

Single-Sex Classrooms

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Don't expect it to be a "silver bullet," but single-sex education may provide the solution some students need to focus on learning.

Although single-sex education was once the norm in the U.S., the practice has largely been confined to private schools for more than a century. However, with the introduction of the final version of the U.S. Department of Education's so-called single-sex regulations in 2006, public schools were allowed greater flexibility to offer single-sex opportunities. As a result, the issue is receiving more attention from educators, policy-makers, and parents.

What Does the Research Tell Us?

In his review of the research on single-sex education, Bracey (2006) identifies problems that limit both the quality of the findings and their generalizability. Specifically, it is "extraordinarily difficult to conduct scientifically acceptable research on single-sex schools since the mere fact that such schools are schools of choice means that, from the outset, no random assignment is possible." Other problems include, for example, the short period that the programs studied had been in operation.

Campbell and Wahl (1998) are concerned about the lack of contextual data in the research. In their view, when a study doesn't address "what went on in the classes, the pedagogy and practices of the teachers, or anything about the students other than their sex," it cannot adequately answer the question of whether single-sex or coed classes are better. They point out that much of the research has been interpreted by those with ideological support for or against single-sex education.

One of the first efforts to review studies of single-sex education, conducted on behalf of the U.S. Department of Education, focused on its impact on female students. While characterizing the body of

research as inconclusive, researchers Moore, Piper, and Schaefer (1993) also stated that there was "sufficient evidence" to suggest that single-sex educational opportunities may positively impact female students and that the "countervailing evidence" was not sufficiently convincing (Salomone, 2003; Riordan, 2002).

Another overview of the research, conducted by the American Association of University Women (1998), also focused on the achievement of female students, but contained different findings. *Separated by Sex: A Critical Look at Single-Sex Education for Girls* reports on some "points of consensus" that emerged from a discussion by experts:

There is no evidence that single-sex education in general "works" or is "better" than coeducation ... Single-sex educational programs produce positive results for some students in some settings. However, researchers do not know for certain whether the benefits derive from factors unique to single-sex programs, or whether these factors also exist or can be reproduced in coeducational settings.

Mael, Alonso, Gibson, Rogers, and Smith (2005) conducted a "systematic review of single-sex educa-



tion” research on behalf of the U.S. Department of Education. Excluding studies of single-sex classes in coeducational schools, the researchers found 88 quantitative studies of single-sex schools. But when they attempted to apply What Works Clearinghouse criteria to the studies, they found this would have eliminated “virtually all” of them. A decision was then made to loosen the standards to include correlational studies that “used appropriate measurement and statistical principles.” However, the researchers recognized that the 40 studies selected for review still might have lacked an “important covariate such as ethnic or minority status.” They therefore characterized the results from their analysis of the research base as “equivocal,” stating that: “There is some support for the premise that single-sex schooling

can be helpful, especially for certain outcomes related to academic achievement and more positive academic aspirations. For many outcomes, there is no evidence of either benefit or harm.”

Smithers and Robinson (2006) conducted a review of studies that examined educating girls and boys together and separately, either in different schools or in different classes. They looked at studies from Australia, the U.S., Canada, New Zealand, Ireland, and the United Kingdom and concluded that there were no consistent findings that single-sex education is either advantageous or disadvantageous. They also noted that “the influences of gender are far outweighed by ability, social background and race.” Overall, they concluded that there are excellent coeducational schools and excellent single-sex schools, and that “they are

excellent for reasons other than that they separate, or bring together, the sexes for their education.”

One study that Smithers and Robinson reviewed was conducted by Younger and Warrington (2005). These researchers studied the effects of single-sex classes in a coeducational school and found some positive effect. For example:

[B]oys and girls can feel more at ease in single-sex classes, feel more able to interact with learning and feel free to show real interest without inhibition. There can be positive effects on achievement particularly for boys in modern languages and English, and girls in the sciences and maths.

However, some teachers in this same study characterized teaching in all-boy classes as challenging and found that

some boys felt less comfortable in the single-sex environment.

