

Educational Level:

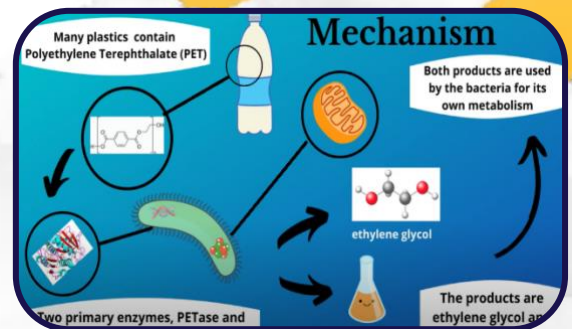
Higher Education

Subject Area (s)

Science

Time required

7.5 hours



Communicate and pitch a solution by visualising STEMM data (team project)

Overview

In this semester long teamwork challenge, students collect, analyse, and visualise STEMM data to solve a real-world sustainability challenge. Their solution is firstly communicated in an infographic which is then pitched to industry in a video. Through this, students develop professional communication skills as well as improve their digital literacy skills while using Adobe CC Express Post or Adobe Illustrator, and then Adobe Rush.

Because these Adobe programs enable a multidisciplinary collaborative approach where students can play, risk and act as entrepreneurs, students are empowered with skills for their future careers. Using these programs, this assessment enables students to inspire community action and contribute to industry.

To assist students in this project, you will need to either enter students in the competition by contacting [Dr. Bitu Zaferanloo](#), or run the competition yourself by providing several real-world sustainability challenges for the students to choose from. You will need to ensure that there is available data and industry partners willing to be involved. Students will visualise the collected data relevant to the real-world challenge, propose an innovative solution, and discuss its impact. They will then utilise their knowledge in user-centred design to create an interactive prototype infographic using Adobe CC Express Post or Adobe Illustrator. This inspiring infographic will be the basis for a pitch presentation while Adobe Rush will be used to showcase the innovative design to industry and community stakeholders.

Students should be advised that infographics and videos submitted via a link will be accessible and potentially shared by anyone with the link (including class members or industry).

Examples of appropriate industry partners to be involved in the presentation of the pitch include:

- [The Royal Society of Victoria](#), vision: Promoting Science in Victoria
- [Insurance Australia Group](#), vision: We make your world a safer place

Supporting tools and resources

- Student Samples:
 1. [Winner video](#)
 2. [STEMM Infographic 2021 Competition - Live Showcase](#)
 3. [Student examples 1 & 2](#)
- Template:
[Overview of program](#)
- Judging criteria for Competition
- Assessment Criteria
 - Training workshops:
[Data Visualisation Workshop](#):
[Recording workshop](#)
- Adobe [Premiere Rush](#) Tutorials
- Adobe [CC Express](#) Tutorials
- Adobe [Illustrator](#) Tutorials

Outline

The following outline scaffolds the information and skills students are required to be able to complete this project.

Step	Time	Description
1	Learn	120 min
		Run a workshop in which the students learn the necessary tools (Adobe CC Express or Illustrator) to design the infographic. We suggest you provide students with a basic template for infographics to get them started.
2	Evaluate	120 min
		Run a workshop similar to the Data Visualisation workshop to generate innovative ideas on a possible sustainable solution using STEMM Data and capture these in wireframe designs for evaluation.

In a world where there is data and statistics everywhere, information can be overwhelming to interpret, so visualising and communicating data is an important skill. This workshop should explore some types of visualisations, some good and bad practices in presenting data and provide some tips for creating a STEMM infographic.

Useful links to share with students during the workshop include:

- [Data GIF maker](#)
- [Flourish](#)
- [Google Trends](#)
- [Public Data Explorer](#)
- [GNI training](#)
- [Canva – templates for infographics](#)

3	Create	180 min	Students create an interactive Data Visualisation infographic and a pitch presentation video aligned with the industry vision that explains the infographic. (See Training Workshops under 'Supporting Tools and Resources')
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4	Share	30 min	Hold a pitch presentation session at the end of the semester to view the students' pitch videos. This presentation should include invitations to industry representatives, community organisers and academic facilitators. Record the presentations as a live showcase for future students. Hold an evaluation to confirm the sessions were informative, inspiring, and fun.
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OR

To enter the competition, students need to write a 300 word outline of their STEM solution plus references and send it to [Dr. Bita Zaferanloo](#).

Provide students with the judging criteria for the competition.

Students who enter the competition will receive feedback to further iterate their project and be advised if they have been selected to present to the judging panel. The judging panel will comprise of industry representatives and academics.

Selected competitors submit and present a video to the judging panel as per instructions provided via email response to their entrance submission.

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Bitra Zaferanloo, Lecturer in Microbial Biotechnology, Lead Shaping STEMM futures

This resource was created by Dr Bitra Zaferanloo, Lecturer in Microbial Biotechnology, Lead Shaping STEMM futures.

• Department of Department of Chemistry & Biotechnology • School of Science, Computing and Engineering Technologies • Swinburne University of Technology