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Austin Independent School District

Best Practices in Single Gender Education

September, 2011

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Contents

Introduction

Single-gender education in the United States has existed for a long time; however, it was found mostly in private and parochial schools. Public school single-gender education did not fully emerge until 2001, under The No Child Left Behind (NCLB) Act. This change in federal legislation allowed for the opening of various single-gender public schools and single-gender programs in recent years. According to the National Association for Single Sex Public Education (NASSPE), in 2002, only about a dozen public schools offered single-gender education; in the 2011–2012 school year at least 506 public schools were registered as offering single-gender educational opportunities.

Single-gender public education has adopted several different operational models. One is the classic model, which serves either boys or girls only; another is the dual academy model, in which boys and girls are in a coeducational school but attend classes separately (Riordan, 2008). In 2011, NASSPE reported that out of the 506 public schools registered to offer single-gender education, 116 operated under the classic model, and 306 operated under the dual academy model.

The benefits of single-gender education are ambiguous (Herr & Arms, 2004; Hubbard & Datnow, 2005; Younger & Warrington, 2006). In the United States, most research studies on the effects of single-gender education have been conducted in private and parochial schools; thus, results may not be generalizable to public schools. As more public single-gender schools emerge in the country, research conducted in these settings will become more reliable and valid for this population.

Reasons for Single-gender Education

Motives for single-gender education are diverse and have changed over time. In the early 1990s, the public's main concern was that coeducational schools were more advantageous for boys than for girls. Sadker and Sadker, researchers at American University, published *Failing at Fairness: How Our Schools Cheat Girls* (1995)*,* in which they reported their findings on the negative impact of coeducational settings on female students. Concurrently, the American Association of University Women (AAUW) revealed alarming results that suggested coeducational schools set up girls to fail. These results led to the opening of many private all-girls schools (Salomone, 2003). Later, researchers started questioning the validity of previous results on single-gender education and concluded that boys, not girls, were falling back academically (Sommers, 2000). Since then, many researchers have taken an interest in boys and their apparent underachievement, compared with the achievement of girls.

Diverse and sometimes controversial theories attempting to explain gender differences have been proposed in the last decades. Sax, author of *Why Gender Matters* (2006) and an advocate for single-gender education, presented several research findings supporting an essentialist view for single-gender education. Among his examples, which support the view of hardwired biological differences between genders, he claimed that male/female hearing and visual differences in the early ages have direct consequences in education. Along these lines, in her book *Same, Different, Equal, Rethinking Single-sex Schooling,* Salomone (2003) presented research findings that suggested developmental differences between boys and girls at an initial stage of life. She argued that girls enter kindergarten with a small but noticeable advantage in reading skills, as well as in fine and gross motor skills. According to Salomone, the gaps favoring girls over boys are equal to or larger than the racial gaps favoring White students over Black students.

Recent studies' results supported the argument that boys are falling behind in school achievement. In a report prepared for the Center on Education Policy, Chudowsky and Chudowsky (2010) found that boys' reading proficiency was more than 10 percentage points lower than that of girls; this trend was persistent across elementary, middle, and high school. Boys' underachievement in reading and writing is not only a concern in the United States; researchers from the University of Cambridge in the UK found that boys of 7, 11, 14, and 16 years of age underachieved in national reading and writing assessments (Younger & Warrington, 2006).

In response, countries such as the US, UK, and Australia have gained interest in supporting research to find a solution to the "boy crisis." Younger and colleagues (2005) identified key strategies that primary and secondary schools implemented to make a difference in boys' learning, motivation, and engagement. Similarly, in recent years, educators and researchers in the US have published a range of case studies of public schools that have adopted a single-gender model. It is important to mention that currently most of what is known about strategies and best practice for single-gender education is not based on longitudinal, quantitative research results, but on previous experience from educators and case studies. The field of single-gender education is still developing, and more research is expected to emerge in the coming years.

Single-gender Education and Grade Level

Researchers and single-gender school advocates have not identified yet a best grade level or age to begin single-gender education. Schools that have started a single-gender program have done so based on their population's needs. Some schools may choose to start at the elementary school level because a plethora of research has showed that boys and girls each

enter school at different developmental levels in terms of verbal, spatial, and fine-motor skills (Buchmann, DiPrete, & McDaniel, 2008; Sax, 2006; Salomone, 2003). The most compelling argument for separating boys and girls in the early years is that student ability ranges within single-gender classrooms will be narrower at that stage, allowing teachers to meet students' needs more easily and move through curriculum at a faster and more uniform pace (Gurian, Stevens, & Daniels, 2009).

