

Gender and Education – Mythbusters

Addressing Gender and Achievement: Myths and Realities



This resource is designed for use by educators from all phases and stages of schooling. Its purpose is to identify and dispel some of the current and unhelpful myths about gender and education and to counter them with an evidence-based rationale. It could be used in a variety of ways and contexts but it might be most productively used as a vehicle for opening up dialogue about gender issues in education with teachers and other school staff, trainees and pupils.

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Addressing Gender and Achievement: myths and realities

Myth: All boys underachieve, and all girls now achieve well at school.

Reality: Many boys achieve highly, and conversely many girls underperform.

Analysis of the attainment data shows that other factors or a combination of factors, such as ethnicity and social class, have a greater bearing on educational achievement than gender considered on its own. Planning to address underachievement needs to take this potential interrelationship into account. Schools need to consider the relative impact of gender, ethnicity and social class in their particular setting and analyse their performance data in this light.

Sources of evidence: DfES (2007)

Myth: Boys underachieve across the curriculum.

Reality: Boys broadly match girls in achievement at maths and science.

Boys outperform girls in Maths at Key Stage 2, and continue to outnumber girls at higher level maths. But there is a large gender gap favouring girls in English. This pattern is broadly reflected across OECD nations, and is of long-standing. (In the 1950s and 60s it was common place to explain this

difference in terms of boys' late development in language and literacy skills. Such relatively poor performance was not expected to hinder their educational progress over the long term.) Early diagnosis and intervention through structured support for literacy skills as part of the early years foundation stage and primary curriculum is likely to be particularly important. Whilst the gender gap in attainment for English is relatively constant across social groups, schools with poor English performance may well find that both boys and girls are underachieving.

Sources of evidence: DfES (2007)

Myth: Boys' educational performance suffers because the existing school curriculum doesn't meet boys' interests.

Reality: There is no evidence to suggest that the content of the secondary curriculum reflects particularly gendered interests, or that such interests equate with attainment.

It is true that since the 1980s girls as a group have performed much better in science and maths subjects, and are now more likely to stay on to further and higher education. The main reasons for this are girls having equal access to the curriculum

and the end to subject specialisation at 14 with the introduction of the National Curriculum; together with changes in the employment market so that most girls envisage a 'career' once they leave school. However, girls remain underrepresented in STEM subjects at university and the introduction of the new 14-19 diploma route means that, unless schools provide active guidance, both boys and girls may once again 'opt' for gender-stereotyped education routes at 14.

Sources of evidence: Arnot, David and Weiner (1999), Francis (2000), Moss (2007)

Myth: Boys are 'naturally' different to girls, and learn in different ways.

Reality: There is little evidence to suggest that neurological ('brain-sex') differences result in boys having different abilities/ways of learning to girls.

Recorded patterns of difference are slight, and widely debated. Neurological research remains in its infancy, and even proponents of neurological gender difference caution that there is more *within* sex difference in abilities than *between* sex difference, meaning that teaching boys and/or girls as though these are discrete groups will fail to meet the needs of many boys and girls.

Sources of evidence: Baron-Cohen (2004), Slavin (1994)

Myth: Boys and girls have different learning styles, which teaching needs to match.

Reality: Learning styles as a concept are highly contested. There is no evidence that learning styles can be clearly distinguished one from another, or that these learning styles are gender specific.

In spite of the widely-held belief that boys and girls tend to have different learning styles, there is little evidence to bear this out. Research has questioned the validity of notions of discrete learning styles, and studies have also failed to find conclusive links between gender and learning style. Where learning practices and preferences may be gendered (for example, girls enjoying group work etc), such preferences may be due to social norms, suggesting a role for teachers in broadening (rather than narrowing) learning approaches.

Sources: Coffield et al (2004), Younger et al (2005).

Myth: Coursework favours girls and 'sudden death' examinations favour boys.

Reality: Changes in assessment practice reducing the value of the GCSE coursework component have had little impact on gendered achievement patterns.

Girls' results were improving prior to the introduction of the GCSE assessment model.

Changes in the 1990s reducing the GCSE coursework component had little impact on gender achievement patterns. As a group girls appear to do well at sudden death examinations and coursework assessment.

Source of evidence: Arnot et al (1999), Bleach (1998), Elwood (2005)

Myth: Boys prefer male teachers.

Reality: For the majority of boys and girls, the teacher's gender has no bearing on their preferences for a teacher.

Whilst males are under-represented at all phases of schooling, studies have shown that the vast majority of boys and girls prioritise a teacher's individual ability as a teacher, and their level of care for their students, rather than a teacher's gender. There have also been many studies investigating potential correlations between teacher gender and pupil achievement, and most of these have found no relationship between matched pupil-teacher gender and pupil achievement. Further, evidence does not suggest that teaching approaches or attitudes differ according to teacher gender.

Sources of evidence: Ehrenberg et al (1995), Lahelma (2000), Skelton et al (2009), Francis et al (2008a; 2008b), Carrington et al (2007, 2008), Skelton (forthcoming).

