

Parents Ask:

Why Are We Losing Our Boys?

**Can We Crack the Boys'
Learning-Code?**

**Report of the Committee on:
Are We Losing Our Boys?**

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Parents Ask: Why Are We Losing Our Boys? Executive Summary

As any parent or educator knows, boys learn differently than girls.¹ Because these differences are not always accepted, boys are falling behind. Education is not a zero sum game. Any egalitarian education methodology that overlooks or ignores the different stuff boys and girls are made up of ends up not producing egalitarian education results.

The Facts:

- For every 100 girls enrolled in elementary grades, 105 boys are enrolled.
- For every 100 girls suspended, 215 boys are suspended.
- For every 100 girls expelled, 297 boys are expelled.
- For every 100 girls below modal grade, 130 boys are below modal grade.
- For every 100 girls diagnosed with learning disabilities, 276 boys are diagnosed with learning disabilities.
- For every 100 girls diagnosed with emotional disorders, 324 boys are diagnosed with these disorders².

There seems to be a societal denial that boy/girl genetic learning differences exist. “Although many educators recognize that boys have fallen behind girls in school, few address the problem in a serious way. Schools that try to stop the trend, through boyfriendly pedagogy, literacy interventions, vocational training, or same-sex classes, are often thwarted...” by claims of discrimination against girls. To address the problem, we must acknowledge the plain truth ‘boys and girls are different.’³ More girls are becoming school leaders, college graduates, and are more job-ready than boys. Boys are earning more D’s & F’s are more likely to drop out of school and more likely to be jailed.

Yet,

- Educators are reluctant to experiment with single-sex classrooms.
- Colleges of Education do not emphasize boy/girl differences.
- Education materials tend to be girl-oriented and less boy friendly.
- Because the achievement gap is a gender gap, American students are losing the competition with our world-wide competitors.

1 Stetson University

2 Tom Mortenson, 2011 Compilation, Pell Institute for the Study of Opportunity in Higher Education

3 Christina Sommers, The War Against Boys, 2013

Ideas for consideration to address this challenge:

1. Learn from Finland by introducing reading when a child is older. Studies show that both boys and girls are more suited to begin reading at age 7.
2. Permit more boys' toys, boys' books and boys' play in the classroom to excite and interest boys. Most elementary school teachers are women who may be inclined toward girl-centered toys, books and play. More emphasis on teacher preparation is needed.
3. Colleges of Education should better prepare their students in teaching the 5 basic skills of reading: phonics, phonetic awareness, fluency, vocabulary, and comprehension. Most elementary teachers are not adequately prepared in this area.
4. Modify our approach to zero tolerance policies, which negatively impacts boys, and recognize the importance of rough and tumble play.
5. Kindergarten should focus on learning through play and socialization rather than on learning via academic methods.
6. Bring back recess and physical outdoor play. Countries with the most respected educational outcomes, like Finland, have 60 minutes of outdoor play regardless of weather. Boys learn best through spatial learning and movement rather than sedentary methods.
7. Question and challenge the disproportionate diagnoses of emotional and behavior disorder diagnoses among boys in Pinellas County Schools. Boys receive more than 80% of all diagnoses, which often result in the prescription of addictive medications including Ritalin and Adderall in an effort to modify their behavior.

This Executive Summary provides a brief over-view of an in-depth White Paper, *Parents ask: Why Are We Losing Our Boys?* The paper, prepared for parents, educators, legislators and interested persons by Pinellas Education Foundation, Inc., will be released in conjunction with the Foundation's October 28, 2014 program, the second in its series of programs regarding the special issues related to the education of young boys.
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Can We Crack the Boys' Learning-Code?

*“The only thing worse than kids giving up on school is
if we give up on them.”*

CityYear.Org

IT WAS A POPULAR DITTY – A NURSERY RHYME RECITED AND SUNG BY BOYS AND GIRLS - IN THE EARLY 1800s, the work of English poet Robert Southey:

*What are little boys made of?
What are little boys made of?
Snips and snails
And puppy-dog tails,
That's what little boys are made of.*

*What are little girls made of?
What are little girls made of?
Sugar and spice
And everything nice,
That's what little girls are made of.*

A scientist didn't craft the ditty. No peer-reviewed studies backed up Southey's metrical composition. His insights were pure poetry, sourced in the intuitive mind of a literary artist, an emotional Romantic, one of many rebelling in his day against what was becoming a philosophic obsession with “Pure Reason,” the theme of the Age of Enlightenment that became deeply embedded in the minds of our country's Founding Fathers.

Maybe that's why the nursery rhyme is dismissed in our times as sexist. In the minds of some, the poetry tells boys that they aren't nice. In the minds of others, the poem teaches boys converts women into victims – a “moral bi-polar paradigm,” as sociology professor Anthony Synnott describes it in his book, *Rethinking Men: Heroes, Villains, and Victims*.¹

Maybe the societal mindset that dismissed Southey's poem as sexist was a fundamental necessity to frame the rise of Western society's growing insistence on egalitarian education for boys and girls and women's rights.

There's little doubt that since ancient times too many women have too long been subordinate to men in too many ways, including education. In his provocative book, *Learning the Hard Way*, sociologist Edward Morris writes that men's suppression of women, and today's boys' education-problems, are the results of "hegemonic masculinity," a societal-imposed ideal (pushed by our institutions, including schools) touting masculinity as a "system of power relations between men and women and between different men."²

The idea of masculine superiority isn't unique to Americans. It's global and it has been around for a long time, most likely since our tribal days as hunters and gatherers. Aristotle touted the idea of women's inferiority some 2,500 years ago in *Politics*:

*"Again, the male is by nature superior, and the female inferior; and the one rules, and the other is ruled; this principle, of necessity, extends to all mankind."*³

For American women, it took a long, difficult struggle before they could stand equally with men when it came to voting and owning property and being educated. The struggle goes on today, as women continue to assert their rights for equal pay for equal work, and for positions of leadership in corporate boardrooms and cathedrals, as well as high political offices.

But when it comes to educating boys and girls, there is a fundamental truth in Southey's ancient ditty that our drive for egalitarian education has discarded: boys and girls are made of different stuff.

The Challenge

Although there remains some debate about the roles of nature and nurture in shaping boys and girls, which we delve into in this paper, most parents and educators recognize that there is different stuff. Furthermore, the different stuff shows up very early – usually well before our children are six—and has a substantial effect on how they learn.

In 2013, Florida's Stetson University, a pioneer in the study of the educational efficacy of single-sex classrooms, published an article, *Single-gender classrooms get good results*, that starts off:

*"As any parent or educator knows, boys learn differently from girls.... Ten years of study-in partnership with local schools-reveals that...."*⁴

In her book, *When Boys Become Boys*, Judy Chu's study of very young boys observed that halfway through their kindergarten years the boys showed a remarkable behavioral shift. Near their mid-kindergarten year, Chu reports that boys "began to show signs of becoming" inattentive, inarticulate, inauthentic and indirect as they begin to seek approval from their peers and others, and as they grow to understand what our culture expects from boys:

*"In many ways, the boys' posturing reflected how these boys were learning to be 'boys' within a culture and society where boys and men are expected to be tough, confident, powerful and in control."*⁵

The different boys and girls stuff, architected by their genes and nurtured to meet society's expectations, affects not only how boys and girls learn, but also when they learn what they learn. When it comes to educating our boys and girls, the different stuff that boys and girls are made of simply cannot be overlooked.

What happens when we ignore the different stuff? Exactly what's happening today within our classrooms:

We are losing more boys than girls – far too many more!

Little wonder frustrated politicians who sense the problem but struggle to find the cause and the potential for meaningful solutions are tinkering with public education.

The numbers are less than comforting.

On a national basis, the U.S. Department of Education reports that for the school year 2010-2011, 84% of girls graduated from high school in four years compared to 77% of males. In Florida, the ratios were 78% for girls and 70% for boys. For 2011-2012, the national four-year graduation rate bumped up to 85% for girls and 78% for boys, while Florida's rates ratcheted up to 82% for girls but the boy-gap widened slightly, with boys at 73%.⁶

The Alliance for Excellent Education reports that if the schools in Tampa Bay could increase the area's over-all graduation rate of boys and girls to 90%, the positive economic impact for the Tampa Bay economy would be \$77 million in additional income.⁷

As discomfoting as the low high school gradation rate and the boy-girl high school graduation gap are, the graduation rate and gap are not the whole story.

Consider a sampling from Tom Mortenson's 2011 compilation (Mortenson is Senior Scholar for The Pell Institute for the Study of Opportunity in Higher Education):⁸

- “For every 100 girls enrolled in the elementary grades, there are 105 boys enrolled.”
- “For every 100 girls suspended from public elementary and secondary schools, 215 boys are suspended.”
- “For every 100 girls expelled from public schools, 297 boys are expelled.”
- “For every 100 girls diagnosed with emotional disturbances, 324 boys are diagnosed with emotional disturbances.”
- “For every 100 girls diagnosed with learning disabilities, 276 105 boys are diagnosed with learning disabilities.”
- “For every 100 girls ages 9 to 11 enrolled below modal grade, there are 130 boys enrolled below modal grade,” with a similar differential continuing through the rest of the school years.
- “For every 100 females ages 15-19 that commit suicide, 549 males in the same range kill themselves.”
- “For every 100 girls ages 15 to 17 in correctional facilities there are 837 boys behind bars.”
- “For every 100 women ages 18 to 21 in correctional facilities there are 1430 men behind bars.”
- “For every 100 American women who earn a bachelor's degree from college 75 American men earn a bachelor's degree.”
- “For every 100 American women who earn a master's degree from college 66 men earn the same degree.”

There's more – a further sampling of Mortenson's compilation of statistics, this time from his *Fact Sheet: What's Wrong With the Guys?*⁹

- In 2010, 74.1% of men were in the labor force, down from 89.2% in 1948, with 2009 median annual income for men 25 and older being \$36,801, down from \$42,288 in 1973.

- Males are the largest share of employees in the industries facing the greatest decline in employment in America: construction, mining, manufacturing, and agriculture; and the lowest percentage of employees in the fastest growing industries: education, health care, leisure and hospitality.

And then there is the appalling report about the diagnosis of boys and girls with emotional and behavioral disorders released in October 2013 by the State of Florida, provided to us by Florida's Bureau of Exceptional Education and Student Services. In the State of Florida, there were 3,350 girls diagnosed with emotional and behavioral disorders and 15,018 boys diagnosed with emotional and behavioral disorders. What this means is that for every 100 girls diagnosed in the State of Florida with emotional and behavioral disorders there are 448 boys diagnosed with emotional and behavioral disorders. In Pinellas County, there were 178 girls and 907 boys diagnosed with emotional and behavioral disorders, with the ratio of 509 boys to 100 girls.

Why?

Why are we losing so many of our boys?

