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**Smith, Cathy; Golding, Jennie**

**Raising girls' participation in A-level mathematics: initial findings from 'good practice' case studies.**

Adams, G. (ed.), Proceedings of the British Society for Research into Learning Mathematics (BSRLM). Vol. 35, No. 1. Proceedings of the day conference, St. Patrick's College, Dublin, Ireland, February 28, 2015. London: British Society for Research into Learning Mathematics (BSRLM). 72-77 (2015).

Summary: Fewer girls than boys in England participate in post-compulsory mathematics and the recent increase in popularity of Mathematics and Further Mathematics (FM) at age 16 has not changed the gender balance. Previous studies have shown the significance to girls of their mathematics lessons and teachers, of discursive co-constructions of masculinity and mathematics, of the range of careers associated with mathematics and science, and family 'science capital'. This study identified four case-study schools and one Further Education (FE) college with unusually high participation by girls in mathematics A-level. Focus groups and lesson observations were used to explore factors relevant to girls' participation. Common factors were: preparation for demanding mathematics during key stage 4, a departmental ethos which encouraged student-teacher interactions in and out of lessons, teachers who explicitly and repeatedly confirmed that girls would succeed at mathematics A-level, appreciation of mathematics as opening doors to many careers. Messages about FM were more restrictive but emphasised interest over unusual ability.

*Classification:* C64 D34

*Keywords:* gender; post-compulsory; participation; choices; educational research; case studies; A-level; further mathematics; encouragement

<http://www.bsrlm.org.uk/IPs/ip35-1/BSRLM-IP-35-1-13.pdf>