

Bitesize Careers - Empowering girls in STEM careers

Why girls don't choose physics

Only around 20% of physics students are female and that has remained so for many years. This section looks at some of the reasons why people choose physics and what factors put off students.

Relevant research for this section

- <https://www.ucl.ac.uk/ioe/research-projects/2022/feb/understanding-participation-rates-post-16-mathematics-and-physics-upmap>
- <https://www.jcq.org.uk/wp-content/uploads/2023/08/A-and-AS-level-Results-Summer-2023.pdf>
- <https://www.science.org/doi/full/10.1126/science.aah6524>
- <https://www.theatlantic.com/family/archive/2018/09/puberty-girls-confidence/563804/>
- <https://journals.sagepub.com/doi/10.3102/0002831216678379>

Discussion support

This is a quick activity which should take you no more than 10 minutes and could easily be carried out in a department meeting. Below are some points to help your discussion if struggling.

- Physics at GCSE isn't harder than other subjects. Everyone should be able to access it. However, its reputation for being hard can put students off from even trying. The amount of maths and the tricky language, particularly everyday words that mean something different, like energy, weight etc, can also make it feel hard.
- Boys and girls have a similar spread of academic ability. If anything, girls slightly outperform boys at GCSE. However, stereotypes often play on the 'dumb blonde' and the male rocket scientist and gendered roles in the home often don't help. It could be worth considering how confident participants in your group feel about challenging sexist language or gendered assumptions in their classroom.

The video <https://www.youtube.com/watch?v=nWu44AqF0iI&t=2s> provides a suitable stimulus for discussion about our unconscious bias and how stereotypes might have affected our personal reactions to children in our families and in the classroom.