The loss is not simply a matter of race nor discrimination, nor simply a matter of disparity in family wealth. Poor, Rich, White, Black, Asian, and Hispanic sons all suffer. The sons of college-educated parents suffer. Richard Whitmire reports in *Why Boys Fail* that almost 25% of high school graduate sons of white, college educated parents read "below basic" reading levels compared to 7% of girls. Whitmire quotes psychologist Judith Linfield:

"This means that almost one in four boys who have college educated parents cannot read a newspaper with understanding. What kind of jobs can they get in the Information Age, where not only professionals but also mechanics must be able to read complicated directions?"¹⁰

Nor is the loss an issue of misandrism – hatred of boys. The issue is not one based on a claim that we are losing boys because we have an education system that over-powers women and under-powers men. Education is not a zero-sum game.

The potential for disaster comes from the many road bumps our boys encounter on their way to manhood that differ from the road bumps girls encounter along their way to womanhood, particularly in the years our sons are, or should be, in school.

Our approach to education addresses the girls' road bumps better than the boys' road bumps and produces more winners among our girls than our boys. In fact, today our girls dominate attendance in our colleges and achievement of masters' and doctoral degrees. As positive as our daughters' progress is, our inattention to our sons has produced the sad gender results revealed in this paper.

Simply put, we are not cracking the boys' learning-code as well as we are cracking the girls' learning-code.¹¹

If we mean what we say – that we want egalitarian education for our boys and girls – then we must consider boy-girl learning differences we don't seem to want to deal with when it comes to operating our schools.

Why?

Any egalitarian-education-methodology that overlooks or ignores the different stuff boys and girls are made of ends up not producing egalitarian-education-results.

Compared to the rest of the free world, our overall educational results for both girls and boys is not stellar, but for our boys the results are plain dismal. We aren't going to get our kids ready for their global competition without dramatic change, not only in education systems that affect both our girls and boys, but particularly, in the way we educate our boys. If we are going to crack the boys' learning-code:

- We can't continue to use the same methods for both boys and girls and close our eyes to the fact that many of the methods aren't producing egalitarian results.
- We have to focus on strategies that produce closer, more egalitarian, results – even if in the minds of some the methodologies used don't appear to be egalitarian. We repeat: education is not a zero-sum game. Furthermore, solving many of the boy-issues will also enrich the education experience for our girls.

It is worth noting that cracking the boys' learning-code is not an issue limited to America or Pinellas County, Florida schools. It's a prevalent how-to need in much of the Western World.

Unfortunately, our failure to crack the boys' learning-code is a failure we Americans find it difficult to admit, the necessary first step in crafting solutions.

Some countries, like Australia, New Zealand, and England aren't merely pontificating; they're taking serious steps to crack the boys' learning-code on a national basis. Christine Hoff Summers reports in her Preface¹² to *The War Against Boys* that ten members of England's Parliament formed a Boys' Reading Commission, which published a comprehensive "boys' reading tool kit" for teachers.¹³

Summers also tells us that Australia developed a grant program for 1,600 local schools to help them incorporate "boy-effective methods into their daily practice."

Whitmire devotes a chapter of his *Why Boys Fail* to the "International Story," including the Australian effort. He writes, "No one would suggest that Australia has found a solution, but they are years ahead of the United States in pioneering solutions."

Whitmire reviews in some detail many of the Australian efforts, from phonic to single-sex classrooms and athletic events, concluding that teachers who create in classrooms the "kind of team work boys find so alluring in sports" succeed. Their young male students develop a sense of belonging and an understanding that they have an important role to play, attitudes that create classroom success.¹⁴

New Zealand's Ministry of Education publishes a website for its *Success for Boys* program.¹⁵ The site includes research from around the Western world and announces:

"Success for Boys is about taking steps to ensure all boys are engaged and achieving in their learning. The Ministry of Education is focused on lifting the engagement and achievement of all young people."

However, when it comes to education, we Americans don't seem to work well on a national basis as do England, Australia and New Zealand. We like to keep education closer to home.

So the prime issue for us:

Are we willing to bring about changes in our education strategies at our local level to imbed the boy's learning-code, or will we continue to lose our boys?

Why Aren't We Solving the Boys' Learning-Code?

Despite the straight-forward statement Stetson University introduced in its report on single sex classrooms, which we cite above, “*As any parent or educator knows, boys learn differently from girls,*” when it comes to how we go about providing education we have not done very well in facing up to the idea that boys and girls learn differently.

In fact, there remains a disconcerting amount of denial.

Christina Sommers makes a strong case in her *The War Against Boys*, that the denial stems from misguided, politicized, feminism willingness to champion gains for girls at the expense of boys.

Whitmire sees Sommers as creating, or contributing to, what may be an unnecessary gender-gap controversy, a shouting match that ends up without solutions.¹⁶ But, the controversy exists and is politicized, and in a real way obstructs solving our boys' problem.

In her 2013, second edition, Sommers writes that her first edition failed to make the issue that concerns her clear enough. It isn't the humane and progressive women's movement Sommers criticizes – her concern is about the hostile school environment created for boys by politicized feminism that assumes efforts advocated to improve boys are a backlash against the achievements of girls. Boys don't want to sit quietly and play with dolls, as has been advocated by some of the reformers she challenges. Our young sons are itchy; they want to be active. They're energetic; they can't sit as still in classrooms as our daughters.

Sommers' concern is that politicized feminism has become an uncompromising winner-take-all political lobbying movements, relying on the kind of obscuration of facts we too often see today in political arenas.¹⁷ The result, Sommers warns, is an unwarranted politicized push to feminize standards for boys' conduct in our schools, and, further, to characterize strategies that schools implement to meet boys needs to achieve results on par with girls as an attack on feminine progress.

In the preface to her 2013 edition of *The War Against Boys* Sommers writes:

“Although many educators recognize that boys have fallen behind girls in school, few address the problem in a serious way. School that try to

*stop the trend, through boy-friendly pedagogy, literacy interventions, vocational training, or same-sex classes, are often thwarted. Women's lobbying groups still call such projects evidence of a 'backlash' against girls' achievements and believe they are part of a campaign to slow further female progress.... To address the problem, we must acknowledge the plain truth 'boys and girls are different.'"*¹⁸

Then, Sommers outlines materials added to her revised work, including evidence added of “boy-adverse trends,” from zero-tolerance policies and elimination of recess, to attacks on experiments like single-sex classrooms. She concludes: “As our schools become more feelings-centered, risk averse, competition-free, and sedentary, they move further and further from the characteristics of boys.”

Sommers criticizes shaky scientific claims used to advance the cause against our boys, such as those cited in Diane Halpern's *The Pseudoscience of Single-Sex Schooling*¹⁹ as well the claims used for an attack on proponents of the idea that there are genetic brain differences between boys and girls that must be considered in our approach to education.

Summers argues that the American Civil Liberties Union (ACLU) has taken up the politicized feminist cause with its *Teach Kids, Not Stereotypes* program.²⁰ Among the several law suits and administrative complaints ACLU has filed is ACLU's May 15, 2014 lawsuit regarding single-sex classrooms, filed against several school districts, including Florida's Hillsborough County.²¹ The theory of the ACLU litigation is that single-sex classrooms don't work and they discriminate against girls.

ACLU's advocacy position, *Preliminary Finding of ACLU "Teach Kids, Not Stereotypes" Campaign*, was furnished to the U.S. Department of Education, Office of Civil Rights, on August 20, 2012. Not only is the report critical of single-sex classrooms, it is critical of the work of advocates of the idea that boy-girl brain differences create important learning considerations. The report includes the argument:

"There is no question that our country is facing an educational crisis. Too many of our schools are failing our students, especially

poor students of color, and new strategies are desperately needed. But coeducation is not the problem, and single-sex education premised on stereotyping is not the solution. Separating the boys from the girls is not going to turn a struggling education system around.”²²

In 2008, a feminist advocate, Amanda Schaffer, called the brain difference advocates misguided “sex difference evangelists.” She writes that the brain differences between boys and girls are small, much smaller than the brain differences among girls or among boys.²³

ACLU’s *Preliminary Finding of ACLU “Teach Kids, Not Stereotypes” Campaign* cites Halpern and adopts Schaffer’s brain-difference position and argues that boy-girl brain differences do not create important learning considerations:

“These (ideas) are merely re-packaged sex stereotypes. There is no evidence that brain differences translate into a need for different instructional approaches for boys and girls.”²⁴

As we ponder the “small differences” between the genetics of boys and girls (estimated at 1%-5%²⁵), we might remind ourselves of the small differences between human and chimpanzee genomes. There is but a 4% difference between chimpanzees and us; but obviously, an important 4% difference.²⁶

However, despite the advocacy of the challengers, there is growing evidence that nature cannot be ignored, much of it quite recent, but muted in the debates. Consider these recent studies:

- *Specific Genes Found Linked to Learning.* A 2012 study, *Dopaminergic Polymorphisms and Educational Achievement: Results from a Longitudinal Sample of Americans*, is believed to be the first to link specific genes to learning. The researchers cite earlier studies that indicate genetics account for approximately 50% of one’s educational performance. This study focused on three genes, DAT1, DRD2, and DRD4, which the researchers relate to educational attainment. The researchers write:

“The possibility that academically oriented phenotypes (an individual’s observable

characteristics) are under considerable genetic influence has evolved from taboo to common acceptance.”

The researchers point out that although there were statistically significant correlation between the three genes and academic achievement, the amount was not significant and more research is required. The researchers point out that genetic influence on educational achievement goes beyond the three genes studied. Educational achievement is influenced by complex interactions of many genes, “each having only a small effect.”²⁷

- *Genetic Influence on Children’s Examination Scores.* A 2013 study of 16-year old twins by the Institute of Psychiatry at King’s College, London, concludes from its study of over 11,000 teens that 58% of a child’s test scores on compulsory core courses are sourced in the child’s genes. The child’s upbringing and environmental factors contribute the rest of his or her success. The researchers recommend that “model education” be personalized to take into consideration the importance of genes to bring out the best in children.²⁸

- *Men and Women’s Brains Are Wired Differently.* In December 2013, the Perelman School of Medicine, University of Pennsylvania Health System, published a press release of a new brain connectivity study from Penn Medicine, that found “striking differences in the wiring of men’s and women’s brains.” Men front-to-back neural connections are greater than women’s, and women’s left-to-right neural connections are greater than men’s. The researchers suggest that men’s brains are wired to facilitate coordinated action and perception while women’s brains are wired to “facilitate communication between analytical and intuition.” The result is that women are better at multitasking and men are better at coordinated action and single task performance. The male-female differences are most pronounced within the ages of 12-14, critical learning years. Dr. Ruben Gur’s comments in the press release states that the study “helps us better understand the differences between how men and women think.”²⁹

It may be too early to conclude from the studies we cite above that the ACLU, and the feminist organizations whose causes it champions, are totally wrong, but it is safe to say they are far from being totally right.

