) *CM Magazine*. September 2, 2005, 12(1). Downloaded from: <http://umanitoba.ca/outreach/cm/vol12/no1/guyswriteforguysread.html>
- Worthy, J., Moorman, M., and Turner, M. (1999). What Johnny likes to read is hard to find in school. *Reading Research Quarterly*, 34, 12-27.
- Worthy, J., Turner, M., and Moorman, M. (1998). The precarious place of self-selected reading. *Language Arts*, 75, 296-304.
- Zambo, D., & Brozo, W.G. (2009). *Nurturing Young Male Readers*. In *Bright Beginnings for Boys*. Newark, DE: International Reading Association.
- (2005) Boys and Literacy. *Boys Rreading website*. Colorsports Publishing. Downloaded from: [http://www.boysrreading.com/boys\\_and\\_literacy.php](http://www.boysrreading.com/boys_and_literacy.php)
- (2007) Boys Close Gender Gap in English, test results show. *The Independent*. August 8, 2007. Downloaded from: <http://license.icopyright.net/user/viewFreeUse.act?fuid=MjE4NTk5NA%3D53D>
- (2007) Gender gap in literacy rate unacceptably high: Pratibha. *The Hindu*. September 9, 2007. Downloaded from: <http://www.thehindu.com/2007/09/09/stories/2007090955941100.htm>
- (2008) Taking a reading on literacy. *The Times of Trenton Living News*. Tuesday, November 18, 2008. Downloaded from: <http://www.nj.com/living/times/index.ssf?/base/living-1/1226984741286110.xml&coll=5>