Presenting investigations: academic posters

This resource accompanies the article **Using academic posters to present information** in *Education in Chemistry* which can be viewed at: <https://rsc.li/3no3QHI>.

Learning objectives

1. Explain why you have carried out an experiment.
2. Display your observations and data using appropriate methods.
3. Present your conclusions clearly and concisely.

Introduction

It is important that learners can present information from a practical in a logical, clear and concise manner. In this activity, learners answer a series of questions before and after completing an investigation. The questions focus learners’ attention on the points they need to consider before presenting their findings. The list of questions is not exhaustive and can be adapted to suit different investigations. After completing their answers, learners create an academic-style poster summarising the key information and data from the investigation.

How to use the resource

This activity would work well as a group task and is likely to take at least two lessons to complete. First, introduce your students to the investigation and instruct them to answer questions 1–4 on the student sheet. When your students have completed the investigation, get them to write up their results and thoughts using questions 5–9. Then, display the PowerPoint presentation to guide students as they create either digital or physical (using A2 size paper) academic-style posters to present their findings.

You can use this resource alongside many 14–16 practicals to develop your learners’ skills in presenting and communicating observations and explanations. For example, investigations into endothermic/exothermic reactions work well with this activity (see the practical resource <https://rsc.li/3lGynQC>).

Once learners have produced their posters, you could ask them to present what they have discovered, and learners could peer mark each other. This works especially well if different groups have investigated different variables.

The resource is also ideal for a STEM club, with learners aged 11–14 or 14–16 who have carried out an extended research project. Learners aged 16–18 could use the questions as the structure for a scientific poster layout if they plan to attend a student research conference. These learners should use the poster layout on slide 9 of the PowerPoint presentation to include references.

Scaffolding

The PowerPoint presentation contains three different poster templates. You can choose which one to use depending on your class and the level of detail you would like them to go into. The student sheet is designed as a scaffold to help students clarify their ideas before putting it all together on a poster. As an alternative, ask students to write their answers on large sticky notes then attach them to their final posters.