An exploration into the gender-based achievement gap in literacy: deficiency, difference, and teacher, researcher and measurement bias

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An Exploration into the Gender-Based Achievement Gap in Literacy:
Deficiency, Difference, and Teacher, Researcher and Measurement Bias

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Abstract

An Exploration into the Gender-Based Achievement Gap in Literacy: Deficiency, Difference, and Teacher, Researcher and Measurement Bias

By Theresa Orlandi

This paper provides a review of the research pertaining to various explanations and causes for boys’ underachievement in literacy. Drawing upon the perspectives of brain research, teacher and student attitudes and expectations, self-efficacy beliefs, and motivational theory, it demonstrates that there are multiple factors contributing to the gender achievement gap in literacy. Examples of successful programs and initiatives are described and effective criteria are identified. In response to the review of literature and research, a project was developed that incorporated these criteria and was used with a small group of fourth-grade boys in a rural, mid-Hudson Valley community. Findings suggest the importance of choice in engaging students, the use of drawing in supporting writing, and opportunities for collaboration and peer critique that serve to further promote engagement in the writing process.
Dedication

For Olivia and Liam.

Watching both of you grow and develop into distinct learners has inspired my inquiry and research.
# Table of Contents

Rationale…………………………………………………………………………………………..5

Review of the Literature…………………………………………………………………………9

Differently Literate: Male Brain Biology and Its Effects on Literacy...............................9

Predictors of Writing Outcomes & How Boys are More Vulnerable to Deficits..............17

Boys, Reading, and Underachievement in Literacy......................................................23

Gender Bias in Teacher and Student Perception and Rating of Writing........................27

The Impact of Self-Efficacy Beliefs on Writing Achievement........................................31

Effective Practices That Make a Difference.................................................................35

Development & Implementation of Write On! An After School Boys’ Writing Club.........56

Limitations of the Study.................................................................................................65

Implications for the Field.............................................................................................66

References......................................................................................................................68

Appendix A....................................................................................................................71

Appendix B....................................................................................................................73

Appendix C....................................................................................................................76

Appendix D....................................................................................................................84

Permission Letters......................................................................................................87
**Rationale**

In the current educational and political climate that focuses almost exclusively on data-driven assessment and instruction, one does not have to look long and hard before encountering a clear and consistent statistic regarding literacy achievement: for decades, girls have outperformed boys in reading and writing, across grades. (National Center for Education Statistics, 2011). When considering writing specifically, the achievement gap becomes even more alarming, at 20 points, as reported in the *The Nation’s Report Card* in 2011 by the National Assessment of Educational Progress (National Center for Education Statistics, 2011). Considering literacy achievement’s importance in long-term educational outcomes and its potential impact on a generation of underachieving males, it is imperative that educators, schools, families, and communities look at current research about males and literacy and find ways to broaden our current thinking about literacy in general and our educational practices to support the specific needs and strengths of our boys’ literacy growth and achievements.

* * * *

Consider the following scenario: a young boy (age 6) sits with a copy of James John Audubon’s *The Quadrupeds of North America* on his lap. He is pointing to an illustration plate and describing, in rich detail and with scientific precision and vocabulary, the qualities of a wolverine. He recounts, with sound effects and dramatic movements, the narrative Audubon reports regarding his encounter with a wolverine in the wild. He then opens a sketch-book to a blank page, where he begins to draw an impressively detailed drawing of a wolverine and retells the story of Audubon’s encounter with the wolverine and his hunting party. His attempts at writing the words that go with the story are rudimentary. But the
enthusiasm, engagement, motivation, and sophisticated choice of words and description of
the action are exquisite.

Now consider this same child, less than an hour earlier, resisting and ultimately
crying over having to practice Wilson Fundations words on special paper with sky, plane,
grass, and worm lines to help him form his letters correctly. Would your instincts tell you
that this child has a deficit in literacy skills? Would his resistance to the rote task of
practicing letters and words in order to conform to a specific standard indicate his innate or
potential ability to communicate in a verbal or written format? Alternatively, would his voice
and choice of acting out and then drawing, labeling, and writing the story of Audubon’s
encounter with a wolverine in the wild inform your assessment of his potential literacy skills,
strengths, and needs?

And what happens to a boy like the one described here, who receives years of
instruction that focus on the basic mechanics of writing rather than nurturing the skills and
topics that engage his attention, allow for the pursuit of interests and passions, and provide an
arena for him to showcase what he can produce as a writer when given the opportunity?
Perhaps this one vignette suggests the profound disconnect between what boys bring to the
literacy table and what is happening in classrooms today that turns boys off to reading and
writing before they ever have a chance to develop into invested and valued members of a
greater literacy community.

* * * *

Before I became a classroom teacher and then later a parent to both a daughter and a
son, I used to believe strongly in the role of nurture and culture in the development of most
qualities and characteristics of a person. Once I became responsible for the academic growth
of multiple young minds and watched a daughter and a son grow up very distinctly and differently before my very eyes, my convictions regarding the nature vs. nurture debate began to shift. Stereotypes about boys and girls and their respective qualities in arenas such as reading and writing, interests in sports and hobbies, behavior in and out of school, and general development started to haunt my thoughts and undermine my strongly held beliefs about what and how children learn best.

*Why did the conferences with my boy readers and writers take on a different flavor from my conferences with girls?*

*Why was engagement more difficult for more of my boy readers than the girls?*

*Why did so many of my boy writers struggle to “paint a picture with words” yet be fully engrossed in writing about the action in a favorite video game, movie, or T.V. program?*

*Was there something visceral to the boys’ preference for the Time Warp Trio series while girls overwhelmingly chose Ramona books?*

*Why did my son interface with the world in a way his sister never considered or did (i.e. physically destroy things daily or attempt to eat worms)?*

Could there be something to how boys’ and girls’ brains and biology (i.e. their “hard-wiring”) that has profound implications for what and how they should be instructed in literacy (and other areas) that could make a real difference in terms of their engagement, motivation, and achievement? Should I hold my male writers to different standards, ones that more accurately reflect their preference for action-driven plots and violence? Could our current ideas about what constitutes “good” writing be narrow? Could they privilege a
specific gender or set of skills over the other? What could I do to help my boys become more
invested readers? Should there be different ways of conceiving literacy skills and
achievement by gender? How could I reframe what I currently did and know about the
Teaching of literacy that could be more inclusive of what boys (and girls) naturally bring to
the tasks of reading and writing? Would any of these changes make a difference for the boys
not “achieving” in literacy?

I began my teaching career twenty years ago and all these questions have recently
been brought back to the forefront of my mind. The current educational and political climate
has placed a greater focus on assessment data and teacher and school accountability, bringing
with it a more prominent focus on the growing gender-based achievement gap. After
watching my own son disengage from and outright resist current classroom literacy practices
and instruction yet thrive as a reader and writer at home, I became more committed to
pursuing this line of inquiry. And after hearing my concerns echoed by equally invested
parents regarding the literacy lives of their sons, I am convinced that we, as a culture, need to
question the dominant values of our educational and political systems. We need to redefine
and nurture the strengths of male readers and writers through informed instructional
practices, measurements, and structures that reflect and value these strengths if we actually
want to make a meaningful and lasting difference in regards to the literacy development of
boys and begin to “close” the existing achievement gap.

Since this has become a global trend, there is a tremendous amount of recent research
related to the gender-based literacy achievement gap. For the purpose of this review, my
research question focuses on why boys are consistently underachieving in writing and what
teachers, families, and communities can do to support the writing achievement of boys. I will
provide a review of the relevant research that provides multiple perspectives and sheds light on why, what, and how boys are differently literate, suggest why boys may be particularly vulnerable to literacy deficits, and showcase examples of the impact teacher and measurement bias can have on boys’ literacy achievement, with a particular focus on writing. Ultimately I intend to bring to the forefront the latest research regarding boys and literacy so that educators, families, and communities are capable of making informed, common-sense decisions regarding how to support boy readers and writers. The research and data suggest that altering our current practices can nurture the strengths and needs of boys, thereby helping them realize their full potential as valued, literate members of society.

Finally, I will share the results of an action-based research project that grew out of this review of literature. Writing Attitude Surveys conducted with four, 4th grade boys regarding their thoughts, attitudes, and experiences with writing as well as the foundation of a boys-only writing group in which both reluctant and enthusiastic boy writers come together weekly to write, support one another with strategies and tips, and provide a willing audience with whom to share writing triumphs and difficulties.

**Review of the Literature**

**Differently Literate: Male Brain Biology & Its Effects on Literacy**

There are many reasons why boys seem to be struggling more with literacy skills than girls. The reality is that boys and girls are different, and many of these differences appear to be related to distinct and inherent differences in how male and female brains operate in concert with biological and hormonal functions. It is important to note that while there are major differences between male and female brains, there are also areas in which there is “immense overlap” (Gurian, p. 9, 2010). Equally important is to keep in mind that brain
development and maturation occurs over a continuum, with some children (male or female) developing earlier or later than their peers. Additionally, “brain development is best understood as a spectrum of development, rather than two poles, female and male” (Gurian, p. 16, 2010). So while much of the information I present will resonate with you as true for many of the students you have worked with, there will inevitably be other students (male or female) that come to mind that simply don’t fit what the research suggests. As such, the information I present in this section should be seen as generalizations or trends rather than conditions and processes set in stone.

In order to provide an easy means of summarizing and synthesizing the operational/structural, biological, and hormonal differences between the genders and their potential impacts on literacy learning in particular, I have adapted a chart from Michael Gurian’s 2010 edition of Boy’s and Girls Learn Differently: A Guide for Teachers and Parents (see Appendix A). A discussion of significant brain structures, hormones, and operations that affect literacy learning in particular follow.

Recent advances in medical technology and techniques such as fMRI’s (functional magnetic resonance imaging) and PET (positron emission tomography) and CAT (computerized axial tomography) scans have revolutionized research into brain development and functions. Through the use of these advanced techniques, scientists and researchers have found that “certain areas of the male brain do not develop at the same rate or even in the same sequence as the female brain” (Senn, p. 214, 2012).

When noted linguist and Georgetown University Professor Deborah Tannen compared how girls and boys of different ages use language, she ‘was overwhelmed
by the differences that separated the females and males at each age, and the striking similarities that linked the females, on one hand, and the males on the other, across the vast expanse of age. In many ways, the second-grade girls were more like the twenty-five year old women than like the second-grade boys. (Tannen, D., p. 245, 2001 as cited in Sax, p. 35, 2005)

As a result, the differences in the timing of brain development and the structural, organizational, and hormonal differences in the brain may contribute to some of the external behaviors and attitudes we see in our boy and girl students.

It has been found that, chronologically, girls’ brains mature earlier than boys’ brains (Sax, 2005; Gurian, p. 25, 2010). The maturation that occurs is a process that continues through the late twenties, closer to age 30 for males. And this maturation manifests itself in areas that affect literacy development. For example, if we look more specifically at the brain’s frontal lobe and cerebellum, which are primarily responsible for language skills, “recent brain studies have discovered the development of language areas of 5-year old boys’ brain to be on par with the language areas of 3.5-year old girls (Sax, 2007 as cited in Senn, p. 214, 2012). Consequently, “girls’ verbal abilities tend to develop earlier so they have been found to rely more heavily on verbal communication; while boys often rely heavily on nonverbal communication, and are less able to verbalize feelings and responses as quickly as girls” (Gurian, p. 26, 2010).

So how can this difference translate and inform real life and school experience? Given the profound impact spoken vocabulary has on predicting and acquiring reading and writing skills, we need to think about how, when, and what types of literacy instruction are appropriate for individual children, especially the boys in our classes. As more and more
academic literacy skills are brought down into kindergarten and preschool curricula, many boys may be at a disadvantage. But should this be framed as a deficit, or something that developmentally is inappropriate for some of the learners in our classrooms?

Another important difference between male and female brain structure is the corpus callosum, which is typically 20% larger in females than in males (Sax, 2005, Gurian, 2010). This part of the brain connects the right and left hemispheres and allows for communication between the two sides and might “explain why females are generally more adept at expressing emotions than males” (Fletcher, 2006; Gurian & Henley, 2001 as cited in Senn, p. 214, 2012). As with the maturation issue mentioned earlier, this suggests the need to consider the importance of verbal communication in literacy instruction, as well as in school in general, and how some boys might exhibit a distinct disadvantage in this respect.

Differences in brain organization can also have an impact on how boys and girls comprehend and generate language. For example, brain imaging of emotions in teenagers shows that activity associated with negative emotion occurs in different locations for girls and boys (Sax, 2005, Gurian, 2010). In teenage girls, the activity is localized to the cerebral cortex, which is the same part of the brain used to comprehend and generate language. In teenage boys, the brain activity is localized in the amygdala, which is located in the base of the brain and has few direct connections with the cerebral cortex (Sax, p. 106, 2007). The implications of this finding suggest that questions that require students to link emotions and language (i.e. *How would you feel if* . . . questions) might be more challenging for boys. In order to answer these types of questions, empirically speaking, boys would need to link emotional information in the amygdala with language information in the cerebral cortex—essentially using two different parts of the brain that don’t normally work together (Sax, p.
106, 107, 2007). Being aware of this difference in brain organization would help educators to be more flexible and responsive to the difficult nature of such kinds of questions for boys. Perhaps reframing feeling questions as “What would you do if you were this character?” might help boys interpret and analyze the events, actions, and feelings of characters in texts more readily and proficiently.

