Press release: Minister calls to dispel girls' misconceptions of STEM subjects

School Standards Minister Nick Gibb has called on teachers, parents and society in general to challenge and dispel misconceptions some girls have about Science, technology, engineering and mathematics (STEM) subjects.

New data published for the first time today by the Department of Education shows school girls in England are substantially less likely than boys to consider taking STEM subjects at A Level than boys.

Whilst the number of girls taking STEM A Levels has increased by 26% since 2010, the research shows 15-year-old boys are more likely than girls to see STEM subjects as being useful when it comes to getting a job and that girls are less likely to consider a STEM subject as their favourite.

Speaking on International Day of Women and Girls in Science, School Standards Minister Nick Gibb said:

> There is growing demand for STEM skills, particularly for sectors such as engineering, construction and manufacturing, and it's essential that gender is no barrier to ensuring that all young people have the knowledge and skills to succeed in our outward looking and dynamic economy.
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> We've made considerable progress in increasing girls' participation in STEM subjects since 2010, with the proportion of girls taking STEM A Levels increasing by a quarter, and 25% more women accepted onto full-time STEM undergraduate courses.
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> We are determined to continue this trend, and that's why we are funding programmes to increase the take up of maths, computing and physics, and have reformed the school curriculum to make sure it meets the needs of employers.
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> This research, however, shows that certain misconceptions are still prevalent, and we all have a part to play, including parents and teachers, to dispel misconceptions about STEM subjects and help encourage our scientists of future generations.

The research published today is based on a survey taken by 10,010 15-year-olds in 2015, as part of a longitudinal study. It shows:

- Girls enjoy STEM subjects less than boys: The proportion of male pupils who ranked KS4 STEM subjects first for enjoyment was almost twice that for females: 59% vs. 32%.

- Girls are less likely to say STEM is their best subject: When asked which subject they were best at, the proportion of male pupils who ranked a STEM subject first was 60%, which again was almost twice as high compared to females at 33%.
- Boys are more likely to think STEM leads to a job: When asked about which subjects were most likely to lead to a future job, 69% of male pupils ranked a STEM subject first compared to 51% of females.
- Girls and boys both name STEM as leading to highest paid jobs: When asked which would lead to the highest paid job, 81% of male pupils named a STEM subject compared to 77% of females.
- Girls are less likely to pursue STEM at A level: When asked what they planned to study at A-Level, female pupils made up the minority of those naming STEM subjects. Particularly, in Engineering (14% / 86%), Computing (15% / 85%) and Physics (22% / 78%).

Home Office research shows 60% the roles on its shortage list are in the STEM sector while the 2017 Employer Skills Survey found that there is significant demand for skilled and qualified professionals in IT and engineering, as well as a need for complex numerical and statistical skills.

Since 2010, the number of women accepted onto full-time STEM undergraduate courses increased by 25% and women accounted for 54% of UK STEM postgraduates.

We have invested in programmes to encourage take up in STEM-related subjects and courses, including announcing substantial spending commitments in the Autumn Budget 2017 on maths, digital and technical education.