

Published: March 15, 2006

Concern Over Gender Gaps Shifting to Boys

By Debra Viadero

Kenneth E. Wallace, a suburban Chicago educator, first noticed that boys were lagging behind girls academically when he coached high school wrestling in Indiana in the 1980s.

His district put a “no pass, no play” rule in place. Girls’ participation in sports was barely affected, but Mr. Wallace found himself working in overdrive to tutor the boys on his team so they could still compete.

Years later, when Mr. Wallace became an assistant principal, the contrasts were even more vivid. Who accounted for most of the disciplinary referrals on his desk? The boys. Suspensions? Boys again. Mr. Wallace also saw that boys predominated in special education and among the ranks of dropouts.

“We have this misguided emphasis on trying to remake boys,” said Mr. Wallace, who is doing a doctoral dissertation on the topic. “Rather than change boys, we need to learn to respect and understand who they are.”

Mr. Wallace, now an assistant superintendent in Illinois’ Maine Township High School District 207, is not alone in his concern. After years of efforts aimed at boosting girls’ achievement in science and mathematics, researchers, writers, and educators are now expressing alarm about the plight of boys.

Even boys themselves have jumped into the debate. In December, Doug Anglin, a 17-year-old senior at Milton High School in Milton, Mass., filed a federal civil rights complaint contending that his school discriminates against boys by making it easier for girls to succeed.

In some ways, the gender patterns now generating worries are not new. On National Assessment of Educational Progress tests in reading, for instance, boys at every age tested—9, 13, and 17—have trailed behind girls since at least 1971. The congressionally mandated NAEP also tests nationally representative samples of students in mathematics. On those tests, boys have had a razor-thin lead over girls at all three age levels since 1992.

What’s more, the patterns appear to be universal. On a 2003 reading test given to 15-year-olds around the world, female students outscored males in all but one of the 41 countries tested.

What is newer, though, are trends at the college level in the United States. According to a report published this month by the National Center for Education Statistics, men went from being the majority to the minority of the nation’s undergraduate population between 1970 and 2001.

Over that time, men’s share of undergraduate enrollment shrank from 58 percent to 44 percent. By 2001, the report adds, women earned 60 percent of all associate’s degrees and 57 percent of all bachelor’s degrees.

Experts say the trend is troubling because high-level skills are more important than ever. “There was a time when there were all kinds of end runs you could do around the educational system, like join the military or join a union and get a manufacturing job,” said Thomas

Newkirk, the author of the 2002 book *Misreading Masculinity: Boys, Literacy, and Popular Culture*. “Now, if boys fail at school, they’re not going to be competitive.”

Brain Variations Eyed

Judith S. Kleinfeld, a University of Alaska psychology professor who studies academic gender differences, says that advocates for boys have bandied about some misleading statistics lately. Nonetheless, she says, boys’ schooling problems are real.

“Something has changed, and I’m not quite clear what it is,” she said in an interview last week. “But this is an issue that has gone on since Tom Sawyer.”

Long-Term Trends

Average scale scores on the National Assessment of Educational Progress show that girls have long scored higher than boys in reading at ages 9 and 17, although the gap has narrowed at age 9. While boys have consistently outscored girls in mathematics at age 17, girls have narrowed the gap. At age 9, the gender gap in math has been slim in recent decades, although boys now edge out girls.

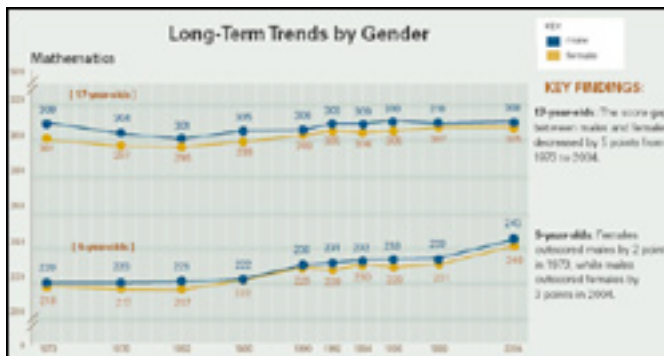
Reading

*Click image to see the full chart.



Mathematics

*Click image to see the full chart.



SOURCE: National Center for Education Statistics

Boys do seem to have a hard time in school—and their problems worsen as they move from elementary to middle to high school. At age 9, the NAEP data show, boys score an average of 5 points lower than girls in reading. The gap widens to 14 points at age 17.