The role hormones play in our daily lives, moods, and behaviors cannot be overstated. What is less widely known and understood is how sex hormones literally “genderize” the brain’s architecture and functioning, profoundly affecting learning processes as a result. While there is tremendous variety in individuals’ hormonal levels, there are well-documented degrees of dominance in relation to gender. Consider the stereotype that boys are more aggressive and impulsive than girls. The reality is that there are structural and chemical differences in the male brain, triggered by secretions of hormones (especially testosterone) in the womb and later during puberty, that contribute to these conditions. These hormonal secretions “wire the brain toward male structure and functioning” and “change the brain’s very architecture to male” (Gurian, p. 28, 2010).

So how can these prenatal and pubescent surges of hormones affect learning and literacy in particular? One obvious outcome is the effect on emotions and behavior. But these fluctuations in hormones might influence learning and performance on tests. “Beginning in prepuberty, generally around ten years old, males often receive as many as seven to ten ‘spikes’ or ‘surges’ of testosterone every day. During the spiking, hormonal flow can make their moods vacillate between aggressive and withdrawn. . . . When male testosterone is high, the boys may perform better on spatial exams, like math tests, but worse on verbal tests” (Gurian, p. 28, 2010).
Serotonin (a.k.a. “the feel-good” chemical) is another hormone that can impact learning and achievement in academics. Serotonin is a neurotransmitter that helps brains process various sensory stimuli. It has been found that in general, male brains process serotonin less effectively than females. This can lead to more impulsivity and fidgety behavior (Sax, 2005; Gurian, p. 27, 2010). Additionally, boys have been found to have faster metabolisms than girls, which helps explain their potential need for movement. “Movement has been shown to stimulate boys’ brains and help them to better manage their impulsivity; more frequent opportunities for movement increases communication between the right and left hemispheres and therefore enhances boys’ ability to learn” (Gurian & Henley, 2001 as cited in Senn, p. 214, 2012). As with the maturation, these differences can easily become “de facto deficits” in a classroom setting where sitting still and remaining quiet is the expectation for large periods of time. If educators understood the reasons behind why boys tend to need more physical stimulation and opportunities to move, then this could drive more appropriate learning environments, structures, and opportunities for the boys in such classrooms.

Building in more hands-on and physical experiences such as acting out the plot events or manipulating magnetic letters are meaningful and effective literacy instructional practices that meet the needs of boys (or other learners) that have less tolerance for sedentary learning activities.

Functional differences between male and female brains contribute to distinct advantages and disadvantages for both males and females. “PET scans, magnetic resonance imaging (MRI), and other brain imaging techniques show that the resting female brain is as active as the activated male brain” (Gurian, p. 29, 2010). Since the female brain is never truly at rest, this may result in a learning advantage, as it is consistently being engaged and is
utilizing more of the “upper,” advanced brain structures where complex thought processes occur (Gurian, p. 29, 2010). This can translate to advantages and disadvantages for both genders, especially when it comes to learning environments and tasks. Since the male brain may potentially be more easily overwhelmed by stimulation than the female brain, it copes by focusing on one task, leading to a “quick, direct route to a goal.” The disadvantage of this tendency is that the “male may have fewer resources to redirect himself” in the face of failure” (Gurian, p. 29, 2010).

This use of upper brain structures and greater activity in the brain overall suggests one explanation for why females can have a greater propensity to multi-task, a skill that is indispensable in a learning environment filled with multiple sources of sensory stimulation and distractions. However, boys have shown a tendency for greater single-task focus, which can be an advantage when selective task-focus results in greater engagement and learning success. A personal anecdote that demonstrates this tendency is when my son is building with Legos and I have been calling him or have asked him a question. It seems as if he is selectively deaf, only attending to his goal of assembling a Lego set. I often wonder if he would be disturbed by a bomb going off when he is in a task-focused state of mind! And if one were to translate this to classroom practices, allowing blocks of time for focused, single, goal-driven activities might accommodate the learning needs and strengths of many of our male students.

Gender difference has also been noted in the areas of memory and sensory intake. Girls can store a greater quantity of seemingly random information, especially if it is linked to an emotional or relational experience they had. Boys tend to store
information well when it is organized into clear, logical form or has specific importance to them, such as sports trivia. (Gurian, p. 30, 2010)

In addition to this, increased levels of estrogen in females during puberty cause sudden growth of the hippocampus, the part of the brain that focuses on memory. Since the hippocampus is larger in girls and women, this may explain why females are often better than males at remembering things, such as names and faces in myriad social relationships” (Gurian, p. 30, 2010).

Again, the potential for gender differences in memory as well as the storage and retrieval of information has clear implications for classroom practice. So much of literacy instruction today is geared toward the interpretations of characters’ feelings as well as the relationships between characters and the personal connections readers bring to a text. If we know that boys utilize different parts of their brain than girls to process emotion and language, what can we do differently to support their learning in these areas? Could reframing questions as well as utilizing organizational scaffolds such as story maps and outlines make more sense to some of our readers and writers? Is there a middle ground of instructional practices that allow for our students to utilize their innate strengths in processing, comprehending, and interpreting literature such as character analysis while developing their abilities that come less naturally?

As we consider these developmental, structural, and hormonal differences between the male and female brains, perhaps our current practices and expectations for boys and literacy, especially in the primary grades, need to be flexible or altered to better meet the needs of our developing male readers and writers. Just as the brain develops along a continuum, so should our expectations for literacy achievement be framed within a
developmental continuum. As Dr. Leonard Sax summed up, “Timing is everything in education. . . It is not enough to teach well. You have to teach well to kids who are ready to learn, kids who are developmentally ripe” (Sax, 2007, as cited in Senn, 2012).

**Predictors of Writing Outcomes and How Boys are Vulnerable to Deficits**

There is no question that gender matters when it comes to writing achievement for children. Girls have outperformed boys in writing consistently across grades ever since writing was included in the NAEP (National Assessment of Educational Progress) (Kim, Otaiba, Wanzek, & Gatlin, 2014). Additional studies report gender achievement differences in writing, although mixed or non-significant differences have been reported when controlling for specific variables related to writing outcomes (Berninger and Fuller, 1992; Kim, et al. 2014, Olinghouse, 2008). What remains less clear is how and why gender is making a difference in the writing outcomes of students, what dimensions contribute to writing skills, and what sorts of interventions or changes in current practices and measurements should be implemented in order to mediate the gender differences in writing outcomes.

Investigations and research into the multiple dimensions that contribute to writing quality and quantity, as well as predictors of potential writing deficits have been conducted in recent years. When examining the writing of students in elementary grades, it has been found that quality, productivity, spelling, writing conventions, and syntactic complexity are discreet and separable dimensions (Kim et al., 2014; Puranik et al., 2006; Wagner et al., 2011 as cited in Kim et al., 2014; Olinghouse, 2008). These dimensions can be analyzed to determine how they individually contribute to writing quality in standardized measurements such as the Woodcock Johnson Writing Fluency subtest. In addition to these dimensions, other
predictors of writing quality have been based on previous research and include “oral language, reading, spelling, handwriting fluency (letter writing and story copying tasks), attention, and rapid automatized naming” (Kim, et al. 2014).

In 2014, Kim et al., sought to “expand this line of research by examining how CBM scores and the Writing Fluency task of the WJ-III are related to writing quality and productivity dimensions using data from children in Grades 2 and 3” (p. 81). Using a combination of CBM writing measures (Curriculum Based Measurement: number of words written, correct word sequences, incorrect word sequences, words spelled correctly, percentage of correct word sequences, and correct minus incorrect word sequences) and the Writing Fluency standardized subtest of the Woodcock Johnson-III, it was found that “boys had statistically significantly lower scores after accounting for age” and showed “that boys continued to have lower mean scores in writing even after accounting for all the included language and cognitive variables” (Kim, et al., p. 90, 2014). So while the aforementioned predictors of writing outcomes in language and literacy explained the gender gap to some extent, the discrepancies were not completely mediated. The fact that the gender differences persisted “even after accounting for language and cognitive skills” underscores the need for further research regarding the specific skills that influence children’s writing development as well as the role gender contributes to these skills (Kim, et al., p. 90, 92, 2014).

It is important to keep in mind that the CBM and the WJ-III writing fluency subtest focus on the mechanics of writing such as handwriting fluency, number of words written, spelling, and correct syntax rather than qualitative elements related to craft such as vocabulary (i.e. word choice) and voice. As such, the results should be considered as a narrow measurement of overall writing ability and achievement. This points to a need for
more studies assessing quality of writing and any potential gender-based achievement
differences. It also suggests a need for a wider range of criteria to be considered when
assessing the writing skills of all students, and boys in particular.

Kim, et al.’s 2014 research builds on an earlier study by Berninger and Fuller (1992),
in which standardized measures of oral verbal fluency, written orthographic fluency, and
written composition were analyzed in order to identify primary grade children with writing
disabilities. The authors were also interested in whether boys and girls differed in verbal,
orthographic or compositional fluency and found that “boys were a) more likely to have
poorer writing skills than girls and b) more likely to qualify as having disabilities in
composition” (Berninger and Fuller, p. 379, 1992). However, the authors were surprised by
an “unpredicted asymmetry in gender differences” in which the boys excelled in verbal
fluency for oral language and girls excelled in orthographic fluency for written language and
composition (Berninger and Fuller, p. 375, 1992). The findings suggest that the boys’
disadvantage in orthographic-motor integration had a negative impact on their composition
skills. By contrast, the girls’ disadvantage in verbal fluency did not have a negative effect on
their writing composition outcomes (Berninger and Fuller, 1992).

The authors go on to caution school psychologists when identifying children in the
primary grades with writing disabilities:

Their problems may not stem immediately from immature fine-motor skills, but
rather may stem from their immediate problems in orthographic-motor integration.
We simply do not know how many children, especially young boys, may give up
before they get started in writing because of discouragement over the difficulty of
producing written language, compared with the relative ease of producing oral
language. We need to be sensitive to this developmental issue if we are to optimize the writing competence of the entire school-age population. (Berninger and Fuller, p. 381, 1992)

The educational implications of such research are profound. Students, especially primary age boys, identified as having orthographic fluency (orthographic-motor integration) difficulties may simply need more time before they are expected to conform to strict age or grade-level compositional expectations. Again, this underscores the innate differences that boys’ brains and biology contribute to the literacy achievement gap and suggest that current classroom practices and measurements be altered or expanded to better accommodate the diverse strengths and needs of our young male writers.

If we revisit Kim, et al.’s (2014) predictors of writing skills, we can see that a deficit in transcription skills (i.e. spelling and handwriting) contributes to the total number of words produced and has a significant impact on how children’s writing is perceived and measured. Other studies have reported a predictive nature of transcription skills in writing achievement such as the relationship between spelling ability and writing quality (Hogan & Mishler, 1980; Juel, 1988; Macmann, et al., 1989; Parker, Tindal, & Hasbrouck, 1991a; Tindal & Parker, 1989 as cited in Olinghouse, 2008) as well as spelling ability and writing fluency (Beimiller, Regan, & Gang, 1993; Graham, et al., 1997; Tindal & Parker, 1989, 1991 as cited in Olinghouse, 2008). It is hypothesized that stronger transcription skills “allow for mental resources such as attention and working memory to be available for idea generation and translation processes” (Kim, et al., p. 81, 2014). Since the boys in Berninger and Fuller’s 1992 study demonstrated a relative weakness and disadvantage in this area despite having
stronger verbal fluency than the girls, it is not surprising that their writing outcomes were negatively affected.

Compounding this relative weakness in transcription skills is the role attention plays in writing outcomes. “Additional evidence underscoring the importance of attention in writing comes from studies with children who have attention deficits or attention-deficit/hyperactivity disorder (ADHD); converging evidence suggests that students with ADHD made more spelling and grammatical errors, made more content errors or digressions and demonstrated weaker text structure features than children without ADHD” (Casas, Ferrer, & Fortea, 2013; Gregg Coleman, Stennett & Davis, 2002; Re, Pedron, & Cornoldi, 2007 as cited in Kim et al., p. 81, 2014). If we consider the sobering statistic that boys comprise the majority of students identified with ADHD (up to 95%), this can be considered an additional factor for why boys are not achieving as well as girls in current writing measurements that focus on transcription skills such as the mechanics of writing—handwriting, spelling, and speed (letter writing automaticity).

Reading skills play an essential role in writing development and general literacy achievement overall. “Studies have shown that reading comprehension was related to written composition quality and productivity for children in elementary and middle school grades” (Berninger & Abbott, 2010; Berninger et al., 2002; Kim, Al Otaiba, et al., 2013, 2014 as cited in Kim et al., p. 81, 2014). “Children’s reading ability might influence written composition skill via reading experiences. Greater reading ability and consequent text reading might allow the opportunity for the child to acquire vocabulary and syntactic structures, and organization of written text as well as content” (Berninger, et al., 2006 as cited in Kim, et al., p. 81, 2014).
It is also important to consider that statistically, fourth-graders who read for fun almost every day score higher in reading achievement tests than students who read far less. Female students reported reading for fun on a daily basis 14% more than their male peers (National Center for Education Statistics, 2011). Additionally, a relationship between word reading skills and writing fluency and quality has been reported. “The relationship between word reading and word spelling skills also is well documented leading to the potential of word reading to play an indirect role in writing skill through its relationship with spelling” (Bruck & Waters, 1988, 1990; Ehri, 1997; Juel, Griffith, & Gough, 1986 as cited in Olinghouse, p. 4, 2008).