Schools that choose to launch a single-gender program at the middle school level do so for the same reasons as at the elementary level; however, an additional advantage for separating students at the middle school level lies in minimizing the social, emotional, and romantic distractions natural to early adolescence (Gurian et al., 2009). During the middle school years, separating genders can create more comfortable classrooms, in which both genders are willing to take risks, speak up, contribute answers, express uncertainties, and ask questions. Results from a case study conducted in a rural New York State public middle school suggested that the most positive outcomes, academically and affectively, for both genders occurred in grades 6 and 7 (Spielhagen, 2008).

Single-gender programs at the high school level usually begin by separating boys and girls for mathematics (math) and English composition or literature courses (Gurian et al., 2009). High schools that have engaged in single-gender programs have reported students can become more engaged in learning because the curriculum is more relevant to their needs as learners. Conversely, some researchers have suggested that as boys get older, an all-boys environment might result in a masculine-gender environment due to the absence of the civilizing impact of girls (Warrington & Younger, 2006). According to researchers and educators, the closer learners come to adolescence, the less willing they are to engage in single-gender classes (Rogers, 2008).

Single-gender Education Best Practices

Because no consensus has been reached about the age or level at which to begin single-gender education, the best-practice strategies presented in this report cover the elementary as well as secondary levels. The first part of the following section (1 & 2) focuses on research-based best practices and the second part (3 & 4) provides hands-on strategies for implementing all-boys classrooms, based on educators' experiences.

1. Best practices for setting up a single-gender school (Gurian et al., 2009; , Rogers, 2008; Younger & Warrington, 2006)

Based on existing research and on administrators' past experiences, we have identified the following aspects as crucial when implementing a single-gender program:

1.1 Select a strong school leader. This leader and the rest of senior management within the school must embrace and be well versed in the single-gender approach to education. Leaders must offer clear and valid arguments for a single-gender setting and keep parents, students, and staff informed about the rationale behind the school's approach.

1. 2 Select teachers who match the school's ethos. When hiring new teachers, the principal should consider the candidates' awareness and commitment to gender-based learning.

1.3 Provide professional development opportunities. Research has shown consistently that teachers who are well trained in the reform they will implement are more successful and consistent than are untrained teachers (Rogers, 2008). It is vital for teachers to understand the benefits and challenges of a single-gender setting and be trained to apply innovative techniques for the students with whom they are working.

1.4 Bring parents into the initiative. Bringing parents into the leadership team (especially parents who are powerful community members) helps make the case for single-gender education to the community.

2. Four strategies to consider when implementing single-gender programs (Younger et al., 2005)

2.1 Pedagogic strategies

Pedagogic strategies refer to classroom-based approaches centered on teaching and learning. Because boys tend to perform below girls in reading and writing, the main pedagogic approach followed by some single-gender schools is on literacy (Younger & Warrington, 2006). Researchers have found the most effective strategies to increase reading results are holistic strategies (i.e., strategies that integrate reading, writing, speaking, and listening into a whole).

Gains can be made in primary literacy when:

- The main concern is not teaching reading but encouraging boys to become successful and satisfied readers. This might involve having a wide range of texts available to stimulate and sustain students' interest and creating space for talk and reflection about reading.

- Some of the following writing-based intervention strategies are implemented: give more attention to paired and group talk, allow students to share and explore ideas among themselves before writing, use visual stimuli as a source of inspiration, and use drama to encourage collaboration between students and stimulate the imagination.

Gains can be made in secondary literacy when:

- Teachers and students have an understanding of different learning styles.

- Teachers receive support so they can plan lessons that address different learning styles.

- Teachers receive help to be more creative in their teaching, planning, and assessing.

- Teachers make more integrated use of information and communication technologies (ICT).

- Teachers share with students their objectives and how they hope to reach them. This creates a sense of partnership with students and fosters a collaborative environment.

2.2 Individual strategies

Individual strategies are approaches that provide opportunities to identify and address specific needs of individual students. Individual approaches based on target setting and teacher-student mentoring were found to contribute to boys' achievement, attitudes, and expectations in some secondary schools. The effects of target-setting and mentoring can be maximized when:

- Target setting is realistic and challenging.

- Target setting is based on a detailed analysis of contextualized, value-added data at the individual level. To set these individual targets, teachers require time and support, and staff must perceive data analysis as a core activity.

- Mentors are experienced staff with the ability to challenge students and negotiate with teachers on behalf of their students. It is important to point out that mentors should be supportive on one hand, but also demanding on the other.

