



Gender-Friendly Schools

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Boys are in crisis in many academic areas. But to turn things around, schools must implement instruction that is both boy- and girl-friendly.

Diane Cotner had been teaching "forever," so she was confident in her teaching abilities. In 2007, however, confronted with an extraordinarily wiggly group of 2nd grade boys in a chronically low-performing school, Diane told her principal, "I can't even get the boys to sit still for a short phonics lesson. I have to do something."

Desha Bierbaum, her principal, responded with a new possibility. "I've been learning about the differences in how boys and girls learn. Why don't you try letting the fidgety boys stand up and move around while you teach? That helps some boys' brains focus and learn better."

That conversation marked the beginning of the success story we became involved in at Wamsley Elementary School in Rifle, Colorado.

School Improvement Through Gender Equality

Fifty percent of Wamsley's students qualify for free or reduced-price lunch, 30 percent are English language learners, and the mobility rate is 43 percent. In fall 2007, Wamsley was on academic watch for not making adequate yearly progress (AYP).

Because boys underperformed girls by a significant margin at Wamsley, Principal Bierbaum decided to target her school's improvement efforts at achieving gender equality. The school staff acknowledged that it had a better understanding of how to teach girls than boys, but it resolved that any professional development approach the school implemented to give boys more opportunity must also be girl-friendly. Wamsley applied for and received a grant to provide whole-school online classes and strategies-oriented summer institute training for Wamsley's teachers, along with on-site professional development and coaching on the different learning needs of boys and girls. By the end of the first year of the initiative, student performance jumped markedly, and the school was taken off the AYP watch list. Wamsley became a national success story.

A year earlier, the Atlanta Public Schools in Georgia had embarked on a similar effort. In 2006, many Atlanta schools were not meeting AYP, and previous school reform initiatives had failed. When the district staff disaggregated data for gender, they noticed that gender gaps reflecting lower achievement for boys were present across all subgroups and were largest for boys of color and those living in poverty.

In fall 2007, the school district launched two single-sex middle school academies—the Business Engineering Science Technology Academy for Boys (the B.E.S.T. Academy), and the Coretta Scott King Young Women's Leadership Academy. We became involved at that point. Faculty and staff at the pilot schools received professional development (including coaching, online courses, on-site training, and summer institutes) on how boys and girls learn differently and how to strategically implement gender-friendly teaching strategies into all aspects of the school, from teaching to counseling services to athletics.

Like Wamsley, these schools are now success stories. Within two years, both made AYP. Grades and test scores improved, student attendance increased, discipline referrals decreased, and teachers felt more effective. The district is moving forward with plans to expand their two single-sex middle schools through grade 12.

Looking Through the Gender Lens

In the last two decades, we have supported efforts to close opportunity gaps in more than 2,000 schools across the United States. When educators look closely at test scores, grades, discipline referrals, homework completion rates, special education placements, and student motivation, they consistently realize how gender-related issues intersect and interfere with their ability to achieve school improvement goals. They notice the following areas of difficulty for girls:

- Lower learning and engagement in science and technology classes.
- Relational aggression in school and in cyberspace.
- Problems with self-esteem development in adolescence.

They notice a different set of core areas of difficulty for boys:

- Lower achievement scores in most classes—especially among low-income and racially/ethnically diverse students—with particular problems in literacy.
- Lagging learning skills in such areas as note taking and listening.
- More struggles with homework.
- Lower grades in all classes, except some math and most science classes.
- Less motivation to learn and lower perception that the curriculum is relevant.

Both boys and girls tend to need help in specific areas. But data show that schools are now failing boys, as a group, in more areas than girls (see "A Snapshot: Boys in School," p. 42). More and more teachers are expressing the need for assistance in learning to teach boys effectively.

In March 2010, the Center on Education Policy echoed teachers' instincts when it released the report *Are There Gender Differences in Achievement Between Boys and Girls?* In preparing the report, the center examined state test data from all age groups in all 50 states, finding good news for girls but bad news for boys. In math, girls are doing roughly as well as boys, and the differences that do exist in some states are small and show no clear national pattern favoring boys or girls. But in reading, boys are lagging behind girls in all states with adequate data, and these gaps are greater than 10 percentage points in some states. (Chudowsky&Chudowsky, 2010, p. 1)

Dealing with this reality is an important challenge for all of us who care about education reform. If we do not recognize it and work to close the opportunity gaps boys are experiencing, millions of boys and men will lose out over the next decades.