So considering that in general, boys acquire reading skills later, are identified as having reading disabilities more frequently than their female peers, and report reading for fun less than girls, it seems that boys are especially vulnerable to being perceived as deficit in their potential reading and writing achievement predictors. When we consider the research on gender differences in the brain and its impact on literacy learning in addition to the aforementioned predictors of writing achievement, the need for more flexible approaches to literacy instruction, benchmarks, and measurements becomes clear.

These various predictors and differences can be taken into account and in some cases (reading skills, spelling, handwriting fluency) measured in order to inform instructional practices. In turn, our informed instructional choices and practices can have a significant impact on the achievement outcomes for all our students, especially the most vulnerable ones. The question of when we begin literacy instruction, what skills and strategies we teach, and how we measure writing can and should be informed by current science and studies. The predictors and statistics reported in these studies as well as the persistent gender-based
achievement gap points to a need for educators and policy-makers to revise their current practices and measurements to reflect current empirical findings in order to be more responsive to the strengths and needs of students.

**Boys, Reading, and Underachievement in Literacy**

In the previous section, I described the various predictors that contribute to writing achievement, including the role of reading and its importance and impact on writing. In this section, I provide a more in-depth discussion of why boys are not scoring as high as girls in reading comprehension, with a particular emphasis on motivation and engagement as it relates to reading achievement and ultimately, writing achievement. Reading comprehension as well as the amount of time students spend reading has been linked to writing proficiency and achievement. In particular, reading comprehension has been shown to be related to written composition quality and productivity for children in elementary and middle school grades (Berninger & Abbott, 2010; Berninger, et al., 2002; Ki, Al Otaiba, et al., 2013, 2014 as cited in Kim, et al., 2014). As such, it is an important contributing factor to consider when looking at the gender based achievement gap in writing.

The statistics regarding boys and reading are impossible to ignore: “as a group, school-age boys score lower than girls at every level on standardized tests of reading comprehension, in almost every country where tested, most notably in the United States (National Center for Education Statistics, 2002), Canada, England, and Australia, where students are continuously tested” (Boltz, p. 1, 2009). As indicated by the research into predictors of writing outcomes in the previous section, the amount of reading one engages in has a direct impact on one’s proficiency in reading comprehension and fluency. Since boys report reading for fun less frequently than girls (National Center for Education Statistics,
2011), the gender achievement gap should not be surprising. Less clearly understood are why boys are reading less than girls and what role current teaching practices and structures have on boys and reading overall.

Several recent studies have suggested that one reason boys read less than girls is that the kind of reading they are asked to do in school does not connect to their interests and strengths as learners (Boltz, 2009; Fisher & Frey, 2012; Gurian, 2010; Moss, 2000; Senn, 2012). This in turn has a direct impact on motivation, which has also been shown to have a profound impact on achievement. It has been suggested that the reading preferences of boys (sports, comics, action, horror, humor) are not appreciated by teachers and librarians and are underrepresented in classroom and school library collections and are not used in literacy instruction and curricula (Boltz, 2009, Brozo, 2002, Smith & Wilhelm, 2002 as cited in Senn, 2012).

In Boltz’s 2009 online article, “What We Want: Boys and Girls Talk About Reading,” she found that the books that appealed to the boys were rarely the Caldecott or Newberry Award winners so frequently chosen by teachers and can be found frequently on banned book lists or books not represented in school libraries. This can have a negative effect on boys by sending the message to them, young and early, that their reading preferences are not valued in school. (Fisher, 2001; Zambo & Brozo, 2009; Zambo, 2007 as cited in Senn, 2012).

Gender bias by teachers seems to also play a role on reading achievement and motivation for boys. If we consider the fact that 90% of elementary level teachers are female, and “the criteria by which teachers evaluate books appears to be more aligned with the way in which girls think” (character and feeling analysis, for example), it is easy to see why many
of our boy readers engage in reading less frequently than their female peers (Boltz, 2009). This same study confirmed previous studies’ (Brozo, 2002; Ivey & Broaddus, 2001; Scieszka, 2003; Smith & Wilhelm, 2002; Sturm, 2003 as cited in Boltz, 2009) findings regarding boys reading preferences for nonfiction titles, comics and graphic novels, and books about sports, action, and adventure. These findings support other research regarding the specific reading and writing tastes of boys “which reveals that they enjoy texts that can be collected (books in a series, baseball cards, etc.), have visual interest (graphic novels, websites), are succinct (newspaper or magazine articles), relate to their own lives, and are funny or rebellious (comics)” (Smith and Wilhelm, 2002 as cited in Senn, p. 217, 2012). Again, these kinds of books are rarely showcased by teachers or school librarians as being “quality” or “good” literature; thereby marginalizing boys’ reading preferences further. The implications for current practices are rather straightforward: widening our current choices of materials for literacy instruction and reading options is essential if we want to adequately meet the needs and interests of all our readers, and boys in particular. As Boltz’ study revealed, when the boys were asked what teachers could do to help boys read more, 25% responded that their only advice was to give boys a choice of what they read (2009)!

In another study looking into the gender differences in girls’ and boys’ achievement in reading, Moss (2000) found that boys’ and girls’ reactions to judgments made about their proficiency as readers “has far more impact on their progress in their respective progress in reading than the inclusion of their preferred reading materials on the school reading curriculum; or the presence or absence of gender-specific role models provided by adult readers” (p. 101). In classrooms where proficiency judgments were made highly visible, “weaker boy readers spent an inordinate amount of time in flight from such judgments” and
as a result, turned to nonfiction texts to disguise their lack of success as readers (Moss, p. 103, 2000). “The project data suggested that the weaker boys opted for nonfiction, not as a rejection of ‘feminine’ narrative forms, but because nonfiction texts allowed them to make claims about their own status as experts, which crucially didn’t depend on their having to read the text at all” (Moss, p. 103, 2000). Consequently, the boys spent less time working on their reading skills, read less overall, and “developed a less strong sense of commitment to the activity” (Moss, p. 104, 2000). This highlights the impact of literacy practices and structures on student achievement and suggests that teachers may need to alter their input styles with male and female students in order to help them reach their full potential as readers and writers.

In this same study, it was found that the students that had been identified as less proficient ironically had “fewer officially sanctioned opportunities to develop their own tastes and their own commitment to reading for themselves” (Moss, p. 103, 2000). An ability-confidence-motivation cycle resulted that contributed to lower achievement. In other words, students identified as lacking in basic skills that contribute to success in reading had fewer opportunities to read on their own or to choose books that would serve to motivate or engage them, which led to avoidance tactics which ultimately resulted in even less time spent reading. Moss documented that the best practices that had a positive impact on children’s reading were ones that “gave children considerable freedom to explore different kinds of texts in different ways and for different purposes, alongside highly structured opportunities to talk and write about their reading together” (Moss, p. 105, 2000). So informed and targeted literacy instruction, teacher feedback/input, and opportunities to practice reading deeply and widely made a difference for the weakest readers, the majority of whom were boys.
Knowing that boys read less than girls and that their literacy achievement is lower than girls is a starting point for educators to make real changes to our current programs, practices, and choices that will result in a real difference for all students, boys in particular. We need to make changes to our current literacy instructional practices, including teacher feedback and the offering of wider choices in reading materials in order to reflect the needs and interests of male students if we are to make a difference in “closing” the literacy achievement gap. “Helping boys find entry points into literacy must be a priority and it must happen early, when boys first become acquainted with literacy” (Zambo, 2007 as cited in Senn, p. 216, 2012).

**Gender Bias in Teacher and Student Perception & Rating of Writing**

Studies have found a positive correlation between students’ self-perceptions as writers and their performance. Studies also have found a correlation between teachers’ attitudes and expectations of writing based on gender and student performance (Peterson, 2000; Williams, 2004). The gender-bias in both teacher and student perception of writing competence suggests a need to examine both teacher and student perspectives on boys’ and girls’ perceived writing competence, current writing measurement criteria and instruments, and their respective roles in writing outcomes.

In 1994, Cummings conducted a study of 11th grade students and found that “literacy skills were viewed as being more natural for females” (Cummings, 1994 as cited in Peterson, p. 253, 2000). This same study revealed another gender-based perception: “29% of females and 37 % of males felt that superiority in reading and literature or math was determined by one’s sex” (Peterson, p. 253, 2000). In another study, Davies and Bremer, Potteroff, Phels-Zientarski, and Scovenero (1996) reported that students consistently described girls as being
more competent writers than boys, but that boys considered male writers to be more competent that girls did (as cited in Peterson, p. 254, 2000).

Just as student perceptions reveal a gender-bias, similar gender-based biases have been found in teachers’ perceptions of literacy learning. In conjunction with his 2006 book, Boy Writers, Ralph Fletcher surveyed 100 teachers with the prompt, “In general, my boys/girls tend to enjoy writing more. . .” The results revealed a majority perception that girls enjoy writing more than boys, with only 21 (out of 100) teachers responding that boys and girls enjoy writing equally and only 1 teacher reporting that boys enjoy writing more than girls.

The teachers’ perception of gender-based attitude toward writing extends to perceptions of literacy abilities as well. Palardy (1969) found that year-end reading test results were consistent with American teachers’ beliefs and expectations of girls as better literacy learners. In a similar study conducted in Nigeria, Johnson (1973) reported teachers’ expectations that boys are better literacy learners resulted in better performance for males (as cited in Peterson, p. 254, 2000). These mixed results between students’ and teachers’ perceptions of and expectations for literacy performance and their actual performance suggest that both teacher and student bias can have a significant impact on achievement in literacy overall.

Peterson (2000) conducted a study with 4th and 8th grade students and teachers in order to examine the gender disparities in tests of student writing as well as the perceptions of students and teachers on boys’ and girls’ writing competence. Teacher interviews and student questionnaires revealed both teachers and students privileging girls’ writing over boys’ writing. It is important to note that teachers described writing strengths in terms of the
criteria in the scoring rubrics used in state assessments. These rubrics “evaluated writing on criteria such as conformity to rhetorical conventions, use of supporting details, organization, word choice, grammar, and conventions- punctuation, spelling and capitalization” (Peterson, p. 257, 2000). Students’ perceptions of writing strengths were the ability to appeal to audience and creativity and they identified a need as the ability to conform to writing conventions.

In general, the students’ assessment of writer’s competence revealed a perception of girls as better writers, especially on the 8th grade level. When students identified an author as female, they highlighted specific features of the texts, describing them in favorable terms. Comments such as “great detail”, “interesting story”, “girls have a wider vocabulary”, “boys are not into detail”, and “girls are very creative and imaginative” were used to describe writing attributed to females (Peterson, p. 255, 2000).

By contrast, written work attributed to males was perceived as less competent. Gender markers within the written samples such as short words, poor grammar, short sentences, and “not a lot of detail” were identified as being written by a male. Comments such as “short words like c’mon”, “It doesn’t make a lot of sense”, “no big words”, “usually girls would go back and correct them (i.e. spelling)”, and “there’s no main character, plot, or setting” were used to describe the features of the written samples that were attributed to male writers (Peterson, p. 255, 2000). In some cases, the same features that had been attributed to a female author and praised were described as being poor when attributed to a male author.

Consistent with the student perceptions was the gender-based bias of teachers that had previously indicated (in interviews), a belief that writing competence is related to gender. In both grade levels, teachers described writing attributed to females as “more detailed,
descriptive, creative, legible, and showing greater conformity to writing conventions” (Peterson, p. 256, 2000). Boys were perceived as careless writers whose “goal is to finish quickly” (Peterson, p. 256 2000).

When considering this study and results, it is important to note that the criteria in the state writing assessment rubric “privilege the strengths that the teachers and students attribute to girls’ writing” and that the “girls’ relative success on a large-scale writing assessment may be related to students’ and teachers’ expectations that girls are more competent than boys in the areas measured in rubrics” (Peterson, p. 257, 2000). Again, this underscores the impact gender bias can have on writing outcomes and achievement overall. These biases in student and teacher perceptions and expectations as well as the criteria on the state rubric suggest a need for the widening of criteria that include the strengths students identify such as audience appeal and creativity when assessing writing. Peterson (2000) eloquently sums up the implications of this study in her discussion of the results:

Change must take place on a broader level, as well. In order to address the disparities in measured writing competence of female and male student writers, teachers, teacher educators, and designers of large-scale writing evaluation must take part in conversations that question an emphasis on conformity in writing evaluation. What are the social and political motives and implications of an emphasis on conformity? How do prevailing assumptions and beliefs about good writing privilege some groups and deny other groups success as writers? How do the scoring criteria reflect what students, teachers and the wider society believe about the role of writing in students’ lives within and beyond the classroom? What alternative values of good writing need to be considered? Finally, teachers and teacher educators must participate in
conversations centered on ways to address boys’ and girls’ identified needs in areas that are emphasized on the evaluation rubrics and at the same time nurture their identified strengths in areas that are overlooked on evaluation rubrics. Through these conversations, teachers and teacher educators may transform classroom and large-scale evaluation practices and extend possibilities for writing success to greater numbers of students.” (p. 257)

The Impact of Self-Efficacy Beliefs on Writing Achievement

Bandura (1986) defined self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Pajares, Johnson, & Usher, p. 105, 2007). There now exists

. . . significant empirical evidence in support of Bandura’s social cognitive theory and contention that self-efficacy beliefs touch virtually every aspect of people’s lives: whether they think productively, self-debilitatingly, pessimistically or optimistically; how well they motivate themselves and persevere in the face of adversities; their vulnerability to stress and depression; and the life choices they make. (Pajares, Johnson, & Usher, p. 105, 2007)

Investigations into the link between self-efficacy beliefs and academics, including writing, have established that students’ self-efficacy beliefs are strong predictors of academic performance (Pajares & Johnson, 1994, 1996; Pajares, Miller, & Johnson, 1999, Pajares & Valiente, 1997, 1999, 2001; Ranking, Bruning & Timme, 1994; Schunk & Swartz, 1993; Shell, Colvin, & Bruning, 1995; Shell, Murphy, & Bruning, 1989; Wacholz & Etheridge, 1996; Zimmerman & Bandura, 1994; Bruning & Horn, 2000; Graham & Harris, 2005 as cited in Pajares, Johnson, & Usher, 2007). As such, just as there exists a gender achievement
gap in literacy, one finds differences in student self-efficacy ratings in writing by gender. Thus, it is not surprising to discover that girls report stronger sources of self-efficacy and therefore; are also judged as more competent writers than their male counterparts.

