10. Poster Presentation

Summary

Outline of the exercise
Students work in groups to prepare a poster presentation. In the scenario outlined in this book, the students represent key members of a research committee, who are hoping to receive funding for their latest ideas. Posters must therefore include information on the chemistry behind the idea, its commercial applicability and the cost of the project. Students are encouraged to search recent literature for suitable topics for their posters. The posters are presented to a panel of judges, some of whom might be external to the department, and “funding is awarded” to the group with the best poster.

Key aims
- to describe a piece of chemistry using a high quality poster;
- to develop skills in information retrieval, written delivery, visual delivery, and team work.

Time requirements
- 2 hours tutor contact time
- 10 hours private study
- 12 hours total student time

Timetable
The following timetable is suggested and is most effective if spread over a one-week period.

20 mins Introduction
10 hours Students prepare their posters
1.5 hours Judging of the poster display (1 hour, with one or two students from each company present)
Final debriefing and prize giving (all students present, 20 minutes)
ACE, the parent company you work for, would like to demonstrate their confidence in you by asking you to outline a new area of research of your choice, for which they might fund an initial R&D programme of £200,000 over 3 years. Several other subsidiaries of ACE have also been asked to put forward a proposal, but only one will be funded.

ACE is keen to diversify and is therefore willing to consider any chemistry research proposal (e.g., new materials, pharmaceuticals or agrochemicals). If specialist work is required (for example, testing a new drug), external companies can be contracted. However, the main thrust of the chemistry must be conducted in-house. The cost of an employee to a company is about double their salary (approximately £120,000 to fund a reasonably qualified chemist for three years).

Sources like *Chemistry in Britain*, the science pages of national newspapers, or journals such as *Chemical Communications* should help you to identify a topic that really interests you, has commercial potential, and for which you could envisage a worthwhile research programme.

ACE has asked all applicants to prepare a poster that will be assessed by a high-powered team from ACE including the Chairman (who does not have a chemistry background) and some of the top research chemists. They will be strongly influenced by a clear presentation of why the topic is important, what new development has taken place, and how it might be further developed in the future. Your planned research programme will probably be quite brief at this stage – an outline of the work you would carry out, the resources needed, and the aims of the project. You need to set up meetings of your company, at which you:

- decide how to choose your topic
- choose your topic;
- plan the poster;
- agree who will do what (e.g., writing, preparing graphics, finding materials, following up references); and
- prepare the poster.

The best posters are clear and easy to follow, have visual impact, and do not contain too much information. In this case, an overview for the non-specialist and some further details for specialist chemists (including several references to the chemical literature) are needed. The poster must have well-defined sections; for example, background, the major recent development, an outline of what you plan to do and achieve (maybe including rough cost), and a summary. It must also contain a title, the names of the R&D team and your company’s name. The whole presentation must fit within 1 m x 1 m, but should at least fill a 90 x 60 cm area, and should be readable at a distance of about 1 m. Coloured paper, pictures, graphics, and any other materials which would enhance the quality of your poster can be used.
Poster presentation

The tutor input for this exercise is simply:

- distributing the information sheet;
- arranging for suitable resources to be available for the students to prepare posters;
- providing an area for the posters to be displayed; and
- inviting judges to assess the posters.

To produce a reasonable poster, the team members need to contribute approximately 10 hours work each. Three to four days is an adequate timescale and provides enough time whilst instilling a sense of urgency, although it is also possible to run the exercise as a one-day event. If the timescale is extended beyond a few days, it can take over from other course commitments. The size of the poster (1m²) is based on a typical conference poster.

The success of the event is driven by having the posters on display for the whole department, and using external judges for the assessment. This is a good opportunity to invite colleagues from industry to see the undergraduates' work. Awarding prizes for the best poster(s) at the end of the event will ensure that it finishes on a high note; if this is the last exercise of a module on communicating chemistry, it might also be appropriate to reward good performances from exercises throughout the course.

Adapting the exercise

A (fictitious) reason for requesting a poster can help the exercise. The format described here builds on previous exercises in the module, but it would also run well as a stand-alone exercise, or with a modified scenario.

Assessment

An assessment form is provided. Four criteria are given for the assessment of the posters, although a wider range could be used. One or two students from each company can be asked to attend their poster when the judges are assessing it.
Criteria for marking:
- Choice of topic [10]
- Visual Impact – use of layout, graphics, colour [20]
- Clarity – was the poster easy to follow? [20]
- Scientific accuracy [20]
- Commercial relevance – was the case well made? [10]
- References [10]
- Discussion with company [10]

Each category is marked out of 10.

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