Using the resource and Inventive podcast

This resource is based on the <u>Inventive podcast</u>. The podcast mixes engineering fact with fiction. Each podcast features an interview with an engineer. That interview was used as inspiration by a variety of authors and poets to create a piect of fiction.

These resources make use of those pieces of writing to support the teaching of English.

A short audio clip about the engineer provides context and can be played during a lesson. Students may wish to listen to the whole podcast in their own time. All resources can be accessed using the QR code below.

This English lesson resource supports students to:

Reading:

- learn new vocabulary with the help of context and dictionaries
- make inferences and refer to evidence in the text
- check their understanding to make sure that what they have read makes sense

Writing

• summarise and organise material, and support ideas and arguments with factual detail.

Additional context and careers resources

Audio clips from Inventive podcast

- Clip 1: Enass talks about those who have no electricity.
- Clip 2: Smart cities
- Clip 3: What is H2GO
- Clip 3: Majot describes what an Integration engineer is

For other resources including posters and more information about Enass and Manjot:



https://nustem.uk/inventive/#enas_manjot





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Meet the engineers



Enass Abo-Hamed & Manjot Chana

Enass Abo-Hamed is an activist and chemical engineer. She set up a company that uses surplus renewable energy to store hydrogen to be used in fuel cells.

Manjot Chana is an Integration engineer. He links different systems together to make one system that works.

Meet the author



George Sandifer Smith Data is Truth and Truth Data

George Sandifer-Smith is a lecturer and writer of poetry and fiction.

He was inspired by the interview with Enass and Manjot to write science fiction about misinformation and the energy crisis.





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Teacher Information Resource Activity Overview

The table provides an outline of the resource activities, and suggests approximate timings for each activity. You may wish to adapt these to suit your students' needs.

1	Meet the Engineers (pg 2 - 4)	30 min	If you have time, you could listen to the whole podcast. Otherwise, read the summary of the life of the engineers and listen to the two clips. Clip 3 introduces the company that Enass runs, H2GO Clip 4 describes what an integration engineer does.
			What are the similarities and differences between the two engineers?
			Discuss the different backgrounds of the engineers and their different routes into careers. You could complete a venn diagram with the students to compare and contrast their backgrounds
2	Developing inference skills (pg 5)	10 min	Analyse the title - Data is Truth & Truth Data
			In pairs students discuss their initial thoughts.
			A series of key questions are provided which will allow a guided discussion about the engineers and the story.
3	Text analysis - making inferences based on evidence (pg 6 - 9)	30 min	Textual analysis of the opening of the story.
			Students compare the two main protagonists in the story using a Venn diagram.
			They also discuss how the author has taken aspects of the engineers' lives and used them in the story.
4	Exploring context (pg 10 - 12)	30 min	Students read information about climate change and discuss a quotation from the story. There is also a short research and writing activity exploring their local council response to climate change and net zero.
6	Research Task (pg 13)	90 min	Enass describes herself as an activist. Students research other climate change activists using key reading skills and a biography check list.

7	Textual Analysis (pg 14 - 17)	s 35 min	Students inish reading the story, and then re-read the story to identify references to climate change.
			They then use these references to explore how human behaviour impacts climate change response.
8	Review	20min	Exploration of references to data in the story.
	(pg 18)		with review questons to reflect on the engineers' motivations and how they are illustrated in the story.

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