Bitesize Careers - Improving the uptake in physics
The Science Capital approach

This session focusses on the benefits of the '**Science Capital approach'** which is based on research that suggests that young people often struggle to see the relevance of science and hence physics. It is designed to support teachers in helping students find more meaning and relevance in science and, as a result, engage more with the subject. The ideas for the approach were co-developed and trialled over four years between Enterprising Science researchers and 43 secondary science teachers in England. The ASPIRES longitudinal research project informed the development of the Science Capital Approach and this has shown that:

- Students with low Science Capital are unlikely to see science as 'for me'.
- Enjoyment of science doesn't translate into science aspirations.
- Current careers education is patterned by existing social inequalities.
- The stratification of science at Key Stage 4 may be contributing to the STEM skills gap.
- Young people's career aspirations are relatively unchanged over time.

These are important points to consider when planning your lessons and utilising the Science Capital approach can help to provide a 'toolkit' to make them more engaging and relevant for your learners. The resources focus on young people attitudes and ways of thinking in science (as well as more broadly across STEM subjects) to promote their self-efficacy (self-belief in their ability). The presentation aims to provide a summary of the science capital approach based on a **Foundation** where teachers consider what counts in science and then go on to develop three pillars of learning as follows:

- **Pillar 1** - Personalising and localising
- **Pillar 2** - Eliciting, valuing and linking
- **Pillar 3** – Building the science capital dimensions

More detailed resources can be found here[1], courtesy of UCL. Once you have digested the detail in the presentation, perhaps you could consider **Activity 1**, which asks you to discuss whether the science capital approach is useful for your school and whether the ideas could be introduced into your physics careers messaging.

Some of the ideas introduced are simply good teaching and learning approaches but you might like to summarise where your schools approach overlaps and the ideas you would like to take forward.

Links:

1. https://discovery.ucl.ac.uk/id/eprint/10080166/1/the-science-capital-teaching-approach-pack-for-teachers.pdf