

## Research versus the media: Mixed or single-gender settings?

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### Abstract

*In this paper we compare scholarly research and media coverage of the benefits and disadvantages for students of learning in mixed or single sex settings. The debate on the relative advantages of single-sex and co-educational learning settings continues to attract the attention of researchers, practitioners, policy makers, and the community at large. The more measured tones of scholarly work can be contrasted with the often heated and emotive voices of the popular media – print, radio, and television. Our examination of relevant articles and reports over the last decade confirms that the focus, however, has changed from concerns about girls' educational needs to those of boys, particularly in the popular media. Even when educational researchers have devised studies incorporating many inter-related factors that can influence educational outcomes, media commentators, with few exceptions, have tended to simplify the issues or ignore completely the complexity of the issues involved. Media consumers, without access to the details of the original research studies, would be left with the impression that there are simplistic solutions. A consistent finding in the research literature of the crucial role played by teachers was frequently overlooked in media reports, thus fuelling the impression that gendered settings of schools or classrooms per se can "fix" perceived inadequacies in the educational system.*

### Introduction

As part of a larger literature review on classroom grouping practices for the learning of mathematics, science, and English, the literature on single-sex and co-educational settings was examined. Various learning settings were considered: single-sex and co-educational schools, as well as single-sex settings within co-educational schools. Our explorations went beyond the three discipline areas and we looked at students' learning in single-sex and mixed-sex settings across the curriculum, as well as at both the primary and secondary levels.

Since many grouping practices, for example, mixed ability versus ability grouping, single-sex versus mixed-sex etc., can evoke strong emotional reactions among members of the teaching profession and among parents, we decided to explore the basis of the public's knowledge of these issues. We investigated how the media - print and television, in the main - dealt with the issues.

In this brief paper, we report on the major findings in the scholarly literature on single-sex and co-educational learning settings in the past and over the last decade, and on how the Australian media have presented the issues to the public in the last few years. Our discussion then centres on the contrasts between the recent findings from the scholarly literature and those reported in the media.

## **Sources of information**

The databases searched for the scholarly literature on single-sex and co-educational learning settings from 1996 to the present included (in alphabetical order): A+ Education; Australian Education Index [AEI]; British Education Index; CBCA Education; Educational Resources Information Center [ERIC]; Google Scholar; and ProQuest Education Journals.

For Australian media reports on single-sex and co-educational learning settings from 2002 to early 2007, the following sources were explored: 7/Yahoo; ABC Online; Channel 10 Online; Herald Sun website; Ninemsn; The Age website; The Australian website; and SBS Online.

## **Findings from the scholarly literature**

### **Earlier research: pre-1996**

The foci of research on single-sex and co-educational learning settings prior to 1996 included the educational disadvantage of girls, and comparisons based on whole school settings. The findings on the relative benefits of single-sex or co-educational whole school settings for girls were generally inconsistent. In these earlier studies, factors other than the gender-mix of the school setting had frequently been overlooked. Gill (1988), for example, noted that socio-economic backgrounds had been ignored in research in which data from girls attending non-government single-sex schools were compared with those from girls attending government co-educational schools:

[T]he distinction between single sex and coeducational schools is interwoven with the division between private and public schooling which has been the site of a long and at times particularly acrimonious debate in the history of Australian education. (Gill, 1988, p.3)

Another theme emerging from research in the 1980s was that single-sex settings within co-educational schools were considered to have the potential to address the educational disadvantages faced by girls.

### **Research 1996-present**

In books and several large reviews of the literature on the relative benefits of single-sex or co-educational settings on the achievements and affective outcomes of girls and boys, studies from the UK, USA, Canada, and Australia (e.g., Gill, 2004; Haag, 2000; Mael, Alonso, Gibson, Rogers, & Smith, 2005; Smithers & Robinson, 2006; Thompson & Ungerleider, 2004) were included. The body of work has indicated that:

- There are some benefits for girls in single-sex settings: greater positive self-concept; less gender-stereotyping with respect to some disciplines; and views that the learning environment was more “comfortable”.
- Findings on the benefits of single-sex settings *per se*, particularly for boys, are equivocal
- While there are some achievement benefits reported in favour of single-sex settings, other factors (e.g., quality of teaching, and socio-economic backgrounds) were identified as more significant than the gender composition of the learning setting.