Self-efficacy beliefs have been found to be strongly linked to the academic performance of elementary, middle, high-school and college-age students. “... these judgments of confidence, or self-efficacy beliefs, are said to act as mediators between other influences on academic achievement- such as the skill, ability, or previous accomplishments that children bring to their school activities- and their subsequent performance” (Pajares, Johnson, & Miller, p. 51, 1999). A number of studies have supported the predictive and mediational roles of self-efficacy, including writing (Multon, Brown, and Lent, 1991; Bandura, 1997; Pajares, 1996b, 1997; Faigley, Cherry, Jolliffe, & Skinner, 1985 as cited in Pajares, 1999). In addition to self-efficacy beliefs, researchers have found other self-beliefs to have an impact on writing outcomes. These include: writing apprehension, perceived usefulness of writing, self-regulatory strategies, and feelings of self-worth associated with writing (Faigley, Cherry, Jolliffe, & Skinner, 1985; Shell, et al., 1989; Schunk & Zimmerman, 1997; Zimmerman, Bandura, & Martinez-Pons, 1992; Zimmerman & Martinez-Pons, 1988, 1990 as cited in Pajares, 1999).

Considering the established impact of self-beliefs on writing achievement, it is especially important to consider the gender differences in various measures of student self-concepts. In 1999, Pajares sought “to investigate gender differences in self-efficacy and to discover whether these differences were congruent with differences in their ability comparisons” with 3rd, 4th, and 5th grade level students (p. 52). For the purposes of the study, writing self-efficacy, writing self-concept, writing apprehension, perceived usefulness of
writing, self-efficacy for self-regulated learning, and writing aptitude were measured. Results revealed “a gender difference favoring girls on writing performance, apprehension, self-concept, and self-efficacy for self-regulation, as well as on five of the six ability comparisons” (Pajares, p. 56, 1999). Despite the fact that boys and girls were not found to differ in their perceived capabilities to accomplish the writing skills on the efficacy measure, “girls clearly believed themselves better writers than the boys in their class and school” (Pajares, p. 59, 1999).

In a similar study of 5th grade students, Pajares and Valiante (2001) found that girls reported higher writing self-efficacy, found writing more useful, and had lower apprehension regarding writing tasks than their male peers. Like the previous study with 3rd-5th grade students, sex did not have a direct effect on performance, but “there were direct effects from sex to perceived usefulness to apprehension, and to self-efficacy” (Pajares and Valiente, p. 353, 2001). As such, the results of both these studies “demonstrate that elementary students’ self-efficacy perceptions predict their writing performance and play the mediational role that social cognitive theory hypothesizes” (Pajares and Valiente, p. 357, 2001).

Extending this research, Pajares, Johnson and Usher (2007) investigated the influence of Bandura’s “hypothesized four sources of self-efficacy on students writing self-efficacy beliefs and to explore how these sources differ as a function of gender and academic level” (Pajares, Johnson, & Usher, p. 104, 2007). According to Bandura’s social cognitive theory of self-efficacy, students form their self-efficacy beliefs by interpreting information from four sources: mastery experience (the interpreted result of one’s previous performance), vicarious experience (observing others perform tasks), social persuasions (judgments others provide), and physiological and emotional states (anxiety, stress, arousal, and mood). Their results
indicate that each of the sources correlated significantly with writing self-efficacy and with each other. Not surprisingly, their findings underscored previous research regarding self-efficacy beliefs and gender: “Girls reported greater mastery experience, vicarious experience, and social persuasions, as well as lower anxiety. Girls also reported stronger writing self-efficacy and were rated better writers by their teachers” (Pajares, Johnson, & Usher, p. 104, 2007).

These studies indicate a need for teachers to assess and address the self-efficacy beliefs and self-confidence of all their students, regarding writing, along with writing competence. When one considers the consistent tendency for girls to report higher self-efficacy beliefs in writing than boys, it is especially important to consider the impact self-efficacy can have on a student’s potential to “develop robust efficacy beliefs that lead to growth and perseverance” (Pajares, Johnson, & Usher, p. 117, 2007). Since self-efficacy beliefs result in a range of consequences, from writing apprehension to future “choice of majors and career decisions of college students” (Hackett & Betz, 1989 as cited in Pajares, p. 359, 2001), educators have an obligation to provide interventions that directly address the issues affecting performance in writing, such as apprehension and perceived usefulness.

These findings also warrant changes in current practices, such as the development of skills in order to increase competence and success, helping students interpret writing experiences in more adaptive (vs. maladaptive or negative) manners, and providing feedback in terms of gains rather than shortfalls. Through assessment of self-efficacy beliefs and their corresponding sources, teachers can use this information to target specific areas of perceived deficit in their students and develop practices and strategies that will support the growing skills and build the self-confidence of their writers, boys in particular.
Effective Practices: What Works for Boys?

The previous sections examined several potential sources of or explanations for boys’ underachievement in literacy. Rather than throwing our hands up and saying that the problems for boys engaging with literacy are too complex and deep rooted for us to make a difference, we need to re-examine our current teaching practices and measurements (especially in literacy) and offer alternatives that meet boys where they are as readers and writers. The research shows us that some practices, research, and educators have been able to get increased engagement, motivation, and achievement from boys. Based on an analysis of these effective research projects and practices, several criteria become apparent. These include choice and voice, flexibility, relevancy, and alternative literacy opportunities.

Choice and Voice

Multiple research studies and action research projects have found that choice in the reading and writing options leads to greater engagement, motivation, and achievement for boys (Boltz, 2009; Fletcher, 2006). While simply stocking classroom and library shelves with texts that appeal to boys is an obvious first step, it is equally important that teachers be open and flexible to embracing a wider array of texts and options for writing projects, including those that typically appeal to boys, in their language arts curricula.

Why has choice, in particular, been indicated as a powerful and essential element in increasing motivation (and ultimately lead to greater academic achievement) in learners, whether they are male or female? The link is that choice increases motivation, and motivation has been linked to increased academic achievement, especially in reading and writing. (Steinmayr & Spinath, 2009 as cited in Fisher & Frey, 2012).
In an attempt to increase the reading and writing habits of 9th grade students, Fisher and Frey (2012) created an inquiry-based English class in which choice was an integral structural component. The students and the teachers reported that these structural differences resulted in increased motivation as well as a significant increase in reading overall. In their interviews with students, the ability to choose which texts to read in order to address the essential questions posed in each unit was indicated as the greatest motivator. The authors were not able to determine exactly why the choice made such a difference:

Whether this was due to the students’ need to exercise some control over their destiny or a matter of selecting topics that resonated with their experiences, we aren’t sure. What we are certain about is that choice, rather than assigned whole class novels, is an important aspect in reaching students and engaging them in learning. (Fisher & Frey, p. 594, 2012)

One of their students summarized the effect choice had on motivation and reading volume:

I get a little stressed when I have to pick a new book. I want to find one that will help me answer the question and one that I’ll like. I start a book and then hear my friends talking about their books. I want to hurry up and read my book so that I can read what they’re reading. It’s how I read so many books this year. I didn’t mean to or anything. It just happened because we were talking about the question and the books all the time. I didn’t ever know that there were so many good books out there. (Fisher and Frey, p. 594, 2012)

In their 2001 investigation into middle school boys’ motivation to read, Ivey and Broaddus (2001) found that “lots of choice among diverse text types” to be among the factors that contribute to increased volume of reading (as cited in Fisher & Frey, p. 2012). In their
surveys with the middle-school students, it was found that being interested in the reading material was the most important determinant in motivating them to read (Ivey & Broaddus, 2001 as cited in Boltz, 2009). Indeed, Boltz’s own research replicated these results, when 25% of the boys responded that their only advice was to give boys a choice of what they read when asked what teachers could do to help them read more. This research into motivation, choice, and increased reading volume and achievement serves as a powerful push for teachers, librarians, and parents to offer wide ranges of print and digital material for all readers, especially the boys, in order to properly meet and address student interests and needs.

The previous two studies suggest a compelling case for the element of choice in literacy instruction, especially for boys. Understanding what many boys prefer to read is also essential to making sure the options they do have in their classroom and school libraries as well as their literacy instruction adequately represents their reading preferences. Studies have consistently shown that reading preferences really do vary by gender, with preferences for different genres as well as reading for different purposes (Boltz, 2009; Hall & Coles, 1999; Millard, 1997; Pirie, 2002; Smith & Wilhelm, 2002 as cited in Hebert & Pagnani, 2010). A common finding is that males tend to prefer nonfiction texts, while females reading habits are heavily dominated by fiction (Boraks, Hoffman, & Bauer, 1997; Hopper, 2005; Langerman, 1990; Simpson, 1996; as cited in Hebert & Pagnani, 2010). In their 2002 publication, *Reading Don’t Fix No Chevy’s*, Smith and Wilhelm found that boys are more likely than girls to read informational texts, magazines, newspapers, and hobby/sports books. This finding was also supported by Boltz’s 2009 study of the reading habits and preferences of 4th-5th grade boys, in which 71.4% of the boys indicated some aspect of learning from their reading.
Additionally, 26.4% indicated a preference for nonfiction, especially books about animals, sports, cars, the military, and newspapers and subject-specific magazines.

The practical implications of such a preference for nonfiction is rather straightforward: teachers, librarians, parents, and schools need to make these sorts of reading materials available as well as make use of them within their ongoing literacy instruction if we are to successfully engage and sustain our boy readers and make a difference in their literacy achievement overall. Using nonfiction texts for read-alouds or in guided reading instruction is one avenue to accomplish this. Providing students with the opportunity to participate in current literacy structures such as guided reading groups or independent reading through other media and formats such as comics or graphic novels, websites, and newspapers and magazines are also other ways that teachers could provide for the needs and preferences of their male readers.

We have known for many years that a large number of adolescents prefer to read nonfiction, yet it is rare to find this genre in middle school and high school classrooms and libraries. When boys say they like anything with sports, action, and scary stuff, they mean it. We should honor boys’ interests by making literature on these topics, especially young adult literature, available to them. (William Brozo, 2002 as cited in Boltz, para. 22, 2009)

Preference differences by gender within the genre of fiction also are apparent, with boys indicating science fiction, action/adventure, comedy, fantasy, comics/graphic novels, and serialized/media connected fiction as favorites. With the occasional exception of adventure, these types of fiction are rarely featured or highlighted for instruction in language arts classes and this can send the message to boys that their preferences for reading are not
valued. Coles & Hall (2002) argue that language arts classes are “so reliant on narrative fiction that being ‘good at reading’ often becomes synonymous with being good at reading stories” (as cited in Hebert and Pagnani, 2010). This point is also reiterated in Boltz’s (2009) research in which she cites

Sullivan’s (2004) proposition that educators are far less respectful of boys’ reading preferences than those of girls. We define ‘good’ books, he says, as those that conform to the way that girls think. Most boy friendly books never show up when ‘good’ books are discussed, are rarely booktalked by librarians, and do not make recommended reading lists. (Boltz, 2009, para.10)

As with reading, other researchers have found choice to be a consistent motivating factor when it comes to boys and writing. In Ralph Fletcher’s 2006 book, Boy Writers: Reclaiming Their Voices, he reported that after asking 500 boys to explain what they wished they could do in writing, he received responses like “create our own topic,” “choose,” and “write whatever we want.” Literacy specialist Allen (2006) also found increased engagement, enthusiasm, and willingness to persist in writing when her students were allowed to write about whatever they wanted in a boys-only writing club during a lunch/recess period. Likewise, in an action research project designed to engage male writers in an after-school writing program, Garlid (2013) also found allowing boys to choose their own topics to be an essential ingredient in his program’s success.

