Introduction to Teaching Scenarios

Introduction

The use of scenarios in teaching is becoming more and more popular in schools at all levels. Scenario-based teaching not only allows children to explore a complex topic in depth, it also develops their skills in analytical thinking, collaboration, communication, and helps them develop confidence in those skills.

There are several ways that you can use scenarios in your teaching and, although the three included scenarios are very loosely based on the Mantle of the Expert approach, they can easily be adapted to your preferred way of teaching. Which aspects of the scenarios you choose to use will depend in part on how much time you will be devoting to it, eg whether you are looking at doing a high-level overview in a single lesson or using the scenarios as the basis for a term-long project.

These scenarios, like the rest of this education pack, were written with Key Stage 3 students (ages 11 - 14) in mind, but they can again be adapted to work with younger or older students.

Whilst the main aim of these scenarios is to encourage more girls to consider STEM careers, and to see themselves as future scientists, technologists, engineers and mathematicians, its contents are not just for science, ITC and maths teachers. There are opportunities for teachers of other subjects to use these scenarios as well. For example, Scenario One could be used by PSHE teachers to explore the theme of living in the wider world, whilst Scenario Two would be useful for careers advisors and PSHE teachers exploring issues round work, or by English teachers to discuss how the use of languages affects our self-perception and understanding of the world around us. Scenario Three might be useful again for PSHE, to explore concepts of public service, philanthropy and non-profit organisations.

The scenarios

We have produced three scenarios for you to use and adapt:

The Ultrobot: A toy company has designed a gender-neutral robot toy which it wants to market to appeal to both boys and girls. Students are encouraged to explore questions around how gender is used as a marketing tool, how colour-coding toys (and other items) as 'for boys' or 'for girls' limits children's opportunities and how they can make their own decisions about the kind of toys, books and careers they choose.

The Recruitment Fair: An engineering and science company needs to rethink it's recruitment materials in order to appeal equally to men and women. Students are asked to consider how language can influence their perceptions about which jobs are 'for men' or 'for women', and thus which jobs they can imagine themselves doing, and how job descriptions can be written to be more inclusive.

The Charitable Trust: A philanthropist wants to have a positive effect on the world by giving grants to people who are working towards solving global and local problems using STEM. Students are encouraged to think about the ways in which STEM makes a positive difference to our lives, how there is a very broad spectrum of opportunities in STEM, and that STEM careers are not reserved just for the 'super-geniuses' or 'brainiacs'.





Each scenario includes:

- An introduction, explaining why the factual motivators behind the creation of the scenario
- The desired learning outcomes that the scenario is designed to address
- The fictional scenario, setting the scene
- The situation, the reason for the students' involvement in the scenario
- Key questions that the students should address whilst working through the scenario
- The fictional client, to whom the students will report at the conclusion of the scenario
- The fictional stakeholders, whose opinions, views and potential reactions the students must also take into account
- The commission, the task the students have been set
- Tasks and activities, which the teacher can work through, choose from or adapt.
- Resources for the teacher, some of which may be also suitable for the students to explore, depending on age, internet facilities, etc

Developing the scenarios

There are many ways that you can develop the scenarios. The Mantle of the Expert framework makes good use of the tools of dramatic enquiry, and it's easy to add more drama opportunities to all of the scenarios, such as:

- *Hot seating*: A student takes on the persona of one of the scenario characters, and is interviewed by other students.
- Conscience Alley: The class splits into two, with the two groups of students take opposing viewpoints; a moderator listens to both sides and draws a conclusion.
- Tableaux or Freeze Frames: Students make a tableau to represent a scene in a whole class improvisation.

Scenarios can also conclude with a plenary session in which students round up the activities, and teachers can make sure that the key learning outcomes have been explicitly identified and captured.

Resources

Mantle of the Expert

http://www.mantleoftheexpert.com/ http://www.imaginative-inquiry.co.uk/

Scenario-Based Learning

http://wikieducator.org/Scenario Based Learning

http://elc.fhda.edu/create/index.html

http://elc.fhda.edu/faculty/scenarios.html

Active Learning and Teaching

http://www.nicurriculum.org.uk/docs/key_stage_3/ALTM-KS3.pdf

Drama Resource

Hot seating: http://dramaresource.com/drama-strategies/hot-seating/

Conscience Alley: http://dramaresource.com/drama-strategies/conscience-alley/

Tableaux: http://dramaresource.com/drama-strategies/tableaux/

Freeze Frames: http://dramaresource.com/drama-strategies/still-images-and-freeze-frames/





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, <u>findingada.com</u>. 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 <u>Ada Lovelace Day RedBubble store</u>, with prices starting at £10.99.

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