Rosemary Salome concludes in her 2013 Boston University Law Review

article, *Rights and Wrongs in the Debate over Single –Sex Schooling*:

“Single-sex schooling is now caught in a paradoxical cycle driven by competing ideological forces. Both sides claim to promote equal educational opportunity, the bedrock of American education reform. Yet, the marketers ... have marginalized it and fueled the absolutist fires of legal challenges.... While the ACLU is correct in bringing impermissible practices to a halt, their organized and sweeping assault on single-sex schooling and the questionable research underlying most of their arguments have unjustly cast a dark cloud over an approach that carries benefits, especially for at-risk students, many of whom are racial minorities and immigrants.... If single-sex schooling is not inherently harmful, and if it appears beneficial to some students, then, unless it is proven otherwise, school officials should be free to establish programs aimed at expanding opportunities.”³⁰

A concern of the ACLU is that single-sex classrooms increase sexism and gender stereotyping. Sommers points out in *“War Against Boys”* that the research comes to the opposite conclusion.³¹ Sommers continues:

“But here is one glaring gender distinction we ignore at our peril: boys are seriously behind girls in school.... Turning a blind eye to real differences and dogmatically insisting that masculinity and femininity are irrelevant distinctions poses serious dangers for us.”³²

And we have been turning a blind eye.

The 10-year research of Florida’s Stetson University regarding single-sex classes, challenged by the ACLU as being discriminatory, indicate that the schools Stetson worked with have strong results, not only in raising the scholastic performance of boys without hurting girls, but in also reducing the likelihood that boys will continue to over populate our special education courses.

• In 2013 Florida's Stetson University, a pioneer in the study of single-sex classrooms, published, *Single-gender classrooms get good results*, stating:

“As any parent or educator knows, boys learn differently from girls Ten years of study-in partnership with local schools reveals that by organizing classrooms to address these differences single-gender classes have unique advantages for boys and girls

“After three years of data analysis, researchers report two clear patterns:

- *“Only the single-gender classrooms were found to have statistical significance.*
- *“The effects of placing a student in a single-gender classroom were more beneficial to boy than girls.”³³*

• In 2014, Stetson researcher, Kathy Piechura-Couture, published a paper with others that indicates, indeed, single-sex classrooms can help our sons minimize their need for special education.³⁴

We delve into the discussion of single-sex classrooms, not because this paper is advocating single-sex classrooms, but because the single-sex classroom example makes a point:

We have a penchant to make our decisions based on our deeply held beliefs and not on evidence. In fact, we discard evidence when it doesn't support our sacred beliefs.

Stated another way:

Whether the ideological war is about taxes, rights, climate change, education or anything else, competing ideological champions stick to their beliefs and damn the facts to the contrary.

The sacred belief that flame the education debate that is damaging our sons seems to be that if we do something different for our boys it will harm our girls, and our girls will lose the centuries of tough, hard-earned progress they

have made. We leave the details for you to explore further in Sommers work.

We repeat:

Education is not a zero sum game and egalitarian education is not about egalitarian methods, it is about egalitarian results!

However, because of its importance, let us dig a little deeper into the thought that, if we aren't careful, our beliefs will trump reality.

We humans are wired to discard information that conflicts with our deeply held beliefs. Although we are convinced of our rationality – of our reliance on *Pure Reason* – it turns out we believe first and then sort through the available facts (or if none are available we create myths), picking and choosing and discarding as we deem appropriate to assure support for the positions we have already decided to take. The process is a gut-level process, essentially subconscious, providing us with a way to defend our personalities, to reassure ourselves that we are in more secure and stable environment. A few million years ago, when we were hunters and gatherers, at a time when there really was no such thing as science to guide us, and the range of our world was very small, holding on to our beliefs went a long way to keeping our tribe together and united against intruders and comforting us about the vast unknown. But today, that sort of wiring can go haywire.

Stated formally, the *Principle of Defective Observation*:

“Our human observation is defective because each of us finds it necessary to interpret events we encounter and data we receive in ways that enhance our self-image and stabilize our perception of the universe. To that end, we search out and embrace information supporting our peculiar worldview. We exclude, refuse to gather, and refuse to recognize conflicting data. Our interpretations lead us to block out potential signs of trouble that threaten or are inconsistent with our self-image and worldview and to assign the wrong interpretations to the signs we identify so as to minimize their importance.”³⁵

We can joke, or take the *Principle of Defective Observation* lightly, when we talk about the rationality of, say, someone joining the recently revamped Flat Earth Society because they believe the earth is flat and the center of the universe, while ignoring the fact the Flat Earth Society's web page bounces messages to us from satellites that circle our globe.

But, when it comes to significant decisions, like educating our sons and daughters, relying on the belief that there are no essential differences between boys and girls that affect the way they learn can be outright dangerous.

We are not born blank slates, waiting to be filled in by culture and nurture. Harvard professor, Steven Pinker (cited below by Sommers in another context) challenged that assumption in 2002 with his *The Blank Slate: The Modern Denial of Human Nature*.³⁶ Pinker pointed out that many people are hostile to the idea that nature has anything to do with human conduct because the idea could be used to justify inequality, subvert efforts for societal improvement, deny the importance of personal responsibility, or, maybe as Sommers surmises, take away a hard-fought-for advantage.

Michael Crichton wrote a best seller, *State of Fear*, based on the idea that immoral politicians and scientists can promote the use of science to rid society of humans endowed with what they perceive are nature's defects (e.g., like not being of the right race or belief), the fear Pinker wrote about. Crichton took the unusual step of including an appendix with his novel, *Why Politicized Science is Dangerous*, which uses as his example the pre-World War II scientific and political support for eugenics – racial inequality and Aryan superiority – which lead to Hitler's drive to purify humanity by genocide.³⁷

Accepting as fact that boys and girls learn differently, evident in the results we all can see, and doing something to right the wrong, evident in the dismal failure of our boys, should not create a *State of Fear* in the hearts and minds of anyone. We say again: education is not a zero sum game. Girls will not lose merely because boys gain. There is room for both boys and girls, not only in the classrooms but also in the boardrooms, the halls of science, the chapels and cathedrals, the professions and industries.

In her discussion of the proceedings of the Harvard panel discussing *Impediments to Change: Revisiting the Women in Science Question*, Sommers writes:

“One panelist ... flatly declared that the case against significant inborn cognitive differences ‘is as conclusive as any finding I know in science.’

“For any scholar, especially a Harvard University social scientist to sweep aside all the evidence for innate differences defies belief....

“ Women tend to be the nurtures and the men the warriors. Harvard psychologist Steven Pinker points to the absurdity of ascribing these universal differences to socialization: ‘It would be amazing coincidence that in every society the coin flip that assigns each sex to one set of roles would land the same way.’”³⁸

Clearly, the gender differences of our boys and girls are driven by not-yet-fully understood interactions between our genes and our culture. But we can't deny the existence of something merely because we aren't smart enough, or educated enough, to fully understand.

The nature versus nurture debate about the source of boy-girl learning is reminiscent of the philosophic discussions regarding the source of our religious beliefs.

The late George Santayana wrote in *Reason in Religion*:

“What religion a man shall have is a historical accident, quite as much as what language he shall speak.”³⁹

Santayana concluded, “But every religion we love contradicts every other religion.”

Nicholas Wade writes in *Faith Instinct* that our need for religion is instinctive, it's in our genes: “Like language, religion is complex cultural behavior built on top of genetics.... People are born with innate instincts for learning language and the religion of their community. But in both cases culture supplies the content of what is learned.”⁴⁰

How boys and girls learn to be boys and girls follows a similar path. Consider:

- All humans have an innate instinct, a genetic propensity, for language; but the specific language a human understands and speaks is a product of the individual's experience of his or her cultural overlay.
- All humans have an innate instinct, a genetic propensity, for religious belief, but the specific religious belief a human endorses and lives by is a product of the individual's experience of his or her cultural overlay.
- And, likewise, when it comes to how boys and girls learn and assert their masculinity and femininity, boys have an innate instinct, a propensity, to be boys, and girls have an innate instinct, a propensity, to be girls. The underlying genetic contributions that frame their behavior and contribute to their learning differently cannot be overlooked, although the behavioral-language boys and girls use to express their masculinity and femininity is refined and shaped by their individual experiences and their cultural overlay.

Behavior is our non-verbal language, communicating to ourselves and to others how we feel about ourselves, about those around us, and about our world. In a sense we are each our own playwright. Though the playwriting we do is clearly influenced and shaped by our cultural and personal experiences, the source of the behavioral stories we write lies deep within our genes, which give boys and girls different slants on the stories they write and different approaches regarding how they learn to write their stories.

We cannot ignore that boys have the innate propensity to become boys and girls have the innate propensity to become girls. However, when there is a genetic flaw in a boy, a boy's propensity may bridge closer to that of being a girl; and vice versa. Rarely is a bridging-choice voluntarily made. Genes play a major role, frequently evident at a very young age.⁴¹

Yet, denial of a boy-girl genetic basis for the development of appropriate teaching strategies continues, despite the growing body of evidence to the contrary, a snippet of which we cite above.

University of Kentucky sociology professor Edward Morris, author of *Learning the Hard Way*, cited above in our reference to hegemonic masculinity, concludes that there are too few studies to establish the biological source for the gender gap. He argues:

“A common persuasive argument for this gap concerns biologically based sex differences (Gurian and Stevens 2005).... The importance lies not within the biological categories of male and female but the daily interactional labor that boys and girls conduct to forge masculinity and femininity.”⁴²

Morris describes boys’ assertion of their masculinity in school as “contrived carelessness.” He denies that the source of the story the boys write lies in their genes.

But, in seeming contradiction to his conclusion that the conduct of boys and girls asserting their masculinity and femininity is not genetically based, he writes, most likely in unintended support of Pinker, cited above by Sommers:

“Thus, contrived carelessness among boys may not be peculiar (to the two schools he visited) but may indicate a broader, possible even a global practice of hegemonic masculinity.”⁴³

We ask him, as Pinker would: How does a behavior become a global practice across cultures if there is no genetic basis for the behavior?

However, ignoring the possibility of a genetic connection, Morris concludes that “gender does not exist internally; the students behaviors actually form gender. Boys and girls picked up the blocks differently, not because they were hardwired to do so but because the activity allowed them to show others the strength associated with masculinity and the gracefulness associated with femininity.”⁴⁴

Morris challenges the claim that: “(I)nherent, especially biological, differences between boys and girls, explain boys lower achievement.”⁴⁵

Morris goes on to explain that the gender gap solution is to “redefine masculinity so that it better aligns with school and achievement.”⁴⁶ He criticizes sports like football that promote a “paragon of masculinity based on combat, dominance and stoicism.”

Never does Morris suggest that schools align their activities with our boys’ inherent masculinity requirements so that boys can achieve their potential.

Thomas DiPrete and Claudia Buchman, in a 2013 “peer-reviewed” study

for their book, *The Rise of Women: The Growing Gender Gap in Education and What it Means to American Schools*, like Morris, are critical of Sommers, who they view (as does the ACLU) as advocating the restructure of “schooling around what we see as outmoded gender stereotypes.”⁴⁷ They conclude that the “scientific consensus” is that, although girls outperform boys, boys and girls have similar aptitudes for academic performance. They write:

“Why do boys underperform relative to their potential? We argue that the causes lie in the social-cultural environment rather than in anatomy, hormones or brain structure.

DiPrete and Buchman then provide three sets of facts they consider in support of their conclusion, the first being:

“(B)oy disengage from school more easily than girls, and their disengagement seems to be connected with their masculine identity.”