Experts agree that boys get poorer grades than girls and number disproportionately among special education students, those diagnosed with attention deficit disorders, and disciplinary cases.

Theorists advance a range of possible causes for the statistical imbalances. Their suggestions include: differences between boys and girls in the hard-wiring of the brain; schooling practices that are not “boy friendly”; after-effects of the women’s movement; and the recent emphasis on testing. None of those explanations, though, is definitive.

The biological theory has gained currency because of technology developed in recent decades that allows scientists to peek into live human brains for the first time. With techniques such as functional magnetic resonance imaging, or fMRI, researchers have learned that male and female brains look different, exhibit different patterns of operation, and develop at different rates.

A Scientific American article published last year, for instance, noted that women possess a greater density of neurons in parts of the temporal-lobe cortex associated with language processing and comprehension. Studies have also shown that the prefrontal cortex, the part of the brain that governs complex thoughts and impulse control, reaches its maximum thickness in girls at age 11—18 months earlier than it does in boys.

Many researchers say neurological differences explain why girls are more verbal than boys, and why boys squirm and fidget in class, or fail to turn their homework in on time.

But Mr. Newkirk cautions against reading too much into the brain studies. “You have studies that show there’s more blood flow or electrical activity in this or that part of the brain,” he said. “To go from that to saying, ‘Therefore, we need to teach this way,’ is too big of a leap.”

A study soon to be published in the peer-reviewed journal *Intelligence* also highlights developmental differences in processing speed on certain moderately difficult types of tasks on intelligence tests. Processing speed is key to reading and writing fluency and computational math.

Looking at test data on more than 8,000 students at all levels of schooling, Stephen M. Camarata and Richard Woodcock of Vanderbilt University in Nashville, Tenn., discovered that boys have lower processing speeds than girls beginning in elementary school. The gap widens in middle and high school. In adulthood, male and female scores converge.

“It may be important that teachers know there are these differences in cognitive efficiency in males and females in terms of homework or timed tests,” said Mr. Camarata.

Another new report, released just last week, fingers classroom grading practices for boys’ poor academic performance. William A. Draves and Julie Coates, both of whom are researchers for Learning Resources Network, or LERN, a national nonprofit education group based in River Falls, Wis., surveyed 200 K–12 teachers last year. Eighty-four percent of the teachers said boys were more likely than girls to turn in homework late, or not at all.

Homework Pass?

The authors propose a provocative solution: Eliminate grading penalties for homework.

“Males, more than females, are oriented to new challenges,” Mr. Draves said. Boys will do 10 of the same kinds of math problems to their satisfaction and leave the remaining 10 problems undone. “By continuing to penalize boys, we decrease their educational expectations,” he added.

Other experts are skeptical of that view. “There’s no point in requiring something if there are no consequences,” said Kathy Stevens, who wrote, with Michael Gurian, the 2005 book *The Minds of Boys*.

Ms. Stevens is also the director of training at the Gurian Institute, a Colorado Springs, Colo.-based organization that promotes “boy friendly” teaching techniques. She said those strategies include frequent “brain breaks” for students, making sure homework is meaningful, and sprinkling stress balls around the class that boys can squeeze to stay focused.

Ms. Stevens says the growing emphasis in schools on preparing students for high-stakes standardized tests has made it tougher for boys to succeed. “The worst thing you can do for little boys is make them sit down and be quiet,” she said. “We did that before, too, but we had more recess and physical education. Now, schools are cutting that out in the drive to boost test scores.”

Other educators are taking bolder steps to improve boys’ achievement. The staff at Woodlawn Avenue Elementary School, an 850-student school in DeLand, Fla., just north of Daytona Beach, began putting boys and girls in separate classrooms at the start of the 2004-05 school year.

“Boys are generally positive about the program,” said JoAnne Rodkey, the school’s longtime principal. “Before, they thought the classroom teachers favored girls.” The school also reports that students of both sexes in the single-gender classes are now outscoring their same-age counterparts in mixed classes on state tests.

Ms. Kleinfeld of the University of Alaska and other prominent experts have launched a national network, called the Boys’ Project, to try to figure out why so many boys disengage from school. Her own research, conducted through interviews with high school seniors, is leading her to conclude that teenage boys’ sliding educational aspirations may be an indirect result of the advances young women have made through the women’s movement.

“They [young men] no longer see themselves as the provider of the family, so who and what are they supposed to be?” Ms. Kleinfeld wrote in an e-mail. “Why not enjoy yourself and slide, earning a little money now and then when you need it?”