Myth: Boys benefit from a competitive learning environment.

Reality: Competitive learning practices may actively disengage those boys who do not immediately succeed.

Social constructions of gender encourage boys to be competitive. However, such constructions also involve a dislike and/or fear of 'losing'. Given there can only be a few 'winners' in competitive educational practices, those boys failing to 'win' academically may disengage, or find alternative ways of 'winning', for example by becoming disruptive. The current pattern of boys' attainment, with a longer tail of underachievement developing behind those boys who are high achievers, suggest that the difficulties lie with motivating those who do not immediately succeed in order that they may engage with purposeful learning.

Sources of evidence: Jackson (2002; 2006), Elkjaer (1992)

Myth: Single-sex classes are the best means to improve boys' and girls' achievement.

Reality: Single-sex classes have very mixed results, and have not been shown to be the decisive ingredient in lifting boys' achievement, but have, in some cases, improved girls' achievement.

While single-sex classes have sometimes been implemented to raise boys' achievement, it has often been girls' achievement, rather than boys', which has benefited under these conditions. Boys

have been found particularly unlikely to favour single-sex teaching. Research has found that teaching practice often does not generally differ according to the gender of the class. But where differences are found, these tend to reflect stereotypical assumptions on the part of staff which may exacerbate existing gender expectations and achievement patterns rather than minimise them. Single sex schools do seem to benefit girls' performance but this is difficult to disentangle from social class. There is no evidence that boys' exam performance is enhanced in single-sex schools, although there is some evidence that they may be more prepared to study arts and humanities subjects in this setting.

Sources of evidence: Warrington & Younger (2001), Younger & Warrington et al (2002), Jackson (2002), Sullivan, A. (2006), Iverson and Murphy (2007).

Myth: Boys prefer non-fiction.

Reality: Boys who prefer to read non-fiction are a minority.

Of the small minority of children who nominate non-fiction as their favourite kind of reading material (roughly 10%), the majority are boys, but this group is very small in comparison to those boys who nominate fiction texts. This is a consistent finding in all the large-scale datasets. It is safer to assert that boys who read, read fiction.

Sources of evidence: Hall and Coles (1999), Whitehead (1977), Moss and McDonald (2004)

Myth: Changing or designing the curriculum to be 'boy-friendly' will increase boys' motivation and aid their achievement.

Reality: Designing a 'boy-friendly' curriculum has not been shown to improve boys' achievement.

There is no evidence to show that where schools have designed or changed parts of their curriculum to be more appealing to boys ('boy-friendly') that it improve boys' achievement. Such changes may involve gender-stereotyping which can lead teachers to ignore pupils' actual preferences and limit the choices that either boys or girls can make. Schools where boys and girls achieve highly, with little or no gender gaps in subjects (particularly English), have high expectations of all pupils; have not designed a 'boy-friendly' curriculum; and in English encourage all pupils to read widely, offer them plenty of choices and plan to both engage children's interests and extend the range of reading.

Sources of evidence: Pickering (1997), Lingard et al (2002; 2003), Keddie and Mills (2008), Younger and Warrington et al (2005)

Myth: Girls are naturally better at reading and writing.

Reality: Girls in general do perform better than boys at English, and the gap between boys' and girls' performance at Key Stage 2 is much larger in writing than reading. However, the largest gaps in English performance are at school level.

The reasons why there is unequal performance in English amongst pupils and between schools are complex. Attempts to explain why high-performing schools with little gender gap in their performance do so well have found no evidence that they tailor their reading curriculum to boys' interests, or champion "boy-friendly" pedagogies. Rather, they have high expectations of both boys and girls in English; provide a high quality and inclusive English curriculum; and are very successful both in teaching the basic skills involved in learning to read and write, and in providing extensive opportunities for children to use and extend the skills they have developed in rewarding ways.

Sources of Evidence: DfES (2007); Younger and Warrington et al (2005); Moss (2007)

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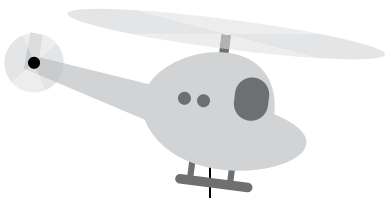
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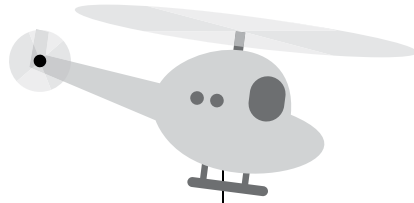
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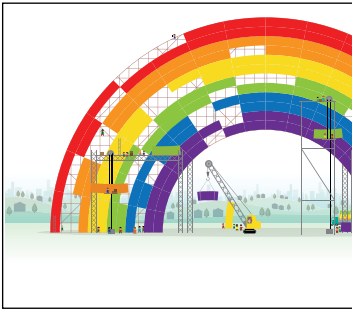
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