Their second point is that boys benefit more than girls from “academically richer environments.” Their third point is that the attitude of parents about education’s importance, expressed in the “messages parent give their children” vary little among the class or sex of the parents, or “the gender of the school” attended by their children.

The source of the “scientific consensus” is not explained. It is also difficult to relate DiPrete’s and Bachman’s three key points to boys’ underachievement, particularly when it exists in so many countries and not merely in our American culture.

Other comments in their work implicate boys’ choices of extracurricular activities (sports versus music, art or drama), boys striving for masculine identity, and the role models provided for them. DiPrete and Bachman conclude that academic success requires the same sorts of effort that success in sports requires, and write:

“Boys do not universally accept this connection.”

We wonder as Pinker would: How can behavioral characteristics – like “Boys do not universally accept this connection” – be universal if not sourced in their genes?

In the end, though DiPrete and Bachman deny genes influence boys' dismal academic under-performance, as did Morris, their conclusion seems to confirm Pinker's observation, worth repeating:

“It would be amazing coincidence that in every society the coin flip that assigns each sex to one set of roles would land the same way.”

Let us now end our examination of the positions of the warring parties and explore issues that concern most every mom, dad and educator attuned to the dilemma of our sons.

At What Age Should Formal Education Start?

There's general agreement, even among the deniers, that girls' brains mature more quickly than boys' brains, and at a younger age. Girls' brains mature in their early twenties; boys closer to age thirty. At the very younger ages, the pace of girls' development is at least two years ahead of boys' development.

The slower start at the younger ages for boys creates a success-problem for many boys in today's early learning reading programs, whereas girls develop the ability to deal with complex verbal skills at a much earlier age.

Richard Whitmire states the issue quite simply in *Why Boys Fail*:

“The world has gotten more verbal; boys haven't.... Preschoolers today are confronted with challenges first graders faced twenty years ago. On the surface that makes sense, but educators overlooked the fact that young boys aren't wired for early verbal challenges.”⁴⁸

Whitmire also expressed concern that teachers do not accommodate their teaching techniques to accommodate the differences between girls and boys, a subject we return to later in this paper.

Michael Gurian and the late Kathy Stevens, authors of *Boys and Girls Learn Differently: A Guide for Teachers and Parents*,⁴⁹ and Leonard Sax, M.D., author of *Boys Adrift*,⁵⁰ agreed. Gurian, Stevens and Sax are among those criticized as *sex-differences evangelicals* by ACLU and its feminist-movement supporters.

But on this point, the evangelicals are worth a listen. Sax identifies five factors contributing to our sons' poor performances. The first factor is the "Change at School:"

*"Kindergarten isn't kindergarten anymore....
Kindergarten has become the new first
grade."*⁵¹

As to the slower development of boys, Sax writes, "Trying to teach five-year old boys to learn to read and write may be just as inappropriate as it would be to try to teach three-year-old girls to read and write."⁵²

In 2008, the BBC published an article, *Is five too soon to start school?* The article questions the wisdom of beginning formal education in England at age five when Nordic countries like Sweden, Finland and Denmark begin at age seven and produce superior educational results.⁵³

A September 2013 letter written to England's The Telegraph repeated the concern expressed in the BBC article that government policies pushing for early education have a negative impact on the health and wellbeing of children. The letter criticizes the government's under-valuing the role of early childhood play, pointing out that research is to the contrary: children need their younger years to learn the lessons provided by play, and will achieve better results when those lessons are not denied them.⁵⁴

David Whitebread's and Sue Bingham's article, *Too much, too young: Should schooling start at age 7*⁵⁵ supports the concerns expressed by BBC and in The Telegraph letter, providing links to several supporting studies. One such study, a 2002 study, *Moving up the Grades: Relationship between Preschool Model and Later School Success* concludes early-play is more beneficial for children than early formalized education. In fact, introducing formalized training, instead of play, as an early learning experience actually slows down their learning process.⁵⁶

The 2014 Washington Post article, *Finland working to expand early education*, reports that Finland is expanding its nationally subsidized day-care system, and, soon, there will be compulsory preschool for all six-year-olds. But formal education will continue to start at age seven. Krista Kiuru, the Finish minister of education and science spoke to the Post about why Finland started its formal education later than we do in the United States. The Finish minister of education stated that the Finnish decision to start formal education was based

on a substantial amount of research that demonstrated that earlier starts do not provide better results.⁵⁷

Pasi Sahlberg, Harvard University visiting professor, and former director general of the Finnish Ministry of Education, writes in his October 2014 article, *Why Finland's schools are top-notch*, that people are surprised that children in Finland's education system, consistently ranked at or near the top in reading, science and mathematics education, don't start school until they are seven, don't have as much homework as do children in America, and take only one standardized test to rank their academic success. That test is taken in the final year of high school.

Sahlberg points out that Finnish homework is kept at a minimum so children can be children, engaged in their own play, hobbies and friend building outside school. Furthermore, play is a significant part of each Finnish child's school day, with each class followed by a 15-minute outdoors play period.

Does a late start in formal education impede the development of Finnish children? Exactly the opposite. It's the countries like England and the United States, obsessed with filling early minds with facts and figures rather than childhood play, that have trouble catching up.

Consider the results: in 2012, Finland ranked third in the world, behind Korea and Japan, in Program for Student Assessment scores in mathematics, science and reading. What is the rank of the United States? We are 21st among 34 participating countries. Sahlberg's article is a sobering analysis of America's faltering education systems.⁵⁸

The point to be made in regard to the subject of this discussion:

Starting our children, in particular our boys, on a course of formal education at too young an age, particularly in regard to their early literacy skills, does not enhance their skills. It actually reduces their ultimate ability to learn and, because of their early failures, can turn them off to education.

To paraphrase Whitmire, who we quote above, the world may be in a rush to enhance our young's literacy skills; but our young boys, who mature more slowly than our young girls, aren't ready for it.

Too early literacy education can have an adverse

effect, particularly on our boys' minds and spirit, in a fashion similar to starting weight training and bodybuilding at an age when tendons, ligaments and muscles aren't ready for the workout.

Substituting early literacy training for the lessons provided by healthy childhood play, particularly outdoor play, is not a problem-solver.

So what?

In the end, does it matter to our sons that their early education experience leads to an early reading failure? Does such a failure vent itself in their conduct – as what Morris calls “contrived carelessness,” a blunting, defense mechanism – subconsciously instigated as a shield to protect their evolving concept of masculinity?

As we ponder the possibilities, consider:

- In Chu's *When Boys Become Boys*, Carol Gilligan writes in the Preface:

“A key insight Chu came to in her research lay in her recognition that the relational capacities boys learn to abjure – the empathy and sensitivity that lead them to read the human world around them so accurately and astutely – are essential if they are to realize the closeness they seek with other boys. Yet in blunting or shielding their emotional sensitivity in order to be one of the boys, they render that closeness unattainable.”⁵⁹

- David Boulton, founder of Learning Stewards, has written an unsettling article about *Mind-shame*, a blunting, emotional shield children, as well as adults, use to protect themselves in failing circumstances. Boulton concludes:

“We are all wired to experience shame. We can feel shame about our bodies, our abilities, our backgrounds, our relationships, our behavior, our possessions. ...

“What happens to children who grow up ashamed of their learning? What happens to children who grow up ashamed of their minds?

...

“Children who experience chronic shame about some aspect of themselves or performance will eventually demote whatever the importance of whatever they blame to ‘whatever’, ‘reading isn’t important’, ‘math isn’t important’, ‘school isn’t important’ and, even more tragically, ‘being smart isn’t important’ and ‘I am not good at learning’. All of which are immediately emotionally responsive, self-protecting, ways of managing shame that orient and direct their learning to avoid learning – that direct their learning in unhealthy ways.”⁶⁰

• In *Boys Adrift*, Leonard Sax advocates that starting school two years later could go a long way in producing superior performance because “kids are less likely to hate school.” He writes:

“(Waiting) might reduce or ameliorate a significant fraction of the problems we see with boys and school.”⁶¹

• We’ve heard from a few questioning parents and educators that the problem with young boys’ underperformance is that our boys (but apparently not our girls) are lazy – that early learning failure is not within the realm of science of the mind, but within the realm of self-discipline. Our boys, the saying goes, have chosen to be lazy. If so, we could ask the deniers to explain why almost all of the young men, but not the young women, in the Western world, regardless of country, are underperforming; but there is an issue more basic, said best by David Boulton as he continues his discussion about a child’s mind-shame and choice. If we aren’t providing our boys with the right tools for them to learn, are they really making a choice to fail? Boulton writes:

“Choice implies choices. If there are no choices to choose from, do we really have any choice? If our choices are limited to choices others

chose for us, are we still as responsible for them?

“Third-graders struggling with reading don’t choose to become ashamed of their minds. As children shame out of learning to read, they don’t understand they are making a ‘choice’ that will disable an uncountable number of future life options and therefore future life choices. Do the choices of a literate person and a markedly less literate person differ? Sure they do. Did they choose to have those differences? Do children choose to be inadequately prepared, confused or feel ashamed of their reading (or math or ...)? No they don’t....

“By framing ‘failure’ as a choice – as a result of a purely personal decision or effort – we create the conditions in which millions of children blame themselves for difficulties that are in no way their fault....

“I am not saying we aren’t responsible for our choices. I am saying that it’s nowhere near that simple.”

• What about resilience? Certainly some of our children crawl, kick and fight their way to success as adults out of bad beginnings; and we have included several citations in our Resources under the subtitle of Resilience. There’s an entire website devoted to the subject. Is resilience a characteristic our schools can enhance? Can schools help our troubled children, our underperforming boys in particular, to become grittier? Michael Bond addresses the subject in *The science of success: Blood, or sweat and tears?*⁶² So does Roy Baumeister in his *Weak will comes from tired muscles.*⁶³

Both nature and nurture matter in human performance. Early intervention is important to help children reach for their potential, which lends credence to Finland’s escalation of its childcare centers, making them available to all children.

Bond discusses the importance of self-control, and that education can enhance self-control, citing the study of Roy Baumeister at Florida State University we refer to above.⁶⁴

Baumeister sees will power like a muscle that tires when it is weak and perseveres when it is strong. Yes, our schools should explore ways to enhance the will power of our children.

But starting them later in formal education should tax our children less, so they can develop their own resilience at their own pace without being devastated in the process.

Thus, our inquiries:

Are we wise in making kindergarten the new first grade? (Our daughters may be able to handle it, but many of our sons are having difficulty.)

Should we give back to all our children a year they could enjoy as a playful rather than an instructional education experience?

Would not doing so provide a necessary crack for us to break the boys' learning-code while it also helps our daughters?

Boys' Toys and The Dangerous Book For Boys

Two related considerations arise out of our discussion so far: toys and books for boys.

Florida Statutes 1006, Section C, is titled "Student Discipline and School Safety." The law describes the responsibilities of school boards and schools regarding school discipline and safety and the adoption of a Code of Conduct. We discuss the law's zero-tolerance provisions in our next section. But there's an unusual provision in the Code of Conduct sections of the law worthy of discussion at this point because it touches on toys.