The Elephant in the Room

Boys and girls, like men and women, are not stereotypes; they fall along a wide spectrum of learning preferences and styles. In fact, there is a great deal of overlap. Every day, teachers work with boys who are verbal, collaborative, and more emotive and with girls who are visual, competitive, and less emotive.

As a group, however, boys are much more likely than girls to be graphic thinkers and kinesthetic learners and to thrive under competitive learning structures. Some of the gender differences we observe in the classroom (see a summary at www.ascd.org/ASCD/pdf/journals/ed_lead/el_201011_gurian_figure.pdf) are undoubtedly linked to societal influences, but some also stem from physical differences in the brain identified by neuroscientists (see "How Boys and Girls Learn Differently").

Most of the teachers we work with realize that the preparation they received in graduate school and teacher certification programs to teach "all students" was in fact training for verbal and sedentary learning. This presents a large elephant in the room for teachers and schools. Given the structures, expectations, and teaching styles in today's classrooms, teachers generally have more difficulty teaching boys than girls (Gurian & Stevens, 2005; Whitmire, 2010). In a classroom of 25 students, we may notice that five to seven boys are having difficulties, whether these are overt issues or a tendency to check out of the learning process. They need a kind of instruction teachers have not been trained to provide, and the lack of such teaching profoundly affects the overall grades, test scores, and behavior of the class, as well as a teacher's sense of whether he or she is teaching effectively.

Strategies for Teaching Boys and Girls Effectively

Here are some examples of strategies that teachers we have worked with are using to close opportunity gaps between boys and girls.

Strategy 1: Add Movement

Chris Zust of Wellington School in Columbus, Ohio, gets her 1st grade boys and girls to stand up for reading group. I play a game when the children have finished reading. I let them spread out around the room, and I throw a beach ball to them that has eight prompts written on it. Each time a student catches the ball, he or she has to answer a prompt. My boys are far more engaged with this activity than they are when I have them sitting at the reading table.

Pairing learning with movement is especially important for many boys because it helps them stay out of the *neural rest* (boredom) state. But because it increases brain activity, movement can also help girls learn.

In addition to infusing movement into learning activities, teachers might also include regular brain breaks—frequent, brief opportunities to simply get up and move, such as doing jumping jacks, jogging in place, stretching, doing the wave from one side of the room to the other, or dancing in place with music.

Strategy 2: Build on the Visual

Fifth grade teacher Debbie Mathis and her teammates at Edith Wolford Elementary in Colorado Springs, Colorado, noticed that during traditional writing activities, boys were much slower getting started, wrote fewer words, used fewer sensory details, and got lower grades. After learning how graphically oriented boys' brains tend to be, Debbie and her teammates decided to use comic-strip pictures as prompts. "That really got the kids' imaginations flowing," Debbie shares. "The entire class was jazzed and wrote like crazy! Honestly, I was thrilled when even my most reluctant boys were eager to share."

Karen Combs, another teacher at Wolford, echoes this approach:

When I explained to my students that they were going to draw pictures as a way to plan their writing content, two of my boys looked at each other and said, "Sweet!" After about 30 minutes of writing, my most reluctant writer came toward me. I expected him to ask, "How much do I have to write?" Instead, he asked, "What if an hour isn't enough time to write everything that I've planned?"

Heather Peter, a language arts teacher at Broomfield High School in Broomfield, Colorado, notes that although boys are vocal about their enthusiasm for visual-spatial projects, girls also flourish when given the opportunity to create visual products to demonstrate their comprehension. Heather shares, "We recently finished a unit on *Hamlet* in which students had the choice to make a video, create a talk show, do a choral reading, or write a screenplay. Of the 38 female students, 35 chose a visual-spatial project."

