SCIENCE KS3
Gender Equality

Leedsdec Development Education Centre
Educating for a just and sustainable world

Lesson: Women in Science & Gender Equality

ACTIVITY OUTLINE

Students begin by drawing a scientist and their real life work. The drawings can be a stimulus for discussion of the type of work which students recognise scientists as doing. This can be returned to at the end of the lesson with the opportunity for more blue sky thinking on the type of scientific work that would support sustainable development.

There is an opportunity to collect data draw conclusions and consider the effect of sample size and the size of any bias effect in determining confidence in these conclusions. There is the option to calculate percentages and discuss the value of percentage comparisons when comparing samples of different sizes.

Analysing the gender representation gives the opportunity to test for bias and compare this with girl's performance in science at school. Discuss the decline in women in STEM positions as careers progress and the possible barriers to progressing in science.

Students use the card sort to look at the biographies of the women scientists and decide which of them they think could be scientists. If they think any of them couldn't be let them share their thinking about why. Discuss the women's achievements in science, draw out the contributions of women from the majority world. Acknowledge the work of feminists like Mary Wollstonecraft and Malala Yousafzai in challenging gender inequality.

Students have the opportunity to think about the science they would like to do/ have done (compare with their initial drawing).

Final task to celebrate the involvement and achievement of women in science.

CURRICULUM OUTCOMES

Students will:

Collect and analyse data on gender representation of scientists.

They will consider the limitations of their data and the conclusions which can be drawn.

Convert data into percentages and understand when this is an appropriate way to treat data.

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GLOBAL LEARNING OUTCOMES

BIG IDEAS

GENDER EQUALITY

Students can explain what gender is, including how appropriate behaviours are taught to both men and women, and how it is different to sex (biological characteristics)

Students can name the different influences which create gender norms. They can explain how gender stereotypes are created and that they can have negative repercussions

SMSC / British Values - understanding and appreciation of the wide range of cultural influences that have shaped their own heritage and that of others

Action

WISE enables and energises people in business, industry and education to increase the participation, contribution and success of women in science, technology, engineering and mathematics (STEM) www.wisecampaign.org.uk/about-us/#.
WISE has created a new interactive game to help girls find rewarding careers in STEM; where girls will be happy and successful.
- www.myskillsmylife.org.uk/sign-in.

500 Women Scientists is a grassroots organization started by four women who met in graduate school at CU Boulder and who maintained friendships and collaborations after jobs and life took them away from Boulder. Immediately following the November 2016 election, we published an open letter re-affirming our commitment to speak up for science and for women, minorities, immigrants, people with disabilities, and LGBTQIA.
- www.500womenscientists.org

The project has been funded with support from the European Commission. The contents of this publication are the sole responsibility of Leeds DEC and do not necessarily reflect the opinion of the European Union.