The Code of Conduct requirements say nothing about requiring students to be educated about self-control, the recommendation of Roy Baumeister at Florida State University we touched on earlier in this paper.⁶⁵

Nor does the law's Code of Conduct section discuss educating our

children about responsible citizenship or the Bill of Rights – with the exception of a provision touching on the right to bear arms under the Bill of Rights Second Amendment. Florida law provides that the Code of Conduct cannot prohibit children during play from simulating a firearm or weapon, or possessing certain kinds of toy firearms, unless playing with the gun-like toys “materially disrupts” education or places other children in “reasonable fear of bodily harm.”

Second Amendment considerations aside: Boys and girls get educated by play but often don’t want to play in the same way or with the same kinds of toys. Toy choices frequently reflect evolving concepts of masculinity and femininity – defining how boys and girls feel about themselves and where they fit in with others, young and old.

When it comes to our sons, Dr. Sax gets to the heart of the issue, arguing that there “is no shred of evidence” to support the belief that prohibiting “violent play or imaginary violence (e.g. boys writing violent stories) will decrease actual violence:”

“We actually know a good deal about the kind of boy who is the most likely to bring a gun to school.... he’s more likely to be shy, a loner; he is less likely than other boys to participate in aggressive sports such as football. We now understand that aggressive play, such as dodgeball, does not increase the risk of truly violent activities such as a school shooting....

“In ‘When Gender Matters,’ I quoted a famous saying attributed to the Roman poet Horace: ‘You can try to drive out Nature with a pitchfork; yet she will always return.’ If your son is motivated by competition, then eliminating it from his school, throwing out his toy guns, and forbidding him to write stories with violent themes won’t change him. These policies may discourage him from school, however. The end result may be a boy who feels that the only place he is truly understood as he really is, is the world of video games.⁶⁶

Both Edward Morris, in *Learning the Hard Way*⁶⁷, and Judy Chu, in *When Boys Become Boys*⁶⁸ comment on boys' penchant for rough and tumble play. We have already mentioned Morris's concern about boys' participation in competitive, aggressive sports such as football. When it comes to boys' toys, Chu's writing includes stories of gunplay, including gunplay forbidden by teachers. She reports that forbidding gunplay increased the excitement and allure, and "strengthened the boys' bond with each other as they engaged in the forbidden activity together as a group."⁶⁹

Of course, Florida teachers could not have forbidden gunplay; but not for the rationale articulated by Chou. Joshua Weiner, M.D., a well-known Washington DC area psychiatrist (and a frequent TV commentator on health), specializing in children and adolescents, has been quoted as saying about boys' connection with guns, which he attributes to being a product of environment and genes:

*"Boys are likely predisposed to respond and probably have some yet-unknown gene, which contributes to this behavior. Think about men being the hunter/gatherer and needing to kill for food and to protect their family."*⁷⁰

No, we are not advocates of guns or violence. Nor are we advocates of undisciplined boys. We agree with FSU's Baumeister that teaching children self-discipline is a worthy educational objective. We agree with Sommers, who writes in *War Against Boys*, that moral education goes a long way to increasing our children's sense of freedom and humanity, and that our sons, as well as our daughters, need moral education in our schools. Moral education (which is not religious education), unfortunately, is also a fruitful subject for deniers.⁷¹

We agree with Sommers that there can be real value for all of our children if, for example, our schools acquainted our children with Aristotle's "practical wisdom" – the important of avoiding extremes, like developing courage (the mean between cowardliness and recklessness), loyalty (the mean between fickleness and blind obedience), and resolution (the mean between spinelessness and obstinacy), and so on. Aristotle philosophized that virtue is the "middle quality" – the point between extremes, the point he calls "excellence" – that true wisdom provides. "Excellence is the art won by training and habituation."⁷² Are not training and good habit building at least in part what schools are about?

We are advocates of knowledgeable, thoughtful, loving parents and educators guiding their selections of toys and games for children with a full recognition that boys and girls are made of different stuff. Neutralization of toys and reading material (which we discuss next) for boys and girls does not provide the learning and guidance our sons need about their masculinity and their roles in a healthy, vibrant, moral society.

We touched on the power of play previously when we questioned whether we should defer the formalities of school until age seven, and we will delve further into the power of play later in this paper when we talk about ADHD and recess, but there is another lesson worth noting at this point in our discussion. In her September 2014 *New Scientist* article, *Daydream believers: Is imagination our greatest skill?* Catherine Brahic concludes that imagination is central to the development of an individual's thought processes, providing a person with ways to solve problems and develop creativity.⁷³

Imagination evolves from play, particularly early childhood play –from let's pretend, from make-believe friends, from make-believe trips to far-away places, and from make-believe heroes and villains. Boys' creativity may be harmed forever if we direct them far away from what's in their hearts and, as we are growing to understand, from what is in their genes.

What about reading material?

The *Dangerous Book for Boy*, a fascinating “how to” encyclopedia of projects for boys, starts off:

*“In this age of video games and cell phones, there must still be a place for knots, tree houses and stories of incredible courage.”*⁷⁴

There's no shortage of research about the differing reading preferences of boys and girls. However, preferences are too frequently ignored, particularly for boys, creating the potential for a learning disaster.

In 2008, Wendy Schwartz, Education Resource Information Center, U.S. Department of Education, wrote *Helping Underachieving Boys Read Well and Often*, in which she said:

“Boys tend to learn to read at an older age than girls, take longer to learn, and comprehend narrative texts less easily. Boys also value reading less, and see reading as a way to get

information rather than as a recreational activity....

“Boys tend to read a ‘wider number of genres over a broader range of topics’ than girls (Simpson, 1996, p. 272). They are usually most interested in books and periodicals about hobbies, sports, and activities they might engage in, and in informational resources. They like escapism (science fiction, adventure, and fantasy) and humor more than fiction and poetry, and they like to collect series of books (Simpson, 1996; Smith & Wilhelm, 2002).

“Reading choices made for boys frequently do not reflect their preferences, since girls are clearer and more vocal about what books they want, elementary school teachers are predominantly women, and mothers rather than fathers select reading materials for their children. Obviously, then, involving boys in the selection process will increase their attentiveness (Simpson, 1996). Further, boys, like all children, want to see characters like themselves sometimes. Therefore, materials should feature people of different ethnicities, races, and backgrounds who live in a variety of types of homes and communities.”⁷⁵

The Boys’ Reading Commission, sponsored in England by the National Literary Trust, released a 2012 report that provides an in-depth insight into boys’ reading problems, providing insights as true in the United States as in England, including a topic,

“Boys’ reading interests aren’t honoured at school or by publishers,” which includes this observation:

“As we highlighted earlier, boys and girls choose to read different materials outside of class. Yet many practitioners felt that one of the reasons why boys underachieve in reading is because their

*reading choices are not respected in school. For example, some practitioners said, 'I find that boys, if given the incentive to read books that interest them, are just as enthusiastic as girls.... (B)oy's are just as easily stimulated into reading if they are led to it in an interesting, structured manner, with books that are relevant and exciting to them.'"*⁷⁶

So we ask:

Isn't it time our schools provide our sons with reading material that sparks their interest, holds their attention – that tells them how to tie knots and build tree houses and provides them with stories of incredible courage?

Doing so would go a long way in cracking our boys' learning-code.

How Are Our Teachers Schooled to Teach?

There are other, literacy-related issues Whitmire and others raise:

- Boys, more than girls, need phonetic-intense instructions. Girls also benefit from phonetics, but seem to be able to learn from whole-language instruction. Whitmire writes, "Boys are less adept at intuiting the structure of language."⁷⁷

- Related, from a report of the National Council on Teacher Quality, Whitmire writes, "elementary teachers lacked the right training to teach reading." The report examined whether or not college courses for teachers included training in how to teach the five basic skills necessary for reading: phonics, phonetic awareness, fluency, vocabulary and comprehension. Only 11 surveyed colleges taught all five basic skills. 23 of the surveyed colleges taught none of the five basic skills.⁷⁸

- A surprising issue regarding the education of our boys and girls was uncovered in a 2012 study about how primary school teachers grade boys and girls. The conclusion of the researchers is the school grades given to "boys in all racial categories across all subject areas" are less than their test scores indicate they should be. The study, *Non-cognitive Skills and the Gender Disparities in Test Scores and Teacher Assessment: Evidence from Primary School*, reveals that boys are given less favorable

treatment than girls when it comes to the grades they get.⁷⁹ Why? Teachers base their course grades not merely on scholastic achievement – behavior is a significant factor in the grades given our young children, with a bonus given to boys “with test scores and behavior like their girl counterparts.”

- The researchers documented that young boys were less amenable to the classroom learning process than girls, particularly in early reading skills; and the amenability of girls to the processes is used by the teachers as an important factor in the grades given to children.

- Boys in all races were given lower grades than their test scores indicated they should receive based on their academic performance.

- The inconsistency between grades given to boys and girls within the same subjects, with girls getting higher grades for the same performance is “largely accounted for by non-cognitive skills.” Non-cognitive skills: behavior and amenability to the processes used in teaching.

The logical conclusion from the study is that many teachers lack training in the different ways boys and girls learn, and in nature’s endowed differences in behavior to the detriment of our itchy young boys.

Could that failure result in the kinds of shame we discussed earlier that too many of our children feel about the way they learn? Could that failure result in the indifference and disconnect our boys exhibit within schools, observed in the research we have presented?

So we ask:

What are our education colleges doing to assure us that our boys and girls are being taught the five components of literacy?

What are our education colleges doing to assure us that teachers are versed in how to educate our boys?

BUT, AS IMPORTANT AS THE RECOMMENDATIONS WE HAVE BEEN CONSIDERING ARE, will solving our boys' literacy problem by starting formal education at a later age, selecting toys and reading materials that interest boys and help them learn through play and formal education, and assuring that our teachers use learning strategies that are designed to meet our boys literacy and learning needs, be enough to keep us from losing so many of our boys?

Or do we need to do more?

We continue our inquiry.

Why Should Tolerance for So Much of Schoolroom Conduct Be Set at a Frigid Zero?

We start with a true story, forged in the hallways of a Pinellas County, Florida, school. The boy's name has been changed to "Billy," and the school identity and other names are omitted or changed. Comments in brackets are added as explanation. The story is told by his mother, in an actual letter she wrote to her son, a recent high school graduate – something she had done every year on his birthday, as a celebration of family memories. This time, the letter was also to consol him about the events of his senior year in school:

“On December 10th, I was in your room cleaning and a knife fell out of the top shelf of your closet – I asked you where you had gotten the knife and you told me that you had taken it from a friend who had said he was going to take his life. You said that you didn't want him to hurt himself like Grammie did (his grandmother had committed suicide) The next day at school you realized that you had the knife in your pants pocket and between classes you went to your truck to put it in the glove compartment. Unfortunately, someone saw you – and she turned you in. My heart dropped to the pit of my stomach when I received the call from the school saying you had been arrested (handcuffed) and taken to JDC (Juvenile Detention Center).... We had a meeting with the principal the next day – (Our attorney) came

too. They said that you couldn't come back to school. (Under the zero-tolerance policies, Billy would have had to complete his senior year at home and graduate via computer.) We were devastated. Your teachers, especially Coach (Jones), were sticking up for you as well, but to no avail. I felt this was wrong – so we started legal proceeding against the School Board. Our (family's) law firm did this pro bono, which was a blessing. By the time we were finished the legal fees were over \$35,000! You were not allowed back in school during this time; however, I was allowed to pick up your schoolwork for you to do and then bring it back. (Because of litigation) You went back at the start of the next semester (in January).... However, we still had to deal with the criminal charge of the knife and had a hearing before the judge. He ordered you to do 50 hours of community service and to write a letter of apology. Since you felt like you didn't do anything wrong (which you hadn't) you refused to do the community service. The court told you that if you didn't do it that you would go to JDC to serve some time. I was sick....

