Advanced Mathematics Support Programme

## Self-audit: Strategies for increasing girls' participation in level 3 mathematics

| Strategy | Already <br> do this | Could try <br> this | Not right <br> for us |
| :--- | :--- | :--- | :--- |
| Arrange for girls to attend an enrichment event aimed at <br> promoting the opportunities provided by level 3 maths. |  |  |  |
| Create displays or organise events that promote maths as <br> being a subject for all students. Ensure equal gender <br> representation in displays/resources that provide information <br> about success stories in STEM industries. Try to ensure that <br> a wide range of abilities are represented, so that maths is not <br> perceived as an 'elite' subject. |  |  |  |
| Ensure that promotional information about level 3 maths <br> courses makes explicit links to the utility of the subjects for a <br> wide range of future study and career options, including <br> degrees in subjects such as biology, geography and social <br> sciences. |  |  |  |
| Persuade colleagues in quantitative subjects to be explicit <br> with students about the benefits of taking a level 3 maths <br> qualification alongside their subject at A level. Complement <br> this by putting up displays in the Maths Department about the <br> maths used in, for example, A level Psychology. |  |  |  |
| If using competition as a teaching technique, experiment with <br> team based approaches or competitions that can be <br> completed over an extended time period, rather than focusing <br> on rewarding processing speed. An example might be a <br> competition to design a poster that promotes/explains an area <br> of maths. |  |  |  |
| Organise lunchtime or afterschool revision/extension groups. <br> Research suggests that girls often prefer the chance to <br> discuss their ideas away from the pressure of a classroom <br> situation in which confident boys may dominate. |  |  |  |
| Set up a peer mentoring/tutoring scheme, where students <br> currently taking mathematical level 3 courses can act as role <br> models to students in younger year groups; approach girls to <br> encourage them to participate. |  |  |  |


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| Introduce extension material (or even an additional <br> qualification such as the AQA Level 2 Certificate in Further <br> Mathematics) alongside GCSE courses, to enable GCSE <br> students to experience A level style work. Research suggests <br> that all students, but girls in particular, value the opportunity <br> to evaluate their interest and find out how they might cope <br> with a new course before making a commitment. |  |  |  |
| Proactively make contact with parents/carers of girls with the <br> potential to take level 3 maths. Research suggests that girls <br> often lack self-belief and are more likely to respond positively <br> to the encouragement of adults such as teachers and <br> parents. |  |  |  |
| Encourage teachers in the Maths Department (and beyond?) <br> to take a test to evaluate their own levels of unconscious bias, <br> to promote self-reflection, inform practice and raise the profile <br> of gender issues. A possible option is a study on implicit <br> association being run by Harvard University <br> (https://implicit.harvard.edu/implicit/takeatest.html). |  |  |  |