There are, however, policy as well as curriculum constraints that have resulted in fewer options and restricted choices for schools, teachers, and students. The current landscape of education has been strongly dominated by assessment-driven reform movements on the federal and state levels that have dramatically influenced reading and
writing instruction in classrooms throughout the nation. Afflerbach, Cho, Kim, Crassas, & Doyle (2013), describe how federal education policies such as the National Reading Panel Report (National Institute of Child Health and Human Development, 2000), the No Child Left Behind (NCLB) Act of 2001, and Reading First (Gamse Jacob, Horst, Boulay, & Unlu, 2008 as cited in Afflerbach, et al, 2013) have reinforced the misguided conception of students’ learning and use of cognitive strategies and skills as the equivalent of successful reading.

As a result of these initiatives, the teaching of basic skills such as phonemic awareness, phonics, fluency, vocabulary, and comprehension have become the sole focus of “effective” reading programs. For example, the NCLB legislation requires teachers to use reading instruction programs that are based on empirical evidence. However, the empirical evidence that is used to substantiate programs is primarily linked to reading test scores that reflect a narrow set of skills in reading. The substantiation of the reading programs is also linked to how much or if a specific program raises students’ reading achievement scores on such tests. Likewise, Adequate Yearly Progress (AYP) tied to high stakes testing of students further “drives the selection, maintenance, or revision of reading programs” since the high stakes tests are the primary measure of AYP (Afflerbach, et al., 2013). Another contributor to the narrowing of the literacy instructional climate is the interpretation and implementation of the Common Core State Standards for English Language Arts, as the standards are closely linked to cognitive skills and strategies, especially in the primary years with rigid grade-level learning standards and expectations. This rigid and narrowing of curricula has resulted despite the admirable goal of bringing nonfiction and high interest content into language arts instruction. Finally, the National Assessment of Educational Progress (NAEP, National
Center for Education Statistics, 2011) which reports the reading achievement of 4th, 8th, and 12th grade students, also relies on reading test items that are tied to the cognitive targets mentioned earlier.

The result of all these initiatives, tests, and use of “evidence based” programs is that “strategy and skill have become the vocabulary that is used to describe students’ reading development, reading program quality, and reading success” (Afflerbach, et al., p. 441, 2013). The authors call for a broadening conception of what developing readers need in order to become successful readers. Affective factors such as metacognition, motivation and engagement, epistemic beliefs, and self-efficacy contribute to the development of independent, motivated, and engaged readers (and writers, as the aforementioned research suggests). The legacy of these well-intended but misinformed and misguided policies is a narrow conception and measurement of what contributes to the development of an independent reader along with a rigid set of criteria that limit what and how teachers teach. This narrowing has occurred despite the fact that one goal of the standards was to bring more nonfiction and high interest content into language arts curricula, across the grade levels.

Ralph Fletcher has strong words regarding the effects of narrow and scripted instruction:

. . . we should consider what impacts all this test preparation has on the attitudes of boy writers. Not only are we force-feeding them a kind of writing that is teacher directed and formulaic, but, more important, there’s no payoff- no purpose, no tangible reader, no fun- for the writer who struggles to create such a text. The only payoff I can imagine is to get the test writing done. (Fletcher, p. 44, 2006)

As an alternative, flexible instructional techniques need to be considered such as after-school or lunch/recess writing clubs, boys-only writing clubs, or instructional groups
that are designed to meet the needs of our struggling students (male or female) and serve to improve achievement at the same time. Reframing what teachers currently do to allow for more choice in the reading and writing workshops can be done. However, systemic change will only happen with a major shift in the current educational climate that demands measured outcomes that are tied to the following of strict and scripted units of study or literacy programs that define writing excellence in rigid ways. Until that necessary shift occurs, there are some solutions (some more conventional than others) that can bring the voice and choice back into the writing lives of our boy writers (see Appendix B: *15 Tips for Supporting the Literacy Learning of Boys*).

**Flexibility**

After reviewing the literature on literacy achievement data along with current instructional practices and measurements, it is very clear that a flexible and responsive approach to the teaching of literacy is necessary if we are going to engage, motivate, and increase the achievement of all students, and boys in particular. Flexibility is necessary in various aspects of a student’s experience- from the classroom environment, to the ability of a teacher to group students by gender when and as necessary or desired, to the adoption or widespread use of instructional practices that have been shown to be especially effective with male readers and writers. Teachers should be given training and license to make changes to their existing practices and classroom environments so that the needs of all their students can be met. While this may be difficult in the current educational climate, some schools and teachers have initiated or adopted such practices that have been effective in reaching underachieving students.
In an effort to close a 13 point overall gender-based achievement gap at Douglass Elementary School in Boulder, Colorado, the staff introduced strategies designed to engage more boys that reversed the typical trend of girls outperforming boys in one school year! They began by reviewing the latest brain research into how girls and boys learn best and their implications for instruction. Changes were implemented on the classroom and school-wide level that accommodated typically male assets. Rather than viewing impulsivity, single-task focus, spatial-kinesthetic learning and physical aggression as problems, strategies that embraced these traits were implemented. The changes include: increasing the opportunity for experiential and kinesthetic learning, supporting literacy through spatial-visual representations, allowing boys to choose topics in both reading and writing, offering single-gender learning environments, making reading and writing assignments purposeful, and the inclusion of male role models (King & Gurian, 2006).

The boys experienced a 24.4 percentage point gain and the girls experienced a 19 percentage point gain in reading and writing on state assessments after one school year. Impressively, the special education students, of which 75% were male, achieved 7.5 times the average gain compared with other students in the district, with a 50-point gain. It was believed that collectively, these meaningful accommodations in classroom practice, connected to brain science, contributed to the impressive gains for all students, most especially the male and special education populations.

The option of creating single-gender learning environments or groups is another adaptation to current practices that has been shown to be effective in raising achievement levels with all students. Sax (2007), Gurian (2010), and Fletcher (2006) have all recommended single-gender learning options in academic areas that range from literacy to
math and even music instruction. Action researcher Lynda Graham (2001) undertook a case study of four primary level classrooms that sought to raise standards in writing. She found that there were several changes that contributed to the increased achievement of students, including the opportunity for children to: write about things that mattered to them; write as experts; hear their writing read aloud, and experience genuine responses to their writing. In addition to these changes, it was also found that “boys made the most progress when given the opportunity to write in the company of other boys” (Graham, p. 18, 2001). Throughout the research period, one particular student’s teacher observed that “he wrote willingly only in the company of other boys, and when he felt that he could write as an expert” (Graham, p. 21, 2001).

Relevancy

A consistent element found to engage, motivate, and improve outcomes for all students is relevancy. In the case of literacy, relevancy is usually interpreted as authentic and meaningful purposes for reading and writing. Authentic literacy activities are designed to focus on communicating ideas for shared understanding rather than simply to complete assignments or answer teacher-posed questions. It has been established that students are much more likely to transfer their classroom literacy learning to real life and future applications when they engage in authentic literacy learning in the classroom (Gambrell, Hughes, Calvert, Malloy, & Igo, 2011; Teale & Gambrell, 2007; Teale & Sulzby, 1986; Teale, Zolt, Yokota, Glasswell & Gambrell, 2007 as cited in Morrow & Gambrell, 2011).

Fortunately, 21st century technologies have made authentic literacy learning opportunities more attainable and manageable. Incorporating things such as blogging or online publishing can make a real difference in terms of both motivation and quality (Davis,
2009; Ellison & Yu, 2008; Ramaswami, 2008; Richardson, 2009 as cited in Pickworth, 2010). However, lack of access to the Internet and other technology is not a deal breaker. Authentic literacy events such as publishing parties within the school or greater community, the writing of book reviews to be displayed in classroom, school, or community libraries, reading to learn how to do or make something, or collaborating on a report can be equally motivating. The goal is have students realize that there is a purpose and audience beyond the assignment and their teacher.

In an action research project whose goal was to assist boys in becoming “powerful, prolific, and confident writers”, Pickworth (p. 1, 2010) implemented a collaborative writing project using blogs. Previous findings found that collaborative blogs helped students communicate more powerfully (Davis, 2009 as cited in Pickworth, 2010), assisted class members to help each other understand class concepts (Yu, 2008 as cited in Pickworth, 2010), and made writing more precise, exact, and focus (Ramaswami, 2008 as cited in Pickworth, 2010). Seeking to build on these findings, Pickworth worked with male students (ages 11 and 12) in North Sydney, Australia and Richmond, Virginia using three collaborative blogs, instruction on blogging as well as lessons centered around themes, setting, plot, and characters in the novel Downriver by Will Hobbs.

In her analysis of blog posts, rubric results, and online survey responses by both students and teachers, Pickworth (2010) reported that the “blogging experience provided opportunities for some powerful and confident writing to a real audience” as well as improved mechanics in writing (p. 6). Indeed, most blog posts received a rubric rating of 3 or above (out of 4), providing evidence of “meaningful and relevant writing in blog entries” as their blog comments “included many references to issues raised through blog posts, reading,
Another significant result was that over half the blog comments displayed confidence by showing “some evidence of personal response to issues raised through blog posts, reading and class discussions” (p. 5). Finally, the majority of responses rated 3 (out of 4) with a “good standard of spelling, grammar and syntax and making sense with ideas” (p. 5).

Another instructional practice that appears to establish relevancy for male students is to incorporate inquiry or open-ended questions into literacy instructional designs (Fisher & Frey, 2012; Hawley & Reichert, 2010). In a study mentioned previously for increasing the amount of reading for 9th grade boys, it was also found that the element of inquiry contributed to the boys’ willingness to engage with more texts. The authors came to realize that the guiding, essential questions “were critical in creating a need to read. Students found the questions interesting, didn’t have an easy answer, and knew that reading would help them answer the question for themselves” (Fisher & Frey, p. 590, 2012). Remarkably, every student interviewed talked about “at least one of the essential questions that captured their interests and hooked them into reading several books on the topic” (Fisher & Frey, p. 591, 2012). So the inquiry orientation of the units served to both increase the amount of reading the students engaged in and also provided a platform to make their reading and learning purposeful. The students had to read several books around a theme in order to answer the essential questions, which piqued their interest and need to read multiple books. In response to the question, “Does Age Matter,” one student wrote compellingly about how the essential question literally drove his interest in the topic and the need to read several texts:

I didn’t get it at first because I thought age just mattered. Then I read (Angela Johnson’s) The First Part Last and (Ishmael Beah’s) A Long Way Gone and those
books made me think. But I wasn’t really ready to talk about it until I read (John Boyne’s) *The Boy in the Striped Pajamas* and then I was ready. Age doesn’t matter; it’s what you do and what happens to you that matters. (Fisher & Frey, p. 591, 2012)

This study and the student’s words illustrate how the combined power of choice and inquiry can build relevancy and ultimately motivate, engage, and improve the reading and writing outcomes of students.

**Alternative Opportunities**

The current educational climate, with its heavy emphasis on assessment data and rigid benchmarks or standards for student achievement, is not one that allows for a great deal of latitude in reading and writing curricula. So it seems that less traditional structures and opportunities to engage all students, especially boys, in effective and meaningful writing need to be considered. Options such as OST (Out of School Time programs), mentoring programs, and unstructured, boys-only writing clubs during lunch or recess should be considered. These opportunities do not have to conform to strict state standards or benchmarks and have been shown to increase the engagement, motivation, and achievement of students that participate in them.

Literacy specialist Jennifer Allen (2006) found herself serendipitously starting a boys-only writing program during a lunch and recess period when a classroom teacher asked her to take a look at some boys’ writing. She was soon surrounded by 5 boisterous boys, waving pages and pages of writing in front of her. She was especially surprised because these same students were typically resistant writers in the classroom and “just minutes ago had moaned that they had nothing to write about” (Allen, p. 67, 2006). The boys asked her if they might write with her during recess.
From that week on, for 45 minutes every Friday, the boys “engaged in active conversations around writing, praised one another’s work, and generated new stories together” (Allen, p. 68, 2006). The writing club continued the following year, with some new students joining in and others dropping out, but on an average Friday, she had 8 boys in her room, eating lunch, socializing, and writing.

This experience had led her to reflect on instruction in general, and the “need for schools to provide nontraditional offerings during lunch and recess- including literacy opportunities- for all students, not just boys. Such programs can provide an added layer to our overall literacy programming” (Allen, p. 70, 2006). Allen sums up her experience:

I have learned as much as the boys have through these weekly encounters. These boys have taught me that they love to write, and they consider themselves skilled in writing fantasy, humorous stories, and comics. They like to make their readers laugh, cringe, and escape to a world unlike ours. They love sharing their writing and getting compliments. Most important, I have learned that these boys, regardless of their socioeconomic status, academic achievement, or social graces, want to experience success and sense of belonging. (Allen, p. 70, 2006)

One of her students handed her a note on the last day of writing group as a 4th grader. It read: “Thanks for giving up your time to have lunch with us. You made Friday my favorite day of the week. Thank you for letting us come” (Allen, p. 70, 2006). These words serve as a testament to the powerful impact that a nontraditional learning opportunity can have on a young student, and underscore its importance and contribution to increased motivation and achievement.
In an OST program in Philadelphia, director Rachel Loeper created “Mighty Writers,” in order to increase engagement in the writing process with 10 reluctant boy writers in middle school. Through her inquiry, she discovered several key indicators of engagement and strategies that led to improvements in writing skills for all learners. Indicators of engagement and supportive strategies included: opportunity for conversation, the use of mentor texts, collaboration between students and adults throughout the writing process, the communication of high expectations and specific praise, and the sharing of work with the writing community throughout the writing process and beyond the writing community (Loeper, 2014).