“(But you were angry, hurt and you revolted.) You (stopped) working and refused to work so we took your truck away and I made you turn in your driver's license. I think at that point you probably hated me – it killed me to do it – but because I loved you so much I had to.... You met with (our attorney) and realized that he was right and you said that you would do the community service. You began your community service at (a church) and you did a great job.

“I know originally you didn't want to 'walk' in the graduation ceremony, but because of

the situation you did. I know you did it for me as well. At this point, you are coming back to me....

“I am so proud of you. After the knife incident, I didn’t think I would see you walk down the aisle. I thought you might be finishing your senior at home working on-line for your diploma. Thank God that didn’t happen....

“In the fall, you began your first semester of college....”

Billy was a straight-A student. Billy had never been in trouble. Billy was well liked and admired by all his teachers. When he discovered his despondent friend had a knife and was considering suicide, he could simply have turned him in and set his friend up to incur the immutable wrath of zero-tolerance.

After all, it wasn’t Billy’s problem, was it?

But his friend was his problem.

Billy wanted to be the solution. Billy wanted no harm to come to his friend. His friend needed his help.

So Billy helped.

And he got caught up in the zero-tolerance system that punished him for having the fortitude to act with passion and concern.

What is the message we want zero-tolerance policies to send to our children? What does the message sent to Billy teach about citizenship, humanity, courage, righteousness, compassion, and leadership?

Billy was fortunate in that he had a loving, supporting family, and that his attorneys worked pro bono and were able to successfully argue for a shortened suspension so that he was able to return to classes, complete his senior year, and graduate on time.

But will Billy’s twisted experience leave him with *collateral damage*?

Collateral damage – unintended consequences – internalized by Billy on his way to becoming a man, when in later years he relives his school’s response to his saving his friend.

Collateral damage: an unfortunate consequence of a zero-tolerance policy that doesn’t tolerate a boy’s forgetfulness or reward his noble act.

And what about Billy's parents ability to achieve some modicum of justice, resulting in Billy being suspended for a relatively short time instead of his entire senior year? If Billy's parents hadn't had a law firm passionate about his plight, and willing to waive over \$30,000 in fees, what would have been Billy's result? How many parents could afford the cost of standing up to the system?

Is such a policy virtuous?

Must we treat sensitive, courageous students like Billy as our enemies?

In our schools, where we cherish the idea that we must teach our children to think, why have we adopted a zero-tolerance policy that banishes thought?

Is there no better way?

In 1994, Philip K. Howard wrote *The Death of Common Sense: How Law is Suffocating America*. Four short chapters. Chapter III is titled "A Nation of Enemies." Zero-tolerance wasn't around in 1994, or it would have, most likely, made that chapter.

Howard could have lumped the zero-tolerance policy with the rest of his evidence about our "collective gaze," our zombie-like approach to not notice, to minimize, the damage we can do to the victims of our injustice. Howard writes that fortunately:

*"Some people began looking around and asking why these conditions existed in a heroic and enlightened society."*⁸⁰

And so we raise the question:

In our heroic and enlightened society, why do we continue to ignore collateral damage to our children, the result of the zero-tolerance policy we champion for our schools?

As we consider the question:

- The Convention on the Rights of a Child, adopted in 1969 by the United Nations, and subscribed to by the United States, states in its preamble:

"(Children) should be fully prepared to live an individual life in society, and brought up in the

spirit of ideals proclaimed in the Charter of the United Nations, and in particular the spirit of peace, dignity, tolerance, freedom, equality, and solidarity.”⁸¹

- In 2011, Gurian and Stevens wrote in *Boys & Girls Learn Differently*: “(W)e were recently informed of a fifth grader who was expelled from school for carrying a pocketknife he had been given by his father over the weekend and put it in his backpack. He had forgotten it was there (as Billy forgot the knife was in his pocket.) He committed no offense but forgetfulness.”⁸²

- In 2012, University of South Florida Professors Hall and Karanxha warn in *School Today, Jail Tomorrow: The Impact of Zero-tolerance on the Over-Representation of Minority Youth in the Juvenile System* that we must stop waging “war against our young people.” They advocate that the goals for the school system and the juvenile justice system should be the same, and the goals should be to reduce the rates of incarceration and improve the rates of graduation. They write:

*“A call to action is needed.... The youth of today are not the enemy, but are our future.”*⁸³

- Florida law mandates that school districts adopt a policy of zero-tolerance. Although the law is not intended to be forcefully applied to minor infractions, such as minor fights and disturbances, and petty acts of misconduct or misdemeanors, the zero-tolerance law requires the expulsion of a student for a period of not less than a year if the student brings a firearm or a weapon to school. On many other matters, policy discretion is granted to Florida school districts.⁸⁴

- Fortunately for concerned parents and children, in 2013, Pinellas County School Board began working toward adopting a new disciplinary policy, based on Broward County’s policies, that could “ensure that students in Pinellas County schools rarely find themselves in handcuffs.”⁸⁵) In January 2014, a contract to further the School Board’s objectives was formulated between the School Board with the Pinellas County sheriff’s office and all of the county’s cities with law enforcement agencies, to decriminalize “petty acts of misconduct.”⁸⁶ This positive change is in part a response to statewide criticism of zero-tolerance from the ACLU and others. (In the 2011-2012 school year, Florida reported

13,870 student arrests and referrals to law enforcement.) The ACLU released a study in 2011, *Still Haven't Shut Off the School-to-Prison Pipeline: Evaluating the Impact of Florida's New Zero-Tolerance Law*, urging the Florida legislature to allow Florida schools to drop their zero-tolerance policy. ACLU's press release includes:

*"This research shows clearly that, contrary to recommendations of the Department of Juvenile Justice's Blueprint Commission, many school districts are needlessly referring too many students to the criminal justice system."*⁸⁷

- On June 24, 2014 the "Collaborative Interagency Agreement" between the Pinellas County School Board and the various law enforcement agencies proposed in January was finalized. Section 5500.08 of the Code of Student Conduct was amended to include:

*"Petty acts of misconduct and misdemeanors including, but not limited to, minor fights or disturbances, should ordinarily not be referred to law enforcement and should not ordinarily result in student arrest. Petty acts of misconduct are those that an administrator reasonably believes do not pose a threat to the safety of students, staff, volunteers, or other persons, or a threat of harm to Board property."*⁸⁸

Dr. Michael Grego, Pinellas Superintendent of Schools, reported that through the efforts of the School Board and its schools, school arrests for the year were down 15% and that the Collaborative Interagency Agreement should have a further positive effect.

- The 2014-15 Pinellas County Code of Student Conduct positively moved the School Board's new disciplinary policy forward. However, within the Code's list of Specific Acts that are deemed to be misconduct are possession "pocketknives with a blade of four inches or shorter" and possession of a "toy or replica gun or knife" (a provision that is potentially contrary to the Florida law respecting second amendment rights to play with guns discussed earlier). As required by Florida law, the Code provides zero-tolerance for possession of a weapon, regardless of why, and defines weapons to include a pocketknife with a blade of 4

inches or longer. Forgetfulness is not an excuse, as state law does not allow excuses for the possession of a weapon.

(Under Florida law, a “common pocketknife” is not considered a weapon. Florida law does not define a common pocketknife, but the Supreme Court has defined it as a knife “occurring within the community which has a blade that folds into the handle and that can be carried in one’s pocket.” The Attorney General opined that a knife with a blade of 4-inches or less was a common pocketknife. The Supreme Court did not formally adopt that limitation [smaller folding knives could be weapons depending upon configuration, for example], but the 4-inch limitation is used by the School Board for its zero-tolerance determinations.)⁸⁹

- In *War Against Boys*, Sommers argues that zero-tolerance came in response to court cases holding that students had rights of due process in suspension hearings and other matters of discipline. She cites Stanford professor William Damon’s *Failed Liberty: How We Are Leaving Young Americans Unprepared for Citizenship* (2011), where Damon writes:

“In response to the threat of (due-process) lawsuits, schools have felt forced to institute increasingly formal and rigid procedures that cannot be challenged in court because they allow for no discretion or flexibility in the way they are administered.”

Sommers sums up:

“But punishment without discretion and judgment angers students and further undermines the moral authority of the school.”⁹⁰

- One could argue that the zero-tolerance policy thwarts our children from making excuses. For example, it could be argued, if a school district allows the defense of “forgetfulness” every youngster who carries a knife to school, like Billy did, would use forgetfulness as a defense. But consider the defenses adults use under “stand your ground laws.” Society doesn’t simply prohibit one person from killing another. Judgment is involved in determining whether a crime has been committed. If a person reasonably believes they face an imminent and immediate threat of serious bodily harm or death, they can stand their

ground and shoot their adversary. Juries apply judgment as to whether or not a crime has been committed, based on the facts and circumstances presented to them. Sometimes the jury makes a mistake: A guilty person escapes punishment, or an innocent person is punished. Whether or not zero-tolerance laws are absolute and allow no judgment, as they now provide, or whether or not the zero-tolerance laws are modified to require the use of judgment, there is always the possibility of a mistake being made. Under zero-tolerance, there is the risk of a mistake of ruining the life of a youngster like Billy. If judgment is used to make the determination, there is a risk of a youngster who makes up a defense that isn't true going unpunished. Which approach provides the best protection for our children? Which approach causes the least collateral damage to our children? Are there alternatives we should consider?

- There is no easy way. Zero-tolerance laws administered without thought provide none of the lessons about justice children should learn if they are to become good citizens. Zero-tolerance laws create collateral damage to our children, most particularly to our boys who dominate disciplinary actions, including suspensions and expulsions and the population of our jails. In his 2011 article, *Zero-Tolerance Education Policies Are Destroying Young People's Lives*, Gara LaMarche warns that zero-tolerance policies don't work. They fail to improve student behavior, deny students access to the kinds of support services they need, and increase the risk of further involvement with the justice system, concluding:

“At the local level, students and parents are coming together to demand an end to zero-tolerance.”⁹¹

It is time for us to come together on zero-tolerance, and end the collateral damage to our children.

Revocation or change of all or the most severe aspects of the zero-tolerance policy will require legislative action, and we should encourage our school district and parents to lobby for that result. However, matters delegated to school districts' discretion offer ample opportunity for productive change in a bevy of areas, and from the actions our Pinellas County School Board has recently taken, it appears the Board is amenable to further considerations.

