Teaching Scenario 2:
The Recruitment Fair

Level
Ages: 11 - 14
UK Key Stage: 3
UK Years: 7 - 9
US Grade: 6th - 8th Grade

Introduction
Evidence from the Girlguiding annual Girls' Attitudes Survey 2011 indicates that science and engineering are careers that few girls would consider. Girls often shy away from STEM careers because they believe that these sorts of jobs are not for girls or women.

There are several reasons for this, but one key problems is that, as girls approach the age where they begin to decide what subjects to focus on, they are also developing a sense of their own self-identity and often that identity conflicts with their perception of a STEM identity. In other words, as they begin to develop a sense of who they are as individuals, they also begin to to see STEM as something that other people do.

This is in part because of how we talk about STEM jobs. Research has shown that women self-identify using adjectives, but when we describe STEM jobs we tend to use verbs, focusing on what people do. This can alienate girls, setting STEM in immediate and irreconcilable opposition to their developing self-identity.

This scenario seeks to reframe STEM jobs in terms of the types of people who might work in them, focusing on describing the qualities and aptitudes of good scientists, technologists, engineers and mathematicians. In this way, it hopes to encourage girls to rethink their preconceptions to STEM jobs, and see them as viable career options.

Learning outcomes
The aim of this scenario is to help students, especially girls:

- Progress beyond stereotypical concepts of 'what a scientist is'
- Expand their thinking about the kinds of people who work in STEM
- Begin to relate more closely to people who work in STEM
- Begin to imagine themselves working in STEM
- Explore the importance of language in shaping our responses to job descriptions

Scenario

A big international company, Engtech Science, is expanding and creating new jobs in its offices around the country. Its Human Resources (HR) department, which is responsible for hiring new talent, is organising a series of recruitment fairs where they hope to attract and hire young scientists, technologists, engineers and mathematicians.

In order to attract the very best new employees, the Head of HR, Dr Jaswinder Singh, wants to completely rethink how they advertise their jobs and how they communicate with potential job candidates. She wants to hire as many women as men, and wants to make sure that the leaflets that they give out at the job fair appeal to women as well as men.

Dr Singh has decided to bring in a team of recruitment specialist to write new descriptions of the type of people that she wants to hire.

Situation

A recruitment agency has been engaged by Engtech Science's Head of HR, Dr Jaswinder Singh, and asked to write a series of four descriptions of the kinds of people she wants to eventually hire: scientists, technologists, engineers and mathematicians.

Key questions

- Are there words or phrases which make students feel excited about STEM?
- Are there words or phrases which make them feel as if STEM is 'not for them'?
- Are these the same words, or different, for boys and girls?
- How does the language of job adverts limit the type of people who might apply?
- How can job descriptions be written to be more inclusive?

Client

The client is Dr Jaswinder Singh, Engtech Science's Head of Human Resources. She is responsible for ensuring that the business hires the very best people, and for making sure that they meet their diversity targets to ensure that they hire people from lots of different backgrounds and heritages.

Stakeholders

Other people with an interest in the outcome of this project include:

- Jena Fischer, CEO of Engtech Science, who has ultimate responsibility for the company's diversity programme.
- A women in STEM campaign group that wants to write a case study about the use of gender-neutral language in recruitment.
- Ashley Krawiec, CEO of a competing company, who is concerned that they will lose their competitive edge if Engtech Science snap up all the best talent.

ARM

Commission

To create four short descriptions of the kinds of people Engtech Science want to hire in the areas of science, technology, engineering and maths.

Tasks and activities

Describe a scientist

- Come up with a list of words that describe what a scientist does
- Now draw up a list of words that describe the qualities that a scientist has
- Do the same for a mathematician, technologist and engineer

You might use the Ten Types of Scientist poster and/or report as a way to kickstart this exercise.

How do words make you feel?

- Think about how these words make you feel.
- Divide your collection of words into three lists:
  - Words that make you feel excited, interested or curious
  - Words that make you feel that STEM is for people like you
  - Words that make you feel bored, uninterested or unmoved

Students should do this activity on their own in order for the next activity to work.

