



Introduction to DataFace for Teachers

What is DataFace?

DataFace equips teachers and students with the skills and confidence to interrogate data – big and small – and present their findings creatively. It draws on core data skills, broader power skills and data visualisation techniques to encourage students to find the stories they care about through the gathering and presentation of data. Working with four core datasets and a range of short teaching videos, students develop their skills and produce a creative visual outcome.

Aims

Through participating in DataFace, students will:

- 1. Understand the relationship between data and everyday life.
- 2. Develop a sensitivity to the ethics and security implications of data science.
- 3. Increase their data literacy.
- 4. Develop employability skills: creativity & innovation, teamwork, communication, problem-solving, decision-making & initiative.

Running DataFace in Your School:

DataFace can be run as either a curricular or extra-curricular project and with a group of any size suitable to your school. It should be run with year 8 and / or year 9 students.

To deliver DataFace, schools are provided with the following:

Key Resources

The Brief: The brief tasks students with working in groups to identify their story and create their visualisation using all the skills they have learned. They should log their process and progress as they work through the interrogation, analysis and design process as this will form part of their final presentation.

The Datasets: There are four core datasets provided and an accompanying video to introduce each one. Students can spend time exploring all four or just a selection of these. The aim is for students to find the stories behind the data and then plan their own visualisations.

Teaching and Learning Resources

Core Skills: Five core skills videos to develop students' competencies around spreadsheets and the data within them. There are two sample spreadsheets used in these videos: weather and the trees of Bristol. These can be downloaded and used. There is also a set of example datasets that can be downloaded and used to practise the skills.





Power Skills: Five power skills videos to generate discussion around the topics of data ethics, security and integrity. On the accompanying teacher resources there are suggested activities and discussion questions that can be used to explore these further.

Data Visualisation: Two data visualisation videos to learn about how two data artists approach data visualisation. There are suggested activities, discussion questions and links to other data artists and journalists that can be explored on the accompanying teacher resources. Students can also do their own research to learn more.

DataFace encourages the use of the PPCAD cycle. See page 3.

What next?

In School:

Each participating school should run their own inschool competition.

Groups should present their final visualisations, and the process by which they created it, to an audience.

Take photographs of each group's entry to be included in the digital exhibition.

Select one winning group and one runner-up group and provide the details to Cheltenham Festivals.

At the Science Festival:

Invite the winning group from each participating school to participate in a live exhibition as part of Cheltenham Science Festival in June. Each winning group will have a stand on which to exhibit their visualisation and display to the public. A judging panel will speak to each group and decide on the top 5 entries

The top 5 groups will then present their work to an audience and a winner and runner up will be selected.

All of the visualisations will remain on site and be exhibited as part of Cheltenham Science Festival throughout the week.

We can't wait to see what your students achieve!

Additional Recommended Resources

Teacher Case Studies video – provided in the playlist Student Case Studies video - provided in the playlist Advice to Students from the Experts video - provided in the playlist



The PPDAC Cycle

Problem - Plan - Data - Analysis - Conclusion

