



**Separate But Superior?  
A Review Of Issues And Data  
Bearing On Single-Sex Education**

**EXECUTIVE SUMMARY**

by

**Gerald W. Bracey  
Independent Researcher**

**The Great Lakes Center for Education Research & Practice**

PO Box 1263

East Lansing, MI 48826

Phone: (517) 203-2940

Email: [greatlakescenter@greatlakescenter.org](mailto:greatlakescenter@greatlakescenter.org)

Web Site: <http://www.greatlakescenter.org>

**November 2006**

<http://www.greatlakescenter.org>

This research was made possible by funding from the Great Lakes Center for Education Research and Practice.

**Separate But Superior?**  
**A Review Of Issues And Data**  
**Bearing On Single-Sex Education**

Gerald W. Bracey

Independent Researcher

**Executive Summary**

Public education in the United States evolved from single-sex to coeducational settings late in the 19<sup>th</sup> century. Single-sex schools then existed only as independent or church-affiliated schools. In 1972 the passage of Title IX legislation promoting gender equity made it illegal to create new single-sex public schools and classes, except in rare circumstances to remedy prior discrimination. Existing single-sex schools were permitted to continue and some courses—human sexuality and chorus, for example—as well as contact sports were allowed to remain single sex. Attempts in the 1990s to pass legislation permitting single-sex schools failed until the 2001 reauthorization of the Elementary and Secondary Education Act of 1965 (No Child Left Behind). The U.S. Department of Education proposed new regulations to govern the legality of single-sex schools and classes in March, 2004. The proposed regulations drew much negative comment and as of September, 2006, have not been implemented.

Multiple theoreticians give multiple rationales for the alleged superiority of single-sex settings. Single-sex education is variously seen as a means:

- to increase the enrollment of girls in courses they often avoid in coeducational settings;
- to alter and improve self-concept and self-esteem in girls;
- to reduce “distractions” that attend coeducation classes once students reach adolescence;
- to better control the behavior of boys;
- to increase the achievement of at-risk students of both sexes;
- to reduce or remove sex-based stereotypes and achieve gender equity in classrooms;
- to improve education outcomes by paying attention to pedagogically significant gender differences, especially in brain function.

And, for some, it is the less-than-optimal solution to less-than-optimal-coeducation settings. For these commentators, rather than segregating students by sex, educators should strive to improve conditions in coeducation classes so that they benefit all students equally. They hold that segregation by sex costs society in ways similar to segregation by ethnicity or class.

The research, although copious, is mostly flawed by failure to control for important variables such as class, financial privilege, selective admissions, religious values, prior learning or ethnicity. Of 2,221 quantitative studies, only 40 survived a review from the American Institutes for Research commissioned by the National Center for Education Statistics (NCES), even though the review had relaxed its criteria for judging studies methodologically adequate. Those included in the NCES review reported

on 33 outcomes, ranging from achievement test scores to graduate school attendance to self-esteem to unemployment rates and even to duration of first marriages.

The findings do not form a coherent body and therefore the single recommendation possible is that:

- A series of specific questions should be asked of any proposal for single-sex schools or classes.