Although physicality and bantering are not typically encouraged in conventional instructional settings, it was seen as an important indicator of engagement that cultivated a sense of belonging and supported the writing of the participants in the OST workshops. The author’s observations and interviews “showed that banter and physical activity affirmed boys’ experience” and “fostered a sense of belonging . . . allow(ed) them a way into the workshop space on their own terms” (Loeper, p. 3, 2014). The ability to use movement or acting was cited as a memorable and motivating opportunity: “The best thing about Mighty Writers for me was when I had to act like Steve Urkel in charades. Everyone was laughing as I was done and that made me feel excited” (Loeper, p.3, 2014). Another student, critiquing a workshop titled “Writing My Neighborhood” said: “All you’re really describing is what your neighborhood is like . . . You’d describe something, the people, it wasn’t as fun . . . For me, it might be better to act out your neighborhood, what you would change” (Loeper, p. 3, 2014).

It was also observed that the students were most successful at writing when they had the opportunity to draft a piece with an adult mentor present as well as when they were able
to share their work formally and informally. The volunteers offered a “hybrid of critique, critical thinking, encouragement, and positive feedback” (Loeper, p. 4, 2014). During an observation of the Sports Blogging workshop, three boys wrote for nearly an hour in the presence of an adult. The boys and their mentors had discussions about transitions, form and content, all while “couched in encouragement and a spirit of collaboration” (Loeper, p. 4, 2014). In particular, “the act of sharing student work throughout the writing process stood out as both an indicator of and a motivator for engagement” (p. 5).

Students were also able to share their work with others outside of the writing program, with teachers, parents, friends, etc. This sharing of work was considered essential to the establishment of a “writerly identity” for the students and revealed their engagement and commitment to the writing process as well. One student’s mother talked about how her son’s sports blog became a conversation starter for family gatherings:

(Muhammad’s tutor) gave him an idea of what a blog was. They considered it like an online journal where he could write about things that mattered to him, and other kids would respond. I signed on to review it and comment, and we’ll often pull it up when the family is together to show off his work. (Loeper, p. 10, 2010)

Just as there were indicators of engagement, Loeper cited several strategies that were found to be especially effective with the participants. As discussed previously, the opportunity for conversation and banter were essential to helping the boys bond and contributed to their subsequent writing. The use of mentor texts in order to encourage critical thinking about writing was also cited as a way to help students and mentors discuss what specifically makes a written piece effective. The ability to collaborate with students and adults throughout the writing process was also discussed previously. When the boys received
equal parts praise, encouragement, and scaffolded support by their mentors, they were able to engage in the writing process for extended periods of time, something that had not previously been observed with these participants. Finally, the communication of high expectations and specific praise was also cited as a successful element. The high expectations and concise and specific praise communicated by the mentors served to both encourage and support the boys as they went through the writing process. Overall, this research suggests that writing programs in settings outside of school such as community centers can increase engagement, motivation, and achievement for their participants when designed with these elements in mind.

Another OST structure for increasing writing outcomes for students is through an after-school writing program or club. Seattle based teacher-researcher Steven Garlid (2013) established a program called “Write After School,” as a way to engage reluctant male writers in grades 3-5 without having to contend with school-time pressures on both teachers and students such as deadlines, standards, and achievement goals. The program was designed to let the students choose their own topics, receive feedback, as well as provide for opportunities to share and talk about their work together. He found that increased engagement and achievement followed with some specific recommendations that are remarkably similar to Loeper’s (2010) indicators of engagement and strategies for success. These include: allowing the students to engage in talking throughout the writing process, the ability to work collaboratively with peers and teachers, and the broadening of writing topics/choice (Garlid, 2013).

Just as Loeper (2010) reports that banter is an essential indicator of engagement and precursor to writing, Garlid (2013) found that providing opportunities to talk at various
points in the writing process allows students to shape and clarify their ideas as well as allowing teachers and peers to provide feedback in the context of a social interaction (p. 3).

The ability to work collaboratively in structures such as “shared writing” in which students and teachers work together on a piece of writing is another successful strategy. This type of instruction requires and calls for talking and collaborative problem solving, while providing the students with guidance, safety, and interaction—all of which contributed to engagement. It is also similar to Loeper’s findings that the ability to work with a mentor throughout the writing process provided for greater engagement and persistence in the previously reluctant male writers.

Finally, Garlid (2013) recommends the broadening of writing topics deemed acceptable in order to “support and value the tastes and values of young male culture” (p. 3). This broadening and accepting of topics that appeal to male writers was also cited by Fletcher (2006), Newkirk (2002), and other researchers as an essential element to engage and ultimately increase achievement in writing for males. He found that “Having choice gives most boys in my workshop more to say about their topics, so they project a stronger voice and write more pages” (Garlid, p. 5, 2013). The students’ exit tickets back up this finding. In response to “I like to write when . . .” the students responded: “I have a good idea; There is choice; We can write about monsters.” In response to “I don’t like to write when . . .” one student responded, “The teacher assigns it” (p. 6).

Finally, an OST program that resulted in greater engagement, motivation, and achievement for reluctant male readers and writers was a VST (Visual Thinking Strategy) program implemented by art educators at an art museum in Missouri. The researchers found
that purposeful and substantive visual art experiences did support the literacy learning of the participants a boys-only writing club (Franco & Unrath, 2015).

The intervention incorporated two elements recommended by Fletcher (2006) in which he endorsed 1) exclusive writing clubs for boys and 2) recommended the integration of drawing into writing assignments. Each intervention session consisted of three core experiences:

an 8-12 minute VTS discussion of a narrative rich artwork selected to captivate and intrigue young boys, followed by an inspired art making activity which prompted the students to visually capture and creatively elaborate on ideas and narratives that had emerged during the dialogue, and concluded with creative and purposeful writing tasks that flowed organically from the VTS and art making components. (Franco & Unrath, p. 28, 2015).

The art-based intervention was structured as a transmediational chain\(^1\) that the researchers hypothesized would strengthen multiple literacies and learning in the boys.

Analysis of the boys’ comments, actions, and interactions (as recorded on video), interviews with participants, and blogs written by the researchers along with photos of the boys’ art and writing products revealed positive responses to the VTS intervention. One consistent finding was a high degree of enthusiasm from week to week, higher engagement levels, increased writing (as evidenced by more words, sentences and idea units), and a sense of community (Franco & Unrath, 2015). These findings echo similar research and studies (Allen, Fletcher, Loeper)- that the ability to draw or respond to a visual stimulus and the

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\(^1\) “Transmediation is the reflective and generative process through which meaning in one symbol system is translated into another as the learner invents a novel connection between the sign systems” (Siegel, 1995 as cited in Franco & Unrath, p. 28, 2015).
ability of participants to talk and share ideas throughout the process can lead to increased engagement and achievement.

One such positive and notable response to the VTS was active engagement, which was manifested in three facets: behaviorally, emotionally, and cognitively. Behaviorally, the boys were able to focus their attention and exert persistent effort to construct meaning from the various works. Emotionally, the boys exhibited genuine interest and eagerness to participate in a rigorous process within their grasp. Cognitively, the boys were able to construct grounded interpretations and the creative elaboration of ideas and recall and link their own agreements and disagreements with the comments of others in the group (Franco & Unrath, 2015).

In addition to the indicators of active engagement, the researchers found that the prewriting art products served as graphic organizers and catalysts for idea elaboration (as predicted by Fletcher’s 2006 research) and that the post-art making writings contained more words, sentences, and idea units. They also found that the sense of community during the club sessions also served to support the boys as writers.

Finally, the researchers also found that the students’ attitudes, self-efficacy beliefs, and achievement were also positively affected, and referred to SDT (Self Determination Theory) to explain how and why this was the case. In SDT, “conditions that satisfy innate human needs for autonomy, competence, and relatedness foster the most volitional and high quality forms of motivation and engagement for activities, including enhanced performance, persistence, and creativity” (Doci & Ryan, 2014 as cited in Franco & Unrath, 2015). Through the open-ended, nonevaluative art discussions and art making, the boys utilized skills that they were already proficient in, such as looking and expressing their thoughts verbally and
visually, which satisfied their autonomy and competence needs. The club membership, collaboration, and whole-group sharing of art and writing provided a sense of relatedness for the boys. And the weekly sessions supported their positive self-efficacy beliefs, provided for high task engagement, and allowed the boys to persist despite difficulties (Franco & Unrath, 2015).

Overall, the research project found that the VTS program did support the literacy learning of the K-5 boys. The participants demonstrated growth in all six language arts areas enumerated by the International Reading Association and the National Council of Teachers of English: reading, writing, speaking, listening, viewing, and visually representing (Franco & Unrath, 2015).

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When considered collectively, these instructional practices demonstrate that all learners, especially the boys, can engage and grow as readers and writers when the conditions are ripe and allow for choice, flexibility, relevancy, and alternative literacy opportunities. Perhaps the gender-based achievement gap in literacy does not indicate a problem with boys as learners in general, but suggests that our current teaching methods and environments, driven by federal and state policies that demand measured outcomes along with rigid and narrow achievement standards, are misinformed and misguided and ultimately serve to undermine the ability of educators to make instructional choices that reflect and are informed by the needs of their diverse group of students.

**Development of Write On!, an After School Writing Club for Boys**

The research and programs reviewed suggest ways literacy instruction can reflect the strengths, needs, and interests of male students, with the ultimate goal of improving
achievement. Drawing upon the research and review of effective practices, I designed an after-school, boys-only writing club, Write On!. The goal of the writing club was to synthesize and apply the academic research about boys and literacy with my own knowledge and experiences as both a teacher and a parent in order to engage, motivate, and support boy writers. The after-school context provided an ideal (and alternative) opportunity to incorporate choice, flexibility, and relevancy- criteria that have been shown to improve engagement, motivation, and literacy outcomes with male students.

In the Write On! Program, boys chose their own topics, were provided with mentor texts for inspiration, received specific praise and constructive feedback, and had opportunities to share, talk and collaborate about their work throughout the process. I sought to increase the engagement of the participants in the writing process as well as increase their motivation and self-confidence as writers.

**Methodology**

This project was designed as an action research study. Data was gathered through the following tools: writing attitude surveys, transcription and analysis of sessions, student artifacts, and exit slips. As a key goal was to foster student engagement and motivation in writing, soliciting and evaluating feedback from the participants at the start and end of the project was a critical tool for developing and evaluating the program.

**Context of the Project**

All students who participated attend a small, K-8 public school in a rural, mid-Hudson Valley community in New York State. All participants come from families that are highly educated (college or beyond) and are socio-economically advantaged. One student has been diagnosed with a learning disability, ADHD. All shared negative to indifferent attitudes
towards writing in school as indicated by parental input and confirmed by the comments made during sessions as well as the survey results.

Student 1 (S1) is nine years old and has been diagnosed with ADHD. He receives academic intervention services for reading and math. Despite some academic difficulties, his mother reports that he enjoys school and is making progress in most areas. Writing, however, remains a significant weakness for him. He was willing to participate in the project because two of his friends were also participating. This student demonstrated the most enthusiasm for choice of topic and was very open to suggestions posed during the sessions. He produced two, comic-book style entries over the course of the three sessions. Despite the ADHD diagnosis, he was able to attend to the mentor texts and engage in the writing portion of the sessions without being redirected or reminded to attend to his writing. He did, however, ask another student to stop bothering him throughout each session.

Student 2 (S2) is nine years old and was volunteered for the project by his parents. They reported that he would benefit from additional support in writing, as it is a weakness for him in school. They did not report any other difficulties in or out of school; however, this student demonstrated significant avoidance tactics and inappropriate behaviors that were distracting to the other participants. At times during the sessions he would make faces at the video camera and hide behind furniture. He also produced the least amount of writing of all the participants and needed direct, one-one-one support in order to add words other than one syllable utterances such as “Ha”, “Aagh!”, and “Boom!” to his two, comic-book style entries.

Student 3 (S3) is nine years old and is a strong student, as reported by his parents. Despite being an advanced student, his parents reported that he does not enjoy writing, in or out of school. They do not believe he has any difficulty or deficiency as a writer, but believed
he would benefit from participating in order to improve motivation in writing overall. This student produced the most amount of writing of all the participants (two narratives over a full page each) and only added a drawing to his entry after finishing his story about a soccer game. His behavior was also the most compliant and focused, as he worked diligently throughout the writing portion of the sessions and was able to ignore the distracting behaviors and comments of the other participants.

Student 4 (S4) is the youngest of the participants, having just turned nine at the end of September. He is a strong student, but writing remains a relative weakness for him, as reported by his parents. While this student does occasionally write during his free time at home, writing assignments in school are “dreaded” and the student reports “hating” writing in school. His parents also believed he would benefit from increased motivation and participation in the group as well. This student was able to produce two entries, one in comic-book form and another longer entry about snorkeling with dolphins. His behavior was at times off-task and he frequently made inappropriate or distracting comments and he was easily drawn into the inappropriate behaviors of S2.

Procedure

The first component of the research was to evaluate and quantify student attitudes toward writing at the onset of the group sessions. The survey administered to students was adapted from a Writing Attitude Survey (WAS) developed by Kear, Coffman, McKenna, and Ambrosio (2000). This was chosen to provide an attractive format that children could easily engage with and a tool that could be administered within a few minutes.