Visual-spatial activities reach a broader spectrum of learners, harness learner strengths, help to stimulate and develop more neural pathways, and help close gaps for both boys and girls. They can be absolutely essential for some learners.

Strategy 3: Incorporate Student Interests and Choices

Tenth grader Will was like many of the boys struggling in Atlanta Public Schools. Will was not motivated in school, and it required superhuman effort to get him to do his schoolwork. But Will had a passion for sports. His teachers began to identify this passion in his classes and made sure to integrate it into his learning. English, social studies, and other teachers stocked classrooms with sports-relevant reading material, from graphic novels and technical magazines to sports magazines and biographies of football and basketball players.

His teachers reported consistent findings, which we've summarized here:

Since incorporating boys' interests into the curriculum, we have seen a measurable change in Will's body language. He comes in with his head up and is cheerful and making eye contact now. He has something he cares about to focus on in class and homework. Boys like him see school differently when their interests and passions are integrated into classes.

Broomfield's Heather Peter has also used strategies revolving around student interests to close opportunity gaps. She says, "I've had several students over the years tell me that they like literature more now because of all the projects that they were able to do. This is true not just for boys but also for girls. My student Alice told me, "I'll never forget *Hamlet* because I will always remember making my music video."

By bringing in novelty and topics of outside interest, these teachers are boosting all their students' motivation. For both boys and girls, motivation to learn can be the difference between success and failure.

Closing Gaps Now and in the Future

As districts, schools, and teachers close opportunity gaps, teach more effectively, and turn around low-performing schools, they explore and learn solutions they can apply right away—solutions inherent in the boys and girls they teach.

After 20 years of training teachers in both how to help boys and girls learn and strategies for teaching them effectively, we believe the next decade will open greater opportunities for teachers and schools to use the wisdom of the gender lens. This lens is an essential tool for education reform—one that not only enables schools to meet accountability goals in terms of higher test scores for all groups, but also reflects the deep humanity and love of all children that each of us brings to the schoolhouse.

How Boys and Girls Learn Differently

Verbal/graphic differences. Boys' brains tend to have more cortical areas, mainly in the right hemisphere, wired for spatial/mechanical processing than do girls' brains; girls' brains generally have greater cortical emphasis on verbal processing (Baron-Cohen, 2003; Halpern et al., 2007).

Frontal lobe development. A girl's prefrontal cortex is generally more active than a boy's of the same age, and her frontal lobe generally develops earlier. These are the decision-making areas of the brain, as well as the reading/writing/word production areas (Baron-Cohen, 2003; Brizendine, 2010; Halpern et al., 2007).

Neural rest states. Boys' brains tend to go into a more notable *rest state* than girls' brains do. Because the brain's first priority is survival, it scans its environment for information that would alert it to any threat, challenge, or information crucial to its survival (D. Amen, personal interview with M. Gurian, July 15, 2008). If the classroom is not providing any stimuli that the brain perceives as important, the male brain tends to more quickly slip into a rest state (which manifests itself as boredom, or "zoning out"). In the classroom, boys often try to avoid these natural male rest states by engaging in activities like tapping their pencils or poking at classmates (de Munck et al., 2008).

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A Snapshot: Boys in School

On the most recent National Assessment of Educational Progress (NAEP) writing test, 26 percent of 12th grade males scored *below basic*, compared with 11 percent of females. Just 16 percent of males achieved at the *proficient/advanced* levels, compared with 31 percent of females (Kleinfeld, 2009).

In reading, one-third of 12th grade males scored *below basic* on NAEP, compared with 22 percent of females; fewer than one-third of males (29 percent) were reading at the *proficient/advanced* levels, compared with 41 percent of females (Kleinfeld, 2009).

Boys receive two-thirds of the *Ds* and *Fs* in schools, but fewer than one-half of the *As* (Kauchak&Eggen, 2005).

Girls are more likely to attend and graduate from college. In 2003, there were 1.35 females for every male who graduated from a four-year college and 1.30 females for every male undergraduate (Goldin, Katz, &Kuziemko, 2006).

These and many other gender gaps for boys have been widening over the last decade (Cataldi, Laird, &KewalRamani, 2009; Chudowsky&Chudowsy, 2010).

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