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## Schools in the 21<sup>st</sup> Century: Changes and Implications for Boys

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*This position paper questions the fundamental effectiveness of contemporary public school education for boys, and identifies a number of specific school concerns that have emerged in the professional literature concerning boys' academic achievement, behavioral issues, and graduation rates. Differential rates of school success between boys and girls may be attributable to inherent physiologically-based intellectual and behavioral differences, enhanced school emphasis on academic achievement, and fundamental educational practices. The paper concludes by offering implications for practice, including greater consideration of maturational differences in young learners, reassessment of the impact of the contemporary intensive academic emphasis of classroom instruction, further examination of the instructional impact of same sex teachers and/or classrooms, and greater incorporation of educational technology in the classroom.*

**Keywords:** Boys, Girls, Gender Equity, Same Sex



Over the past decade many have written on an emerging "crisis for boys" in the nation's schools (e.g., Gurien, Henley, & Trueman, 2001; Pollack, 1998; Sax; 2005; Sommers, 2000). Although

perspectives vary widely regarding the extent to which boys may be disadvantaged academically and behaviorally in the classroom, questions of substance persist concerning potential mismatches in the inherent nature and needs of boys relative to contemporary school structures and practices. These mismatches are generating substantially deleterious educational outcomes for boys.

These disproportionately negative outcomes for boys include the following:

- Boys trail girls in reading and writing throughout school (Freeman, 2004).
- Boys are much more likely than girls to be diagnosed with Attention Deficit Hyperactivity Disorder (Quickstats, 2005).
- Boys are more likely to be held back, and to drop out of school (Freeman, 2004).
- The number of boys who pursue and complete a college degree has fallen far behind girls. In 2001, 57% of college graduates were women (Freeman, 2004).

Individually, each of the above points is cause for concern. Cumulatively, we have concluded that they suggest systemic and potentially substantive issues in the

education of boys. Such gender inequities in educational outcomes cannot be allowed in an educational system, and in a larger society, that holds "equity" as one of its highest values.

### SOCIETY AND SCHOOLS: ISSUES AND BOYS

#### *EARLY CURRICULUM AND INSTRUCTION*

In recent years philosophical shifts concerning the fundamental functions of early school experiences have resulted in dramatic changes. Gone are the days when kindergarten focused on play in a social setting, accompanied by a programmatic goal of fostering in these young students a sense of wonder about learning. Contemporary kindergarten and primary grade curricular emphases are undergoing radical transformations.

Many of these changes are the result of the "No Child Left Behind" (NCLB) legislation, with its emphasis on academic achievement as measured through standardized testing, and dire results for schools identified as underperforming. Unfortunately for boys, these changes may be making kindergarten less "boy-friendly."

One of the most dramatic changes has been in the **curriculum** of kindergarten, or what is expected to be taught and learned over the year. Kindergarten has become considerably more academically oriented today, with students now expected to achieve basic reading and math skills, skills previously not introduced until first grade (e.g., Goldstein, 2007). Because boys mature cognitively more slowly than girls (e.g., Halpern, Wai, & Saw, 2005), they may be pushed into academic skill acquisition before developmentally ready to do so.

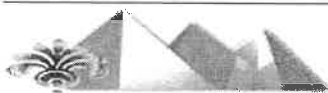
In a related issue, young boys do not develop fine motor skills as early as girls. This characteristic frustrates boys as they attempt to write numbers and letters without the neurological and physiological maturity necessary for these skills (Sax, 2005).

Last, by nature young boys are predisposed to be more physically active than girls, to be more squirmy and eager to "rough and tumble." Sitting quietly, doing seatwork, and listening to the teacher are all skills that seem to come more easily for girls than for boys. This may be due in part to the oft-observed phenomenon that girls seem to value gaining their teachers' approval more than do boys (Sax, 2005). Thus boys may come to school biologically predisposed to behave in ways inconsistent with standard school behavioral expectations. Further, the increasing academic emphasis of kindergarten programs today may be resulting in programs further minimizing the time allotted to the physical activities and outlets that boys need at this early age.

The ever-greater academic emphasis of kindergarten, combined with the slower cognitive and behavioral maturation of boys, has led some to conclude that kindergarten is arguably no longer age-appropriate for many boys. Boys as young as five years of age may become anxious about testing situations and begin to develop a negative sense of their abilities. These emerging "perceptions of incompetence" may have lasting consequences (Boyd et al., n.d.).