Each session began with the reading of a mentor text, followed by time for writing, and ending with the students sharing one thing they wanted peer feedback on or were
especially proud of. Mentor texts were chosen to serve as inspiration for potential writing projects and/or to demonstrate a specific writing technique that might be helpful to the boys. During the writing portion of the session, the boys were encouraged to collaborate, seek each other’s feedback or input, and talk openly about their work. Each session built on the previous session’s work, with the students revisiting their previous entry, discussing and sharing new ideas, and mentor texts.

Student scores on the survey were used to plan instruction for the group and on an individual level. I was careful in my interpretation of the boys’ scores, as causality of individual attitudes could not be determined, such as learning disabilities, low academic performance, poor development of writing skills, poor previous (or lack thereof) instruction, or simply a lack of experience in writing. For the purposes of my research, I was seeking an initial indicator of student attitudes toward writing as well as an attitudinal profile for the group, as my sessions were conducted over too short a period of time to get reliable and meaningful post-measurement data.

**Findings**

Results from the WAS at the outset of the study (see Appendix D) indicated that two of the students (S1 and S2) had poor attitudes toward writing, with scores of 38 and 41 out of a total possible of 104 (26 being the lowest possible score). The other two students (S3 and S4) demonstrated an indifferent to mildly positive attitude toward writing, with scores of 54 and 59 out of 104. Collectively, the group consisted of students with poor to indifferent attitudes toward writing. This reflects much of the research into statistics regarding performance and attitudes toward writing by gender, with boys indicating a less favorable attitude than females.
Comments made by the boys while they were completing the survey were recorded
and analyzed. Mostly negative attitudes toward writing were indicated in their comments.
Indeed, one student (S2) responded aloud to the question, “How would you feel about writing
a story instead of watching TV?” with, “Number 12 is horrible! Writing a story instead of
watching TV?!” This same student commented, “Number 15 is horrible and evil!” in
response to “How would you feel if you could write more in school?” Another student (S1)

In response to Number 11, “How would you feel about writing a story instead of
watching TV?”, one student (S2) described that question as “stupid,” while another student
(S1) responded, “I hate that, writing a story instead of watching TV!” S4 responded to this
same question with, “This is how I feel about it. (He pointed his hand to head) and
exclaimed, “Nuke!” while making explosion sound effects. When handing in the survey, one
student (S3) said apologetically, “There’s only a couple that I had a smiley face for.”

Although the survey was not designed to provide individual profiles, I was able to
extrapolate qualitative data about individual student’s interests, preferences, and aversions in
writing through an analysis of student responses to the questions. For example, S1 responded
very positively to the question about writing to change an opinion, keeping a diary or journal,
or writing an advertisement for something to buy. Since this student had the lowest attitude
towards writing of all the participants, knowing his preferences helped me tailor future
mentor texts and instruction to better meet his indicated interests. Likewise, S2 responded
positively about writing an opinion about a topic and writing a story instead of homework.
This helped me as I suggested fiction/story and persuasive writing and tried to provide him
with appropriate mentor texts and support to increase his motivation. Overall, the data
suggest that student comments and engagement along with an effective survey can provide qualitative as well as quantitative data about skills and interests in writing.

After completing the survey, the boys were read a mentor text from *Guys Write for Guys Read* by Jack Gantos titled, *The Follower*. They were then presented with their own writer’s notebooks and provided with markers, pencils, and colored pencils as writing instruments. The first question I received after handing out the notebooks was, “Can you write about whatever you want? Snakes? I’m doing that.” This underscores the importance of choice and supports the findings of Boltz, Fletcher, and Allen that the ability to choose a topic serves as an important motivator for writing and increases engagement in the process.

Student writing and discussions did feed into the stereotypical topics of choice of young boys, with entries about a death chamber, mallet wars, assassins, space wars, and sports. A question to consider going forward is if the content had been limited to a thematic inquiry with choice of format and genre (kept open), would I have gotten the same engagement or stronger outcomes? In our sessions, engagement appeared to be limited by the fixations they brought with them.

As documented by Fletcher and Allen’s findings, drawing was a useful scaffold for writing. Indeed, the second question I was asked in session 1 was, “Can you draw?” All but one student in all three sessions chose to draw before writing, and one student (S2) spent the majority of his time in each session drawing pictures to communicate plot events/action. S1 chose to create two different comic-book style entries throughout the three sessions, one on a death chamber and another about a battle between Spartans and Europeans. S4 spent the first two sessions working on a “Space Wars” comic-book piece with the illustrations supporting the plot events.
Given the opportunity to talk about their work, it was found that they were able to support each other and share ideas and constructive feedback. Debriefing meetings provided the boys with a forum to think aloud, praise, question, and critique one another’s work. S4 responded to S1’s entry, “That is brilliant! First you get the ultimate wedgie, then you get lowered into a pit of spitting cobras!” S2 asked the others how to spell several words. S2 asked clarifying questions in response to S1’s entry: “How does he get from the pit to the electric chair?” What happened during that time?” which encouraged S1 go back and revise his entry the next session to include the missing part. Likewise, S1 asked S2 how the tracks break in his comic book, which inspired S2 to go back and add a detail (in drawing) that filled in the part in question.

Throughout the sessions, the boys were encouraged to share ideas and talk about their own writing pieces. The sessions were noisy, but still productive with constructive comments and clarifying questions coming from me as well as the other participants that helped the boys add to or revise their drafts as they went along. One student asked for help coming up with a creative and scientific name for his fictional planet. Another student asked the others for help with spelling. One student described how he was emulating a craft technique frequently found in comics: “You know how some comics start with, ‘Our story starts with our hero . . .’ So it starts in the middle of the action. I’m also going to write a prequel to go with this.” Compliments were given about choices of words like “brilliant,” “piercing,” and the name of the planet, “Mergazoid.”

It was also found that mentor texts were successful in inspiring the experimentation with a specific writing technique. After listening to and discussing the mentor text, *Meanwhile*, by Jules Feifer in session two, S3 responded, “I’ve got to do that! I’m going to
try that.” (In the book, the author uses “Meanwhile . . .” as a way to switch to a different setting to help the main character escape danger. For example, the main character is on a pirate ship, being forced to walk the plank and writes “Meanwhile . . .” and as a result is immediately transported to another setting/story in which he is in the old, wild west being chased by a posse.) Two other students, S2 and S4, actually utilized the technique referred to in the mentor text in their writing during that same session, with varying degrees of success. With three out of four students commenting on or using the technique highlighted in the mentor text, it seemed that the boys were enthusiastic about trying a new writing device, indicating that the mentor text was effective in supporting engagement and increasing motivation for writing.

Our last session ended with boys responding to exit slips (designed by Ralph Fletcher) in which they responded to the prompts: “I like writing when . . .” and “I don’t like writing when . . .” The two questions the boys posed during our first session (“Can we write about whatever we want?; Can we draw?”) and the responses on the exit slips affirm the research- the desire for choice and the importance of drawing in the pre-writing or during writing stages as a scaffold and motivating criteria. The responses reflected and affirmed previous research with all four participants writing about being able to choose what they write in response to “I like writing when . . .” Likewise, in response to “I don’t like to write when . . .” responses included “the teacher chooses what we write about,” “we have to write about something specific,” and “I don’t want to write about it.”

One student (S2) had more limited engagement with the writing experience. In all sessions, he insisted on drawing for most of the time, and then only added words and dialogue with direct, one-on-one support. His drawings consisted primarily of stick figures
and the writing he did include was sparse, with words like “Weee!, Aaaa!, Ha Ha!, Boom!”.

In the first session, after completing the survey, he asked if he if there were any other assignments and if he could leave. In session 2, he talked about using the technique of writing “Meanwhile . . .” to get him out of the writing group all together, as it helped the main character in the book switch scenes and danger. He also demonstrated inappropriate behavior and avoidance tactics throughout all the sessions, such as making faces at the camera, hiding behind the table and chairs, and disrupting the other boys while they were working.

So for this one student, it seems that the opportunity for working with other boys and the ability to draw and choose his own topics was not compelling enough to improve his engagement, motivation and attitude toward writing. Finding techniques and approaches that would engage and motivate this particular student in writing would be an important next step for further research and support. Determining causality for his nonresponse to the writing group is beyond the scope of this research.

Data from the sessions support the findings of Allen and Fletcher, with the boys indicating a desire for choice of topic, the ability to draw, and the need to work in alternative settings and spaces, such as after-school and writing on the floor. The boys were boisterous, loud, and at times off task. Three out of four of the participants included a great deal of violence in their writing. All four eventually chose to work on the floor rather than the table in the tutoring room of the local library. But they all engaged in the process (some more than others) by choosing their own topics, drawing before, during, or after writing, and using each other as well as the mentor texts to sound off ideas, get inspiration, or get help with conventions like spelling. The feedback from the survey, exit slips, and the transcripts of our
sessions affirmed previous research about the effectiveness of choice, the ability to collaborate with peers, and the supportive and motivating effects of drawing on writing to help focus my efforts to support them in future sessions.

* * * * * * * *

Overall, the opportunity to engage in writing within an after-school program can be a responsive, flexible, and effective approach to increasing the engagement and motivation of most participants. And if such programs are designed with boys’ strengths and needs in mind, they can be part of a broader approach that seeks to improve literacy achievement outcomes for all students. If our goal is to close the gender based achievement gap in literacy, we must consider changes to existing instruction and alternative opportunities that meet boys where their interests, skills, and strengths are. An after-school writing club is one structure that can provide a safe place for boys to pursue their interests and passions, receive supportive instruction, constructive and specific feedback, and develop their literacy skills.

Limitations of the Study

This review and the subsequent research and recommendations address multiple explanations and identify factors that contribute to the gender-based literacy achievement gap. While aspects of these studies contribute to our understanding of literacy development and achievement, there are implications for systemic shifts in current instructional practices that are subject to federal and state level policy and mandates. As such, the practices implemented with the participating students do not address these systemic contributing factors to the gender-based literacy achievement gap, which are far beyond the scope of this review and research. Rather, they specifically explore engagement and motivation in writing, which have been shown to positively impact student achievement in
literacy. Additionally, this work was conducted with only four, fourth grade boys, which is an extremely small sample of participants to extract data that can be construed as applicable to a wider population. Finally, the group was conducted in a small, affluent, and rural community; it therefore, represents a very specific population of students from highly educated and economically advantaged backgrounds.

**Implications for the Field**

The causes of boys’ underachievement in literacy appear to stem from a range of factors- biological (brain and biological differences), societal (teacher and student bias), and instructional (policies that lead to the narrowing of curricula and measurement bias). Current classroom practices, which have been constrained by federal and state level policies, have created a perfect storm for a gender-based literacy achievement gap. The effects of brain and biology differences between the genders on learning (literacy in particular) in concert with teacher and student biases and instructional practices and measurements that disadvantage boys indicates a problem not with the boys as learners, but rather a problem with teaching practices, measurement methods, and learning environments.

The central problem may indeed have less to do with boys themselves and more with how and when literacy skills are taught and measured (Garlid, 2013). Rather than contributing to the gender binary, the research indicates that we need to broaden our instructional practices, learning environments, and measurements of literacy achievement to include the specific strengths and needs of all learners, boys in particular. Specific recommendations include: the need for teacher education and training in current research regarding gender differences of the brain; the need for literacy instructional practices to reflect the interests and needs of all students, especially boys; a need for awareness of the
role of teacher and student bias on boys’ literacy achievement; the role of student attitudes, motivation and self-efficacy beliefs on achievement; and the need for the revision of current measurements of writing to reflect male literacy strengths, needs, and interests.

If we, as a society, truly want to “close” the existing gender-based achievement gap in literacy, we will need to make informed changes to current instructional practices, measurements, and structures that redefine, incorporate, reflect, respect, and nurture the strengths of male readers and writers. As indicated earlier, the recipe for literacy success includes choice, flexibility, relevancy, and alternative opportunities. These need to be essential criteria when rethinking current literacy instruction and educational policies. As other researchers have demonstrated, increased engagement, motivation, and achievement are possible when these conditions exist. Our students, especially the underperforming males, deserve policies and practices that are effective with them. And teachers, parents, and communities should demand nothing less for all students.