2.3 Organizational strategies

Organizational strategies are ways for organizing learning at the whole school level. It is important for schools to develop an ethos and culture in which achievement in many areas is celebrated, expected, and accepted as the norm. Students are more likely to respond positively when they feel valued and supported within the whole school context, and feel that the school is working with their best interests at heart. The following strategies are proposed:

- Senior managers must identify proactively with the single-gender initiative.

- Parents, students, and staff need to be engaged with the initiative.

- Emphasis needs to be on high-quality aesthetics around the school environment, with high priority on visuals (e.g., wall displays using students' work).

- Public recognition should be given for success. Students are proud when they are publicly acclaimed, which also leads to the establishment of acceptable and non-stereotypical role models for other students. (e.g., formal merit awards system, student of the month awards).

2.4 Sociocultural strategies

Sociocultural strategies refer to approaches that attempt to create an environment for learning in which boys feel able to work with, rather than against, the aims and aspirations of the school. To engage and motivate all students to become fully involved in school and to develop a self-esteem based on learning rather than on values that conflict with it, it is important to:

- Identify students whose physical presence and behavior exert power and influence over peer groups and make them key leaders.

- Create a positive ethos of high expectations by emphasizing uniform, regular attendance, and envisioning the school day as a time for learning rather than social activity.

- Give students space to articulate their feelings and emotions.

- Find an area for each student to excel in, and get all students integrated into school life.

3. Best practices for setting a boy-friendly classroom (Gurian, et al., 2009; Rogers, 2008)

The following proposed strategies are based on observations that have been conducted in boys-only classrooms around the country:

3.1 Teach with an understanding of boys' energy. Because of their activity level, many boys need space to think, move, and arrange their materials for learning. Some recommendations are to use outdoor spaces, have large classrooms with room for learning centers, allow boys to stand and continue to participate, and include recess and physical education.

3.2 Use spaces in boy-friendly ways. Teachers who are creating boy-friendly classrooms understand that boys need more visual stimuli than girls to help them retain information. Some recommendations are to allow for as much natural and bright light as possible, put up

posters and charts in an organized way, and use flexible seating positions according to the types of learning activities.

3.3 Engage boys' competitive spirit. Healthy competition not only engages students to learn but also promotes their spirit and motivation in the classroom. However, this can create unnecessary conflict for the youngest students, who might still not understand the concept of competition (3rd grade and below).

4. Best practices for teaching core curricula to boys (Gurian et al., 2009)

4.1 Give instructions and directions. Because boys learn best using their strongest sense, which is vision, they benefit most from seeing information (Gurian et al., 2009; Sax, 2006). Teachers should visually share in advance examples of what good work looks like (i.e., in terms of quantity and presentation). Some teachers suggest limiting verbal instruction to 10 minutes or less and instead focus on presenting visual cues and allow boys to learn through investigation and exploration.

4.2 Help boys transition between learning tasks. Most boys struggle more than girls when they have to stop what they are doing, clean up, and get ready for the next task. Teachers should develop strategies that ease these transitions.

4.3 Enhance math curricula. Boys tend to be better than girls with spatial tasks (Gurian et al., 2009); thus, they might enjoy working with symbols, diagrams, maps, and abstractions. Teachers and educators suggest using the blackboard rather than textbooks. Some specific strategies for math learning are to use competition, sports, and physical games to explain math.

4.4 Enhance science curricula. Boys build their science knowledge not as much from reading as from experiencing. Therefore, teachers suggest providing boys with the opportunity to do hands-on and interactive work.

4.5 Enhance learning of literacy skills. It is important to develop an awareness of what boys enjoy reading and allow them to find and read those books. Some resources that list books boys like are *Books for* Boys, by Michael Sullivan; *Great Books for Boys,* by Kathleen Odean; *What Stories Does My Son Need?* by Michale Gurian and Terry Trueman; and *Guys Read,* by Jon Scieska. Helping boys become better writers is another important aspect of literacy. Experts suggest using technology and allowing boys to write about high-interest topics.

Recommended Resources for Professional Development Opportunities

1. NASSPE (http://www.singlesexschools.org)

2. Gurian Institute (http://www.gurianinstitute.com)

3. Salomone, C. R. (2003). *Same, different, equal: Rethinking single-sex schooling.* New Haven, CT: Yale University Press.

4. Gurian, M., Stevens, K., & King, K. (2008). *Strategies for teaching boys and girls, elementary level: A workbook for educators.* San Francisco, CA: Jossey-Bass.

5. Gurian, M., Stevens, K., & King, K. (2008). *Strategies for teaching boys and girls, secondary level: A workbook for educators.* San Francisco, CA: Jossey-Bass.

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