#### *CHANGES IN EDUCATIONAL PHILOSOPHY*

As always, education mirrors the current socio-political climate. While different philosophical perspectives are dominant at any given time, contrasting educational



approaches continue to find their niche, shifting from foreground to background and back again.

Two powerful and opposing educational approaches have co-existed in recent decades. The **back-to-basics** movement is characterized by traditional teaching methods, strict curricula, explicit standards of achievement, and frequent testing. By contrast, a **constructivist** (or progressive) classroom is characterized by child-centered and project-based experiences. We would suggest that each of these approaches contains inherent potential pitfalls for boys.

*THE "BACK-TO-BASICS" APPROACH.* The NCLB legislation of 2002 (NCLB, 2002) has profoundly impacted teaching methods and curriculum in the United States, ushering in a powerful school emphasis on academics and testing. Under the NCLB legislation, schools are required to demonstrate that *all* students, regardless of race, gender, disability, and income levels, meet targeted state standards. If specific goals for academic achievement are not met within two years, schools and districts may lose federal funds and/or be reorganized (Rose, 2004). The NCLB legislation has had a number of anticipated and unanticipated outcomes relative to boys.

- **Increased emphasis on testing.** As noted earlier, the expectation of early academic achievement may be inconsistent with the lesser developmental readiness of young boys. Further, in response to the pressure of high stakes testing, some schools have cut recess and physical education programs to gain more classroom academic time. The loss of these much-needed outlets for boys' physical energy may actually be inhibiting their

academic achievement, interfering with attending and concentration.

- **Social and emotional development.** Goals that are not covered on the required tests tend to disappear in school curricula. This may result in a classroom curriculum comprised of only narrow and objectively quantifiable academic classroom goals. Social and emotional skills, which boys may especially be in need of, can be shorted.

The long-term implications of the NCLB legislation for boys remain uncertain. Certainly few would argue that schools should effectively teach academic skills. However, testing well at a certain grade level does not ensure that students will retain their skills or transfer them to relevant life situations. Nor are there assurances that these academic skills will result in equivalent subsequent life successes. As Albert Einstein wisely noted, "Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted" (ThinkExist, n.d.).

*THE CONSTRUCTIVIST APPROACH.* As an alternative to the standards or "Back to Basics" approach, constructivist educators hold that learning should be child-centered, not teacher-led, with much curricula determined by students' activities and wishes, not teacher direction (e.g., Ravitch, 2000). Here too, some implementations of the constructivist approach may not be conducive for the maximal learning of boys. Specific concerns about constructivism for boys include the following.

- **Child-centered focus.** The needs and interests of students are central, and academic expectations are related to their developmental levels, recognizing



that children mature at different rates. Learning outcomes vary because the students “construct” their own learning based on their own perceptions and life experiences. However, some boys may be uncomfortable with the perceived “openness” and apparent lack of structure and “rules” of this approach (Sommers, 2000).

- **Cooperation rather than competition.** Constructivist classrooms often incorporate activities such as group projects, where students learn to work with others toward learning goals. These cooperative activities have two main aims: (a) to create opportunities for students to cross-pollinate their intellectual skills, and (b) to nurture the development of the democratic social skills that will ultimately serve them in future workplaces, as well as benefit society in general. However, small group activities may be easier for girls than boys (Sax, 2005). Boys may lack the sophisticated social skills often possessed by their girl classmates. Also, boys may prefer competition to cooperation in the classroom and on the playing field, and will often be more motivated to achieve when the opportunity to compete and/or shine publicly is at stake (Sommers, 2000).
- **Literacy.** In constructivist classrooms, the teaching of literacy typically draws heavily on “whole language” methods, which seek to create opportunities for students to experience reading and writing in a holistic way rather than learning isolated skills out of context. Two issues here include (a) the written material that boys are asked to read, and (b) the sorts of responses that boys are asked to generate.

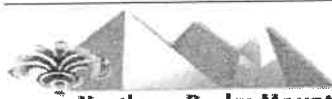
For example, many boys prefer non-fiction to fiction. They are likely to respond to tales of adventure, suspense, history, science or science fiction, and stories with heroes. Unfortunately, there may be a shortage of early reading material aimed at boys’ interests (Smith & Wilhelm, 2002).