What works?

Justice panels aimed at restorative justice.

Justice panels aimed at restorative justice: A “rotating group of students that addresses disciplinary incidents in the school.” In a period of just seven years, Lyons Community School’s switch to restorative justice reduced student suspensions from 22% of its “overwhelmingly poor and 90% African American and Hispanic student population to 3%.” In *Turning Suspensions into a Last Resort*, Aparna Alluri reports that Lyons idea of justice panels is now being tried at other schools. The goal? When at all possible, avoid suspension, a too commonly used disciplinary tool, and substitute “student mentoring” through justice panels as “peer-lead conflict resolution.”⁹²

Fortunately for our children, Pinellas County’s juvenile justice system has taken steps in the right direction. The Sixth Judicial Circuit, which includes Pasco and Pinellas Counties, has established a Juvenile Arbitration Program. The program is described as a “diversion for first time juvenile misdemeanor offenders.” Included in the Program is the *Teen Court*, whose purpose is to “interrupt developing patterns of criminal behavior in juveniles.” Participants in the Teen Court are juveniles who admit guilt and who have a parent or guardian throughout the proceedings. The court panel members are volunteer high school students who are interested in law and government.⁹³

However, the Teen Court only deals with crime. There is a debilitating issue our sons, and in some cases our daughters, face relating to “boys will be boys” or similar unacceptable girls’ conduct that is disruptive but is not a serious crime. Our boys and girls need moral guidance and lessons in citizenship when disruption occurs, and justice panels are designed for that purpose.

Certainly, the recent change in School Board philosophy we have discussed faces up to the need for flexibility when dealing with the disruptive conduct of our children. Furthermore, to the School Board’s credit, we understand that a few Pinellas County schools are experimenting with “peer mediation,” a form of justice panels. However, the use of peer mediation or justice panels is not mandatory in all schools; and where it is not used it could disadvantage our children.

We believe, justice panels – peer mediation – in the schools should be considered for all of our schools.

We close this section with a final question:

Why aren't we using justice panels to address discretionary disciplinary incidents in all our schools?

Not only could the justice panels be a blessing for both our girls and our boys, justice panels could go a long way to helping us break our boys' learning-code. Why? As we point out in our next section, boys, more than girls, are influenced by their standing among their peers.

Peer judgment about right and wrong can become a positive personality and conduct shaper for our boys in particular, and, also, for our girls.

Is it Attention Deficit Disorder, or Nature Deficit Disorder? How About a Return to Recess?

What do many young boys, "made of snips and snails and puppy-dog tails," do in classrooms? They:

- Get bored more easily than girls,
 - Use fewer words than girls,
 - Are not as good listeners as girls,
 - Move around a lot more than girls do when learning,
 - Are louder, more physically aggressive than girls,
 - Enjoy being the center of attention more than girls,
 - End up with more behavioral and learning disorders than girls,
- and
- Are more concerned than girls about status, about their pecking order among their male peers.⁹⁴

Before we consider what these differences mean for our boys, let us pause for a moment. It may be that parts of the boys' crisis we have considered to be of recent beginnings have been with us for a long time. Rather, Mortenson's long list of boys' crisis items we provided at the start of this paper may include line items, like our boys' inferior classroom performance, that come from an accumulation of long-ignored warning signs, which are more troublesome in today's complex times than in the distant past. When our economy was a farm and factory economy that didn't require the reading and

comprehension skills required today, it was easier to ignore the warning signs.

An April 2014 study, *Gender Differences in Scholastic Achievement: A Meta-Analysis*, about the performance of girls and in schools around the Western world, covering 538,710 boys and 595,332 girls in 30 different countries, from 1914 to 2011, has a surprising conclusion: girls have always out-performed boys in the classrooms. The authors described the study's purpose as "reporting the results of a meta-analysis of gender differences in scholastic achievement focusing exclusively on school achievement in the form of teacher-assigned school remarks." The study does not ascribe reasons for the differences nor does it measure SAT, ACT, or similar scores. Rather, the study registers classroom grade differences between boys and girls over a period of 97 years. The study concludes:

*"The results showed that these gender differences favored females in all fields of study."*⁹⁵

The American Psychological Association published a press release about the study, *Girls Make Higher Grades than Boys in All School Subjects, Analysis Finds*.⁹⁶ The release states:

"(G)irls tend to study in order to understand the materials, whereas boys emphasize performance.... 'Mastery of the subject matter generally produces better marks than performance emphasis, so this could account in part for males' lower marks than females.'"

On September 18, 2014, The Atlantic Magazine published an article about the study, written by Enrico Gnaulati, Ph.D., *Why Girls Tend to Get Better Grades Than Boys Do*.⁹⁷ Gnaulati, a clinical psychologist in California, reports the findings of the study along with the findings from other studies, including Pew Research.⁹⁸ Gnaulati then digs deeper into the subject of subject-matter mastery and self-regulation. After noting the long history of girls' better school performances, Gnaulati ponders:

"Are schools set up to favor the way girls learn and trip up boys?"

He next examines studies from the Center for the Advanced Study of Teaching and Learning at the University of Virginia, about how young boys and

girls “self-regulate” themselves. He concludes, in sync with Roy Baumeister in his *Weak will comes from tired muscles*, cited earlier:

“The outcome (of the studies) was remarkable. They discovered that boys were a whole year behind girls in the area of self-regulation. By the end of kindergarten, boys were just beginning to acquire the self-regulatory skills with which girls had started the year.

“This self-discipline edge for girls carries into middle-school and beyond.... This contributes greatly to (girls) better grades across all subjects....”

“These days, the whole school experience seems to play right into most girls’ strengths and most boys’ weaknesses.”

Gnaulati points out that girls do a better job of planning, setting academic goals, and putting forth effort. Boys respond to competition, the tests, but not to the preparatory work necessary to get them ready –particularly important today, in our far more challenging, technical environment.

Gnaulati then discusses what some schools are doing about gender differences, academic performance and report cards. Schools, like the Ellis Middle School, in Austin, Minnesota, are giving children two grades, a *knowledge grade* and a *life-skills grade*:

“The whole enterprise of severely downgrading kids for such transgressions as occasionally being late to class, blurting out answers, doodling instead of taking notes, having a messy backpack, poking the kid in the front, or forgetting to have parents sign a permission slip for a class trip, was revamped.”

Finally, he writes about his experiences as a psychologist with boys who are in the “ADHD red-zone,” and why changes in approach to educating and grading boys are important:

“Since boys tend to be less conscientious

than girls – more apt to space out and leave a completed assignment at home, more likely to fail to turn the page and complete the questions on the back – a distinct fairness issue comes into play when a boy’s occasional lapse results in a low grade. (Or, we insert, when a boy like Billy forgets he has his friend’s knife in his pocket and is arrested under a zero-tolerance policy that doesn’t permit forgetfulness.) Sadly, though, it appears that the overwhelming trend among teachers is to assign zero points for late work. In one survey, ... 84% of teachers did just that.

“Disaffected boys may also benefit from a boot camp on test-taking, time management, and study habits. These core skills are not always picked up by osmosis in the classroom, or from diligent parents at home.

“Of course, addressing the learning gap between boys and girls will require parents, teachers and school administrators to talk more openly about the ways each gender approaches classroom learning – and that difference remains a tender topic.”

As we proceed, let us reflect on the list at the beginning of this section of how our restless, can’t-sit-still, young boys act in school compared to our more naturally self-disciplined and mature young girls. Then, reflect on Morris’s discussions, from his book *Learning the Hard Way*, about boys’ “contrived carelessness,” an apparent defensive mechanism related to their non-performance in schools, which protects their evolving ideas about masculinity. Also, consider Chu’s observations in her *When Boys Become Boys* that, near their mid-kindergarten year, young boys “began to show signs of becoming” inattentive, inarticulate, inauthentic and indirect on their way to masculinity.⁹⁹

Then, reflect on Gnaulati’s brief comments above about his boy patients in what Gnaulati calls the “ADHD red zone,” and consider the following discussion about ADHD, Attention Deficit Hyperactivity Disorder.

Whitmire writes in *Why Boys Fail*, “Boys are four and a half times as likely as girls to get expelled from preschool and four times as likely to suffer from attention deficit disorders.”¹⁰⁰ In a study in Edina, Minnesota, Whitmire reports that seven in ten boys suspended from school were taking medicine for ADHD.¹⁰¹ Whitmire continues:

“Too often the first reaction to an attention problem is ‘Let’s medicate.’ ... White boys are twice as likely to be on medication as African-American boys. When white boys underperform is there an assumption of a physical problem, whereas black boys are just expected to underperform?”¹⁰²

ADDitude, founded in 1998, provides information for “families and adults living with ADHD and learning disabilities.” The August/September 2014 issue of ADDitude Magazine includes *Is it ADHD? Checklist of 18 Symptoms*. When one reads the list, the subjective nature of symptom indicators becomes apparent. Consider the symptom summary below:

- *Inattention*: Fails to give close attention to details or makes careless mistakes in schoolwork or other activities; has difficulty sustaining attention in tasks or play activities; does not seem to listen when spoken to directly; does not follow through on instructions and fails to do chores and schoolwork on time; has difficulty organizing tasks and activities; avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort; loses things necessary for tasks and activities; easily distracted by extraneous stimuli; and is forgetful in daily activities.

- *Hyperactivity*: Fidgets with hands or feet or squirms in seat; leaves seat in classroom when expected to be seated; has difficulty in playing quietly; appears ‘on the go’ as if ‘driven by a motor’; and talks excessively.

- *Impulsivity*: Blurts out the answers before the questions are completed; has difficulty waiting turn; and interrupts others or intrudes on their games.¹⁰³

Dr. Leonard Sax’s *Boys Adrift*, about the five factors he considers the prime contributors to our boys’ sub-par performances, includes *Medications for ADHD* as his third factor. Sax writes about his response to a mother regarding a

teacher's suggestion that her son had symptoms of ADHD because he couldn't sit still in his kindergarten chair:

“But since when does kindergarten mean sitting in a chair all day long? ... Kindergarten nowadays is mostly about sitting in a chair with paper and pencil.”¹⁰⁴

In an abbreviated format, Sax describes the medical criteria for ADHD diagnosis, including failure to pay close attention to detail, carelessness in schoolwork, difficulty in sustaining attention, and avoidance of tasks that require sustained mental effort. His frustrating conclusion:

“Tom Sawyer fulfilled these criteria with exuberance.”¹⁰⁵

So, we add, would have President Theodore Roosevelt.¹⁰⁶

And so would most any young boy exhibiting the array of characteristics on our list at the start of this section, or engaged in Morris's “contrived carelessness,” or exhibiting Chu's signs of becoming inattentive, inarticulate, inauthentic and indirect.