The main foci of individual research reports on single-sex and co-educational provisions were found to be: whole school single-sex and co-educational settings;

single-sex provisions within co-educational schools; and specific discipline areas. The major findings are summarised below.

1. The quality of teaching was found to be a more critical influence on students' learning achievements than the gender composition of schools or classrooms. (e.g., Warrington & Younger, 2003)
2. Some research indicated that in some disciplines, girls in single-sex settings benefited with respect to confidence and achievement, for example in mathematics (see Forgasz & Leder, 1995), and in music (e.g., Colley, Comber, & Hargreaves, 1998).
3. Co-educational settings appear to be more beneficial to boys than to girls (e.g., Wong, Lam & Ho, 2002).
4. While mainly anecdotal, there is some evidence that single-sex settings address some aspects of boys' educational disadvantage (e.g., Anderson, 2006), but that the extremes of machismo behaviour can also be fostered (e.g., Gray & Wilson, 2006)
5. Other factors (e.g, organisational support, parental support, curriculum content, teaching approaches, professional development) need to be incorporated if the dual goals of enhancing girls' and boys' learning outcomes in single-sex settings, including within co-educational schools, are to be achieved (e.g., Becker, 2001; Martino, Mills & Lingard, 2005)
6. When factors such as socio-economic backgrounds are taken into consideration, there were no substantive differences in boys' or girls' academic achievements in single-sex and co-educational settings (e.g., American Association of University Women, 2004)
7. Research on single-sex settings at the primary level is limited; there is also a dearth of research on the longitudinal effects of single-sex interventions.

### ***Findings from the popular media: Newspapers, TV, and radio***

Seldom did media coverage examine critically the effectiveness of single-sex and co-educational schooling on students' achievements. Rather, the issues were more frequently associated with reports of research for which, it must be assumed, media releases had been widely circulated.

The issues associated with coverage on single-sex settings identified in our overview of the media included:

1. the promotion of parental choice in school settings for their children (e.g., School data is positive first step, 2006)
2. debates over the relative merits of single-sex and co-educational schools
3. discussions of the crisis in boys' education (e.g., *ABC Online – Tropical North Queensland*, 2007)
4. the outcomes of trials of single-sex settings within co-educational schools (often related to 3. above) (e.g, *Girls to the left, boys to the right; trial of single-sex classes*, 2005,); and
5. girls' high achievement in high stakes examination results (e.g., Leung, 2006)

When the emphases in the research literature and in media reports were compared there were some stark differences:

1. Many media reports focussed on selective, usually positive, anecdotal outcomes related to boys' underachievement – an area which is less prevalent in the

- research literature. Some reports, however, were of a high standard and the complexities of the single-sex schooling debate were apparent.
2. As arguments in favour of single-sex groupings, brain-functioning differences between girls and boys received much greater attention in the media than in the research literature.
  3. The impact of a range of other contributing factors, in whatever learning setting, that can affect student learning outcomes were often obscured in media reports. Nevertheless, powerful overviews of the complexities involved were provided in some very perceptive, thorough, and well-researched reports.

The power of the media to shape public opinion cannot be ignored. The media's roles include meeting the public's right to know, sharing new knowledge, and provoking debate. Yet, unrepresentative or biased reporting of research, coupled with a failure to discriminate between findings from rigorous studies and small, one-off intervention reports (for which the complexities that can affect findings are frequently overlooked, and that are often undertaken by groups with vested interests) have the potential to distort public perceptions of critical issues. Thus societal beliefs may be limited by the media, deliberately or inadvertently, denying knowledge of the complexities of the interaction between schooling and learning. Educators know that teacher quality, resources, socio-economic factors, family environment, parental involvement, cultural and peer group influences, as well as the gender mix of classrooms, can all impact on educational outcomes.

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