A second way boys may be disadvantaged in a whole language approach to literacy acquisition is in the ways they are asked to respond to the material. A popular way to teach literature and writing is to ask students to respond personally to characters or events. Boys tend not to respond well to these “emotive” lessons. They are more reticent than girls, and find it difficult to do assignments that ask them to explore their feelings. If they do not see an assignment as relevant (e.g., ‘Imagine you are a sock in a dustbin.’), they may simply not do it (Sommers, 2000).

#### IMPLICATIONS FOR SCHOOLS: WHAT BOYS NEED

Given the above questions and concerns, what can be done to make the nation’s schools more effective for both boys and girls? Here are several possibilities.

- **Kindergarten.** Curriculum and instruction designed for any learners, but especially that designed for these youngest of students, must take into account fundamental issues of neurological, physical, and social maturation. The overall readiness of young boys for academic tasks must be taken into account as decisions about kindergarten curriculum and instruction are considered. For example, some have suggested that boys should start



kindergarten at age six, a year later than girls (Weil, 2008).

- **Academics, testing, and NCLB.** Increasingly school districts and state departments of education are questioning the overwhelming emphasis on academics and testing that are minimizing other traditionally valued functions of American education. As the federal government seeks to incorporate greater flexibility in how the NCLB legislation is interpreted, schools may be better able to determine for themselves how to reach the desirable outcome of greater academic achievement for all, including underperforming boys.
- **Constructivist education.** Boys may need to be specifically taught the collaborative group skills necessary for success in such classrooms. In addition, boys may require different types of "authentic" literature than do girls, targeting the types and genres of reading material that boys are known to be drawn to. In addition, boys might be asked to generate different types of responses to that material than are girls.
- **Male teachers.** Growing numbers of boys (and girls) are growing up in homes without male adults. These boys without men in their homes may need male role models and mentors in schools and in the community, men who have stature and skills in both the academic and social arenas (Thompson, 2005). Some reports suggest that teenage boys who are struggling socially and academically benefit from having male teachers (e.g., Dee, 2006).
- **Same-sex classrooms or schools.** The potential magnitude of the problems that boys experience in school today

warrants the consideration of potentially controversial solutions. For example, emerging research suggests that same-sex schools or classrooms may yield multiple advantages for both boys and girls, including increased academic achievement (Parker & Rennie, 2002; Younger & Warrington, 2005). For example, Sax (2008) reported that 37% of fourth grade boys in a traditional coed classroom in a public school were scored as "proficient" on the Florida Comprehensive Assessment Test. But when boys who were identical to these boys in every way were placed in single sex classrooms and subsequently tested, 86% scored at the "proficient" range. Less dramatically (but no less significantly), 59% of girls in coed classes scored "proficient," while 75% of girls in single sex classes scored at that level.

Given these and similar successes, it is not surprising that the number of same same-sex classrooms and schools in the United States has risen significantly in the last several years (National Association for Single Sex Education, n.d.). In 1995, there were two single sex public schools operating in the country. But in October 2006 the U.S. Department of Education issued new rules giving public schools wider latitude to teach boys and girls separately. By 2008 two single sex public schools had increased to 49. Similar increases have occurred in the numbers of single sex classrooms within traditional schools (Weil, 2008). Secretary Margaret Spellings concluded that "Research shows that some students may learn better in single-sex



education environments" (U.S. Department of Education, 2006).

- **Technology.** Boys may be especially responsive to technology multimedia presentations in the classroom (Newkirk, 2006). As classrooms increasingly feature greater access to computers and the internet, teachers might seek to take advantage of the natural draw of boys to these technologies.

### CONCLUSIONS

Ultimately, a primary criterion of the effectiveness of schools is the degree to which boys succeed as men in their post-school lives. By this sole measure, one might conclude that boys are not failing at school, and that schools are not failing boys. Whether or not they do their homework or choose to read for pleasure, boys tend to function well in the world of work. For example, men continue to out-earn women in the marketplace (e.g., Peter & Horn, n.d.).

Nevertheless, there are powerful indicators elsewhere that boys may struggle more than girls in post-school lives. For example, the Census Bureau reports that 14% of 25-34 year-old American men still live with their parents, compared with only 8% of women (Infoplease, n.d.). Such a trend suggests that it is harder for boys to "find their place" in society. In good conscience schools cannot fail to examine their practices in this light.

Certainly every education professional is committed to maximizing the development and success of *all* of their students, boys and girls. To the degree that the schools can evolve their instructional practices to better help boys successfully move into their adult

lives and into the world, all of society benefits.

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