It's the potential for over-diagnosis of ADHD, and the excessive use of drugs, which led to Sax writing his article in *Psychology Today*, titled *Why Not Just Put All the Kids on Medication?*¹⁰⁷ What prompted him was a 2013 report from the Center for Disease Control and Prevention that “nearly one in five high school age boys in the United States and 11 percent of school-age children overall have received a medical diagnosis of attention deficit hyperactivity disorder.” In an International New York Times article about the report, physicians like Sax expressed concern about ADHD over-diagnosis, often-times pressured by parental concerns that lead to their attributing to ADHD mild symptoms that in reality are characteristic of itchy young boys.¹⁰⁸

In May, 2014 the Rosalynn Carter Georgia Mental Health Forum, held its annual program on mental health law policy. At the Forum, Susanna N. Visser, an official with the Center for Disease Control, expressed concern that more than 10,000 two and three year old children are now being medicated for ADHD, outside appropriate medical guidelines.¹⁰⁹

We do not in anyway minimize the importance of ADHD medical advice. However, many researchers and physicians in the field express serious concerns about whether or not the explosion in ADHD diagnosis is appropriate, as the

above articles indicate. Their concerns bring into question whether or not the use of Ritalin or any other addictive ADHD drug is the best way in all, or even most, circumstances to quiet an itchy boy who doesn't like to be confined to his kindergarten chair.

Thus, we suggest parents and educators heed these concerns and, after consultation with their medical experts, carefully consider whether there are alternatives for itchy boys.

Fortunately, it turns out the Mother Nature gives us a bevy of good reasons to consider her helpful options for our itchy sons who are not truly ADHD-burdened.

For background, link into the 5-minute 2013 PBS audio program, *The Secret Behind Finland's Super Smart Kids? Recess*, where Kavita Pillay reports that Finish children spend 75 minutes every day on the playground – whether it's hot or cold, or there's rain, snow, or shine.¹¹⁰

Why?

Play, based on their research, the Finns say, particularly outdoors play, stimulates the brain and makes children smarter.

Despite the growing evidence of the connection between school performance and the physical activity provided by play, including an in-depth 500-page study from the Institute of Medicine of the National Academy of Sciences, *Educating the Student Body: Taking Physical Activity and Physical Education to School*,¹¹¹ our schools are doing less when they should be doing more.

Educating the Student Body's key points:

- Children need 60 minutes each day of vigorous physical activity to optimize health and development.
- “Extensive scientific evidence demonstrates that regular physical activity promotes growth and development in youth and has multiple benefits for physical, mental, and cognitive health. Quality physical education, whereby students have an opportunity to learn meaningful content with appropriate instruction and assessments, is an evidenced-based recommended strategy for increasing physical activity.”
- “Physical activity in children is related to lower adiposity, higher muscular strength, improved markers of cardiovascular and metabolic

health, and higher bone mineral content and density.”

- Important for parents concerned about their children’s ADHD or other emotional challenges: “Physical activity in youth also can improve mental health by decreasing and preventing conditions such as anxiety and depression and enhancing self-esteem and physical self-concept.... (A) growing body of scientific literature indicates a relationship between vigorous- and moderate-intensity physical activity and the structure and functioning of the brain.... *More physically active children demonstrate greater attentional resources, have faster cognitive processing speed, and perform better on standardized tests.*” (Emphasis added)

- “The evidence summarized above supports the need to place greater emphasis on physical activity and physical education for children and adolescents, particularly the role schools can play....” Fiscal and policy pressures, including the demands for improved mathematics and reading performance, have encouraged many schools to cut out recess.

The report makes six recommendations, the first most pertinent to our discussion:

“Recommendation 1: District and school administrators, teachers, and parents should advocate for and create a whole-school approach to physical activity that fosters and provides access in the school environment to at least 60 minutes per day of vigorous- or moderate-intensity physical activity more than half (>50 percent) of which should be accomplished during regular school hours ... through recess, dedicated classroom activity time, and other opportunities (including) ... intramural and extramural sports....”¹¹²

Consider the following studies as further support for the Academy of Science’s position on the importance of physical activity:

- A 2014 study from the Universities of Michigan State and Vermont published in the *Journal of Abnormal Child Psychology* “shows that offering daily before-school aerobic activities to younger at-risk children could help in reducing the symptoms of ADHD in the classroom

and at home.” Alan Smith, one of the researchers concludes, “Despite the number of remaining questions, physical activity appears to be a promising intervention method for ADHD with well-known benefits to health overall. This gives schools one more good reason to incorporate physical activity into the school day.”¹¹³

- In a 2014 study by University of Bristol researchers conclude that when children spend more time engaged in outdoor exercise activities they reduce their risk of obesity and other health issues that are weight-related.¹¹⁴

In 2013, Richard Louv, Co-Founder and Chairman Emeritus of the Children and Nature Network spoke in Boston to the Learning & the Brain Conference, dedicated to “connecting Educators to Neuroscientists and Researchers.” His topic was the *“Hybrid Mind: The More High-Tech Schools Become, the More Nature They Need”* – a talk to which we will return.¹¹⁵ Louv has written extensively on our children’s need for nature and outdoor play. In his classic text, *Last Child in the Woods*, he devotes a chapter to ADHD, in which he criticizes schools eliminating recess and field trips as risky and time wasters, noting that the increase in “detachment of education from the physical world” coincides with increased childhood obesity and loss of concentration and mental acuity. He points out that recent studies demonstrate the advantage of substituting nature experiences for medication. He writes that a body of research has concluded that experiences in nature, “especially (in) green spaces,” help ADHD children by minimizing their symptoms:

“ Indeed, this research inspires the use of “nature-deficit disorder” as a way to help us better understand what many children experience, whether or not they have been diagnosed with ADHD.”

As have others in the field, Louv expresses his concern about over-diagnosis, commenting, “approximately 90% of the young people placed on medication – often at the suggestion of school officials – are boys.”¹¹⁶

Louv cites a number of studies, including a Swedish study that revealed “children in the “green” (outdoors) day care, who played outside every day, regardless of weather, had better motor coordination and more ability to concentrate.”¹¹⁷

In Louv's keynote to the Learning & Brain Conference on the *Hybrid Mind*, he cites Finland's success as a prime example of a country that integrates wholesome and plentiful outdoors recesses and experiences into education. He spoke about the growing body of evidence that students gain in their science, language arts, math and social studies when schools use "outdoor classrooms and other forms of nature-based" education. Although some schools are experimenting with natural play and outdoor learning places, too few are. He concludes:

"But too many school districts are putting all their eggs on one computer chip, while reducing recess, canceling field trips, and demanding that students spend ever more time at their desks, staring at screens."

And for Louv, the "Nature Deficit Disorder" imposed on our children by our schools and in-door play environments become the harmful ADHD, adversely affecting all of our children, but most particularly our boys.

We state our paper's final inquiries that will help all of our children, while going a long way in helping us crack our boys' learning-code:

What can we do to bring 60 minutes of recess and physical activity back into our children's daily learning experience at school?

What can we ask our schools to do to minimize our children's Nature Deficit Disorder, which helps us reduce the dangers of Attention Deficit Disorder?

In 2014, the National Wildlife Foundation and the Natural Learning Initiative released a helpful guide, *Nature Play & Learning Places: Creating and managing places where children engage with nature*,¹¹⁸ creating a "set of guidelines for those who create, manage or promote development of nature spaces in the everyday environments of children, youth and families, especially in urban/suburban communities." The guide begins with the reasons for nature play and learning, quoting the Swiss psychologist, Jean Piaget:

"For a child to understand something he must construct it for himself, he must reinvent it ... if future individuals are to be formed who are capable of creativity and not simply repetition."

And philosopher Hannah Arendt:

“Education is the point at which we decide whether or not we love the world enough to assume responsibility for it.”

Then, the guide explores a multitude of educational possibilities, “forest kindergartens, nature-based preschools, and forest schools,” as well as school gardens, and community-based charitable efforts such as the Nature Play Corps, an initiative between North Carolina State University, National Wildlife Federation, and the U.S. Fish and Wildlife Service. The guide closes with a series of case studies of success stories within communities large and small.

We reference the guide not as a final answer for Pinellas County children, but as a source for creative exploration of possibilities we may consider regarding the rolls of preschools, schools and concerned community members interested in increasing the opportunities all of our children need for healthy, mind-building outdoor play.

Finis? Or a Beginning?

It is customary for papers on subjects like *Why Are We Losing Our Boys* to close with a series of conclusions or recommendations. But our work is a beginning. Our goal is to crack our boys’ learning-code.

Thus, we close with our list of the inquiries we have raised to spur us forward:

Are we willing to bring about changes in our education strategies at our local level to imbed the boy’s learning-code, or will we continue to lose our boys?

Are we wise in making kindergarten the new first grade? (Our daughters may be able to handle it, but many of our sons are having difficulty.)

Should we give back to all our children a year they could enjoy as a playful rather than an instructional education experience?

Isn’t it time our schools provide our sons with

reading material that sparks their interest, holds their attention—that tells them how to tie knots and build tree houses and provides them with stories of incredible courage?

What are our education colleges doing to assure us that our boys and girls are being taught the five components of literacy?

What are our education colleges doing to assure us that teachers are versed in how to educate our boys?

In our heroic and enlightened society, why do we continue to ignore collateral damage to our children, the result of the zero-tolerance policy we champion for our schools?

Why aren't we using justice panels to address discretionary disciplinary incidents in all our schools?

What can we do to bring 60 minutes of recess and physical activity back into our children's daily learning experience at school?

What can we ask our schools to do to minimize our children's Nature Deficit Disorder, which helps us reduce the dangers of Attention Deficit Disorder?

IT IS TIME FOR US TO HEAR FROM YOU. We urge you to speak out and join us in this most important effort, not only for our boys, but also for all of our children.

About

Pinellas Education Foundation, Inc.

www.pinellaseducation.org

Founded in 1986 by Chairman Emeritus, Dr. Gus A. Stavros, the Pinellas Education Foundation has raised more than \$110 million to support the students and teachers of Pinellas County Schools and is consistently ranked among the top public school education foundations in the United States.

The Pinellas Education Foundation is passionately committed to providing all students with the opportunity to be successful. It is our belief that we must have a superior educational system to ensure that our school children remain competitive in an increasingly global marketplace. Involving the private sector in our efforts to improve education is vital to our success.

The Pinellas Education Foundation is a not-for-profit, 501 © 3 organization and has received the coveted Four Star rating for sound fiscal management by The Charity Navigator. This rating indicates that it outperforms most charities in America in its efforts to operate in the most fiscally responsible way.

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Richard Jacobs, of counsel to the Trenam Kemker law firm, is recently retired after more than forty years in the practice of law. He graduated from the University of Wisconsin with high honors including Phi Beta Kappa, and from Stetson College of Law, Magna Cum Laude, first in his class. He is an Av rated attorney, and was included among the Best Lawyers in America from 2007-2013. In addition to his activities with Pinellas Education Foundation, he is a member of the Board of Directors of Raymond James Trust Company and Chairman of the Advisory Board of Tampa Bay Watch. He has served as Chairman of the Tax Section of the Florida Bar, Trustee and Chairman of the Morean Arts Center, Trustee and Chairman of Bayfront Medical Center, Trustee of Eckerd College, and Trustee of Stetson College of Law. He has authored several legal and business articles and his fourth book, Wonderlust, is scheduled for publication in early 2015.

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