

Zero Tolerance for Boys

Boys are lagging in reading because of flaky teaching methods.

By Bonnie Macmillan

Boys are in trouble. Increasingly, it is coming to the attention of anyone who listens to the news or reads a newspaper that boys are struggling to read.

Together, two recent international surveys of reading achievement have measured reading ability in more than 50 countries. The results show that at both the age of 9 and 15, boys' reading skills are substantially worse than girls'. For the first time in the history of such surveys, the gender gaps in performance are significantly large in virtually every country.

Of the countries surveyed recently in 2001, 37 were also surveyed in 1991. In 13 of these, where sex differences did not exist 10 years ago, they are now in evidence. In addition, the gap between boys' and girls' scores has widened over the last ten years in every country but one.

There is much speculation in the media about the possible causes. Many factors have been blamed. These range from biological reasons, such as boys' slower maturation, to environmental factors, such as the predominance of female primary school teachers.

First, a look at the biological factors: the sexes do differ biologically. But they always have. What have not always existed are sex differences in reading ability.

A large survey of English 11-year-olds in 1957 revealed that there were no sex differences in reading. In Scotland, as late as 1992, testing of 8-year-olds revealed no sex differences. If biological differences did not produce gender differences in reading achievement in the past, why should these factors be entertained as a possible cause of the problem now?

Going through a similar exercise to debunk the influence of environmental factors is a rather pointless, given that there is just *one important reason* that exposes all of these suggested causes as red herrings.

Quite simply, boys read equally as well as girls, and sometimes better, in classrooms where they are taught to read by certain methods. They perform just as well as girls regardless of their teacher's sex, their school starting age, the kinds of tests they take, or any of the biological and environmental factors that might be in play.

Any teacher who uses these particular methods not only immediately eradicates sex differences, but also produces significantly better reading attainment among boys *and* girls than with the use of other methods.

Essentially, there are two kinds of reading instruction. For simplicity, and due to biological rather than ideological reasons, I label these two methods the *zero* and the *flaky*. The zero methods "zero in" on teaching just one skill, while the flaky methods consist of bits and pieces of everything, often described as a "combination of different methods".

As it happens, zero methods produce no sex differences in reading, while flaky methods produce substantial differences disadvantaging boys.

A Different Timetable

Boys' left hemispheres (LH) develop later than girls'. A teaching focus on letter-to-sound associations forces boys to make the shift from RH- to LH- processing, accelerates boy's development of LH skills, and speeds the growth of connections between the two hemispheres.

Specialized Brains

During reading, boys' brains are primarily active in LH regions, whereas the activity seen in girls' brains is more bilateral. Flaky teaching practices encourage boys to stay stuck using the RH skills and the wrong neural circuits are developed.

Sound-to-Letter Difficulty

Boys have greater difficulty than girls translating sounds into letters, but they are equal to females in their ability to translate letters into sounds. For boys, letter-to-sound translation

involves RH-processing first (identifying the letter) and LH-processing second (recalling its sound). The task starts with what is easiest for boys.

Fewer Letter Sounds

Boys have less letter-sound knowledge than girls when they start school. If letter-to-sound associations are taught in isolation and intensively to begin with, boys quickly catch up to girls in this fundamentally important area.

Weaker Visual Memory

Boys have significantly poorer visual memory abilities than girls, but they are equivalent to girls in their auditory memory abilities. Unlike methods that emphasize whole-word memorization, zero methods do not require good visual memory because the emphasis is on translating letters *one by one* into sounds.

Poorer Print Tracking

Boys are not quite as good as girls of the same age in their ability to track print visually across a page without losing their place. If boys are taught to sound out all the letters of a word, sequentially one by one, from left to right, they learn the right kind of eye movements, the kind that occur during fluent text reading.

Possibly by sheer chance, flaky teaching methods dwell on the very practices that are most likely to retard boys' reading progress. Zero methods, by contrast, manage to circumvent the biological brain differences that have the potential to cause problems for boys. More than ever before, now is the time for some 'zero tolerance'.

(Adapted with permission from Newsletter #51 of the Reading Reform Foundation, www.rrf.org.uk/. Dr. Macmillan is a Canadian who is the author of a number of books, including Why Boys Are Different and How to Bring out the Best in Them, Sept. 2004.)