Do girls and boys prefer different words?

- Collate the 'excited', 'people like me' and 'bored' lists from the girls in the class
- Collate the 'excited', 'people like me' and 'bored' lists from the boys in the class
- Are the lists the same or different?
- Which words are most positive for girls, ie on the 'excited' and 'people like me' lists?
- Which words are most positive for boys?
- Are girls' most positive words verbs or adjectives?
- Are boys' most positive words verbs or adjectives?
- Which words are most likely to make girls or boys feel that STEM is for them?

It would be possible to use coloured sticky notes to collate the word lists. Girls all get green and yellow sticky notes, and boys all get orange and white (try not to use pink and blue in the stereotypical way). The students would then write a single word on each sticky note:

Green: Girl, adjective
Yellow: Girl, verb
Orange: Boy, adjective
White: Boy, verb

The students can then stick the notes on the classroom wall in groups of 'exciting' and 'boring' words, with the same words clustered together. The number and colour of sticky

notes will show you at a glance whether girls/boys favour verbs or adjectives, or neither, and whether boys' or girls' choices are the same or different.

To make the exercise shorter, you could ask the students to pick their top five or ten words, the ones that they feel most strongly about.

Can words be gendered?

- Is it possible for a word to feel more masculine, or more feminine?
- Come up with some words that are masculine. Describe how they make you feel, and why you think they are masculine.
- Come up with some words that are feminine. Describe how they make you feel, and why you think they are masculine.
- Now look again at the lists of words describing scientists, technologists, engineers and mathematicians. Are there words which seem very masculine? Or feminine?
- Draw a Venn diagram with four circles representing masculine words, feminine words, verbs and adjectives.
- How much overlap is there? Which group is the biggest? Why might this be?

Expanding your list of adjectives

- With students working initially on their own, expand the list of adjectives that could be applied to people working in each area: science, technology, engineering, maths.
- Then, working in small groups, students should share their lists of adjectives, and come up with four lists of the most descriptive adjectives.

Write descriptions

- Write four descriptions of the kind of person whom students think would be well suited to each subject area, using mostly adjectives and/or feminine words.

Present your descriptions
Present your four descriptions to Dr Jaswinder Singh, Head of HR at Engtech Science's, explaining why you made the choices you did.

Responses from other stakeholders
What kind of responses or challenges do you think your descriptions would receive from:

- Engtech Science's CEO
- The group campaigning about women in STEM
- The CEO of a competing company

Resources

Ten Types of Scientist, Diana Garnham, Science Council: http://www.sciencecouncil.org/10-types-scientist, see also the Ten Types of Scientist poster included in this pack.

Not for people like me, Professor Averil Macdonald, WISE: https://www.wisecampaign.org.uk/resources/2014/11/not-for-people-like-me

12 Types of Scientist, an extension of the Science Council report, and the *People Like Me* resource, WISE: https://www.wisecampaign.org.uk/about-us/wise-projects/people-like-me

Wanted: Gender-free job ads, Chris Privett-Duke, Futurity, Duke University/Princeton University, 2011: http://www.futurity.org/wanted-gender-free-job-ads/
Campaign, the Science Council, Practical Action, AGCAS and Prospects for their support and assistance in the preparation of this education pack.

Feedback

If you have any feedback on these scenarios, or the rest of the education pack, or if you would like to provide suggestions for improvements, please contact Suw Charman-Anderson at suw@findingada.com.

About this pack

This free education pack comprises of:

- Notes for Teachers
- Introduction to Teaching Scenarios
- Teaching Scenario 1: The Ultrobot
- Teaching Scenario 2: The Recruitment Fair
- Teaching Scenario 3: The Charitable Trust
- Useful Resources
- The Amazingly Enormous Careers Poster
- Ten Types of Scientist poster
- Ada Lovelace poster

All resources have been produced by Ada Lovelace Day, and are available to download for free from their website, findingada.com. These files will be continually updated so please do check the website for the latest versions.

For schools who wish to buy prints of the posters in sizes up to A0, these are available online from the Ada Lovelace Day RedBubble store, with prices starting at £10.99.

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