Other researchers have looked at the literature more narrowly in order to identify potential impacts of single-sex education on groups such as disadvantaged male students. Riordan (2002) found that “the research is ‘exceedingly persuasive’ in demonstrating that single-sex schools are effective in terms of providing both greater equality and greater achievement, especially for low-income and working-class students, most particularly for African-Americans and Hispanic-American boys and girls.”

Planning for a Single-Sex Program

For a principal considering a single-sex program, careful planning and implementation will be important. Obviously, any program will need to satisfy the guidelines outlined in the 2006 version of the federal regulations. However, principals also should engage in an intensive study of both “why” and

“how” issues before implementation.

The most important question to address might be, “Why a single-sex program?” For example, a look at assessment data disaggregated by gender might indicate a gender gap in a particular grade. Teachers could then be asked for their assessment of the situation. It might also be informative to have teachers collect data on such things as class participation and disciplinary actions.

If analysis of available information reveals particular problems, consider a single-sex program as only one possible option, with others that might include, for example, more staff development for teachers on ways to differentiate instruction (Salomone, 2006a). Also, talk with administrators and teachers who are involved in single-sex education, or visit schools with single-sex programs.

Other areas of study and consideration might involve considerations

about the grade level or subject areas where a single-sex program might do the most good. In regard to grade level, Smithers and Robinson (2006) refer to a “diamond” pattern, where students are coeducated during their early and later years—but separated during the middle years—as one possibility for a single-sex education program.

Obviously, there is also the teacher variable to consider. For example, will teachers be permitted to opt out of teaching single-sex classes if they feel the concept is unsound (Gurian & Stevens, 2005)?

Although California’s experiment with single-sex public education during the 1990s was largely viewed as unsuccessful, a study of the program provides useful information on barriers to successful implementation. For example, Datnow, Hubbard, and Woody (2001) found schools had insufficient time to plan, gain the support of their constituencies, and to recruit

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Salomone (2003) discusses another less-than-successful implementation of a single-sex program. Although test scores improved, there were also findings that the needs of boys and girls were not fully addressed because of “inadequate staff development, inexperienced teachers, and a school mission that was more focused on raising standardized test scores than consciously addressing the specific educational needs of girls and boys.”

Finally, careful efforts to work with teachers, parents, and others involved are critical. Education leaders should take special care when responding to requests for or against single-sex programs that, while couched in educational terms, may have as much or more to do with ideology. Thus, a single-sex program should have a clearly articulated rationale and specific program goals before implementation efforts begin (Salomone, 2006a).

In Summary

Obviously, decisions to offer single-sex opportunities—as well as efforts to implement them successfully—are complex. A single-sex class or school may provide the solution some students need to focus on learning and excel academically. For other students, coeducation may be where they will flourish. Educators should also take care that implementation of single-sex classes or schools does not send a message that boys and girls “have innate limitations that have to be overcome” (Salomone, 2006b).

Finally, it is important to keep legal issues in mind. While the new Title IX regulations establish some parameters for single-sex education, there is obviously still room for interpretation—as well as legal challenges to both the new regulations or specific implementations of single-sex programs by public schools or districts. 

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WEB RESOURCES

The Federal Register posting of the U.S. Department of Education regulations regarding single-sex education includes the regulations (one page) plus an additional 13 pages containing information that could be helpful to a school considering single-sex classes.

www.ed.gov/legislation/FedRegister/finrule/2006-4/102506a.pdf

In this report, Gerald Bracey begins with a review of viewpoints for and against single-sex education, and then evaluates some of the qualitative and quantitative data.

<http://eps1.asu.edu/epru/documents/EPSL-0611-221-EPRU.pdf>

This evaluation of the first large-scale state experiment with single-sex public education in California provides some lessons learned. Implication and policy issues also are discussed.

www.oise.utoronto.ca/depts/tps/adatnow/final.pdf

Noting the increasing public debate surrounding boys' achievement, Sara Mead takes a critical look at the situation of both boys and girls in our schools and then analyzes some of the underlying theories of the so-called “boy crisis.”

www.educationsector.org/usr_doc/ESO_BoysAndGirls.pdf