References


Appendix A: Differences Between Males and Females as it Pertains to Literacy and Learning in General:

<table>
<thead>
<tr>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Speaks first words later than girls</td>
<td>• Develop more extensive vocabularies earlier than boys</td>
</tr>
<tr>
<td>• By age 4.5, 99% of speech is comprehensible</td>
<td>• By age 3, 99% of speech is comprehensible</td>
</tr>
<tr>
<td>• Less able to multitask</td>
<td>• Better ability to multitask</td>
</tr>
<tr>
<td>• Hears better in right ear</td>
<td>• Hears equally well with either ear</td>
</tr>
<tr>
<td>• Better auditory memory</td>
<td>• Better visual memory</td>
</tr>
<tr>
<td>• More likely to ignore voices— even parents’</td>
<td>• Less likely to ignore voices— especially those familiar</td>
</tr>
<tr>
<td>• One-directional, less cross-talk between hemispheres, more focused</td>
<td>• More cross-talk between hemispheres of brain as shown by approach to activities</td>
</tr>
<tr>
<td>• Stories filled with excitement and action, ignoring victims</td>
<td>• Stories pay attention to human dynamics; particular concern with victim feelings</td>
</tr>
<tr>
<td>• More speech problems</td>
<td>• Fewer speech problems; seems to differentiate sounds better</td>
</tr>
<tr>
<td>• Expresses emotions through action</td>
<td>• Expresses emotions through words</td>
</tr>
<tr>
<td>• Less attention span and empathy</td>
<td>• Greater attention span and empathy</td>
</tr>
<tr>
<td>• Takes longer to attain reading mastery</td>
<td>• Reads better and sooner than boys</td>
</tr>
<tr>
<td>• Better at tests requiring circling of answers</td>
<td>• Better at tests requiring listening as questions being read</td>
</tr>
<tr>
<td>• Better general math</td>
<td>• Better verbal ability</td>
</tr>
<tr>
<td>• Better at 3-dimensional reasoning</td>
<td>• Better at grammar and vocabulary</td>
</tr>
<tr>
<td>• 95 % of hyperactive children</td>
<td>• 5 % of hyperactive children</td>
</tr>
<tr>
<td>• Better at reading maps and deciphering directions</td>
<td>• Better at fine-motor skills and coordination for fine tasks</td>
</tr>
<tr>
<td>• Better at chess</td>
<td>• Better at learning a foreign language</td>
</tr>
<tr>
<td>• More likely to need remedial reading</td>
<td>• Less likely to need remedial reading</td>
</tr>
<tr>
<td>• Solves math problems without talking</td>
<td>• Solves math problems with language help</td>
</tr>
<tr>
<td>• 50 % more likely to be held back a grade than 8th grade girls</td>
<td>• 50 % less likely to be held back a grade than 8th grade boys</td>
</tr>
<tr>
<td>• Achieves far greater academic success after puberty</td>
<td>• Higher than normal estrogen level produces certain intellectual disadvantages</td>
</tr>
<tr>
<td></td>
<td>• IQ scores level off or drop during middle school but rise again at high</td>
</tr>
</tbody>
</table>

70
| IQ scores rise dramatically between 14-16  | Performance on writing exams drops as much as 14% during menstrual cycle |
| If involved in high school athletics, more likely to get better grades and go to college | 15% of students in advanced placement computer science classes |
| Performance on writing examinations less affected by biological cycles | Outperform men in tests of verbal and communication skills |
| 85% of students in advanced placement computer science classes | school |
Appendix B: 15 Tips for Supporting the Literacy Learning of Boys


2. Consider all aspects of a writer’s existence and expand what we consider writing opportunities: think websites, blogging, podcasts, discussion forums, online newspapers or resources, social media, and videos/movies.

3. Consider a boys-only writing group during lunch/recess or even during the conventional literacy instructional time in classrooms, at least for portions of the school year. These boys’ only groups provide a supportive climate where boys’ preferred interests, topics, kinesthetic learning styles, and sense of humor might be shared, understood, and respected by each other.

4. Schedule “Free-Choice Writing Cycles” within your existing writing units of study.

5. Create OST (Out of School Time) writing opportunities (gender exclusive or inclusive) that do not have to adhere to the strict state-mandated benchmarks and assessment criteria.

6. Allow boys to write in their preferred reading genres. Immerse them in high-quality examples of their favorites such as fantasy, humor, action/adventure, nonfiction, etc.

7. Make literacy relevant. Provide real and authentic purposes and audiences for writing to be shared. Think book reviews vs. reports and fan fiction vs. personal narrative/memoir. Allow for the design of their own comic books, music videos, or
school newspapers. Consider frequent writing celebrations throughout the year and
the posting of work online.

8. Provide **boy-friendly structures in your environment and instruction**. Allow boys
to write on the floor or in a **special writing center**, just for them. Allow for **lots of
talk** to provide inspiration, support, audience, mentorship, or even to generate stories
together. Create **frequent opportunities for movement** such as sitting optional
writing periods, literacy centers with role-play or readers’ theater options,
manipulatives (magnetic letters, story boards, cards with sentence parts such as words
and punctuation marks) or story elements to be manipulated (i.e. felt story boards,
puppets).

9. **Integrate drawing** as a pre-writing or writing scaffold. As Fletcher reports, drawing
has a calming and centering effect on boys and when used as a precursor to writing, it
allows students to visually conceptualize, organize, and develop narratives before the
writing begins. Allow for the use of graphics, pictures, and storyboards in literacy
assignments and writing projects.

10. **Shared writing** opportunities- don’t expect mastery after first attempts. Consider
using shared writing instruction in whole-class or small-group settings to scaffold
their growing abilities as writers. This allows the boys to apprentice their skills and
moves them towards independence in a structure that provides for teacher modeling
and expertise as needed.

11. **Teacher Modeling** allows for students to hear experts model their thinking while
reading or problem solving while addressing text structures and features. Consider a
**write-aloud** in which the teacher models composing processes such as how to draw
upon knowledge from texts and personal experiences to formulate a coherent argument or narrative.

12. **Provide Specific Feedback** that helps boys internalize what they are doing that is effective and one element that could improve. Marking up a draft with corrections or suggestions for improvement serves to demoralize a young writer. Letting them know specifically what they are doing well will encourage them to keep doing it. And providing manageable (one element at a time) suggestions or instruction for improvement helps them focus their efforts when revising and editing.

13. Provide **Male Writing Mentors** to serve as role-models and highlight their thought and composing processes when writing.

14. **Embrace 21st century technologies** like keyboarding and dictation software as well as digital storytelling options like Animoto, Photo Story, Comic Life, and Movie Maker.

15. **Choice, choice, choice!** Allow your students to select their own topics as well as giving them the freedom to use slang, illustrations, humor, violence (within commonsense limits), even incorrect grammar if it serves the voice and tone in their writing pieces.
Appendix C: Writing Attitude Survey

The WAS was administered to the participants during the first few minutes of session 1 (see Appendix C). Point values were assigned to the circled “Greg” (from Diary of a Wimpy Kid series) for each question. The very happy Greg was assigned a score of 4. The very upset Greg received a score of 1. The response value for each Greg was summed up with the highest possible total being 104 (26 items X 4). An average score of 52 would be interpreted as an indifferent attitude toward writing, with scores below that indicating a poor attitude and scores above indicating a positive attitude toward writing. A blank copy of the WAS follows.
Writing Attitude Survey

Name _____________________  Grade ___________  Date _________

1. How would you feel writing a letter to the author of a book you read?

2. How would you feel if you wrote about something you have heard or seen?

3. How would you feel telling in writing why something happened?

4. How would you feel writing to someone to change their opinion?
5. How would you feel keeping a diary or journal?

6. How would you feel writing poetry for fun?

7. How would you feel writing a letter stating your opinion about a topic?

8. How would you feel if you were an author who writes books?

9. How would you feel if you had a job as a writer for a newspaper or magazine?
10. How would you feel about becoming a better writer than you already are?

11. How would you feel about writing a story instead of doing homework?

12. How would you feel about writing a story instead of watching TV?

13. How would you feel writing about something you did in science?

14. How would you feel writing about something you did in social studies?
15. How would you feel if you could write more in school?

16. How would you feel writing a long story or report at school?

17. How would you feel writing answers to questions in social studies or science?

18. How would you feel if your teacher asked you to go back and change some of your writing?
19. How would you feel if your classmates talked to you about making your writing better?

20. How would you feel writing an advertisement for something people can buy?

21. How would you feel keeping a journal for class?

22. How would you feel writing about things that have happened in your life?
23. How would you feel writing about something from another person's point of view?

24. How would you feel about checking your writing to make sure the words you have written are spelled correctly?

25. How would you feel if your classmates read something you wrote?

26. How would you feel if you didn't write as much in school?
### Appendix D: Results of Writing Attitude Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>S 1 Response</th>
<th>S 2 Response</th>
<th>S 3 Response</th>
<th>S 4 Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How would you feel writing a letter to the author of a book you read?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. How would you feel if you wrote about something you have heard or seen?</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3. How would you feel telling in writing why something happened?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. How would you feel writing to someone to change their opinion?</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
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<tr>
<td>5. How would you feel keeping a diary or journal?</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6. How would you feel writing poetry for fun?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7. How would you feel writing a letter stating your opinion about a topic?</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>8. How would you feel if you were an author who writes books?</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>9. How would you feel if you had a job as a writer for a newspaper or magazine?</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. How would you feel about becoming a better writer than you already are?</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11. How would you feel about</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>writing a story instead of doing homework?</td>
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<tr>
<td>12. How would you feel about writing a story instead of watching TV?</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13. How would you feel writing about something you did in science?</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>14. How would you feel writing about something you did in social studies?</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. How would you feel if you could write more in school?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>16. How would you feel writing a long story or report at school?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. How would you feel writing answers to questions in social studies or science?</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>18. How would you feel if your teacher asked you to go back and change some of your writing?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. How would you feel if your classmates talked to you about making your writing better?</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20. How would you feel writing an advertisement for something people can buy?</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. How would you feel keeping a journal for class?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>22. How would you feel writing about things that have happened in your life?</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Question</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>23. How would you feel about something from another person's point of view?</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>24. How would you feel about checking your writing to make sure the words you have written are spelled correctly?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>25. How would you feel if your classmates read something you wrote?</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>26. How would you feel if you didn't write as much in school?</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Permission Letters

Dear Parent or Caregiver,

As part of my graduate studies at Bank Street College, I am currently enrolled in the Advanced Literacy Specialization Program. One requirement is that I conduct research and implement instruction that is informed by such research, as well as work with actual students.

I will be looking for and measuring signs of engagement and motivation in writing. My goal will be to help your child to develop both skills in and a love for reading and writing.

This research requires that I video some of my work with your child. The video will be used for transcription and research purposes only. No part of the video will be published online or posted to any social media website.

I will also be presenting a discussion of my work with your child to college faculty. All names of participants and their schools will be changed before I make any presentation.

If you are willing to have your child help me with this project, please sign the form below.

I give my permission for my child to work with
Theresa Orlandi
Bank Street College Advanced Literacy Specialization Program

Child’s Name  LIAM FLANAGAN
Parent’s / Caregiver’s name JOSEPH FLANAGAN

Parent’s / Caregiver’s signature
E-mail Contact JOSEPH.FLANAGAN@ROCKROSE.COM
Telephone 212.847.3760

Date: 11/17/2015
Dear Parent or Caregiver,

As part of my graduate studies at Bank Street College, I am currently enrolled in the Advanced Literacy Specialization Program. One requirement is that I conduct research and implement instruction that is informed by such research, as well as work with actual students.

I will be looking for and measuring signs of engagement and motivation in writing. My goal will be to help your child to develop both skills in and a love for reading and writing.

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I will also be presenting a discussion of my work with your child to college faculty. All names of participants and their schools will be changed before I make any presentation.

If you are willing to have your child help me with this project, please sign the form below.

________________________________________________________________________
I give my permission for my child to work with
Theresa Orlandi
Bank Street College Advanced Literacy Specialization Program

Child’s Name: Mae Lake
Parent’s / Caregiver’s name: Jill C. Lake
Parent’s / Caregiver’s signature: Jill C. Lake
E-mail Contact: jillcorson@yahoo.com
Telephone: 347-922-4281
Date: 11-16-15
Dear Parent or Caregiver,

As part of my graduate studies at Bank Street College, I am currently enrolled in the Advanced Literacy Specialization Program. One requirement is that I conduct research and implement instruction that is informed by such research, as well as work with actual students.

I will be looking for and measuring signs of engagement and motivation in writing. My goal will be to help your child to develop both skills in and a love for reading and writing.

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I will also be presenting a discussion of my work with your child to college faculty. All names of participants and their schools will be changed before I make any presentation.

If you are willing to have your child help me with this project, please sign the form below.

_________________________________________________________________________________________

I give my permission for my child to work with
Theresa Orlandi
Bank Street College Advanced Literacy Specialization Program

Child's Name Charlie Schaufler
Parent's / Caregiver's name Kimberly Schaufler
Parent's / Caregiver's signature
E-mail Contact
Telephone
Date: 4/1/15

_________________________________________________________________________________________
Dear Parent or Caregiver,

As part of my graduate studies at Bank Street College, I am currently enrolled in the Advanced Literacy Specialization Program. One requirement is that I conduct research and implement instruction that is informed by such research, as well as work with actual students.

I will be looking for and measuring signs of engagement and motivation in writing. My goal will be to help your child to develop both skills in and a love for reading and writing.

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I will also be presenting a discussion of my work with your child to college faculty. All names of participants and their schools will be changed before I make any presentation.

If you are willing to have your child help me with this project, please sign the form below.

I give my permission for my child to work with
Theresa Orlandi
Bank Street College Advanced Literacy Specialization Program

Child's Name: Max Westphal
Parent's/Caregiver's Name: Liz Westphal

Parent's/Caregiver's signature: [Signature]
E-mail Contact: lizwestphal@gmail.com
Telephone: 917-412-5147

Date: 11/16/15
November 16, 2015

Theresa -

Can we assume you not only have permission to meet with the boys but have also explained that you will be videoing and surveying for the purposes of research only, and the parents’ consent forms include that understanding? If so, I think you’re fine. If not, I think you’ll want to get that additional specific consent.

Helen knows at least as much about desirable process here as I do. If she thinks your process is good, I’m sure I’d agree.

I hope this helps -- and suffices.

Gil Schmerler