

ACCOMPANYING MATERIAL

The accompanying website to this guide (<http://www.heabioscience.academy.ac.uk/TeachingGuides/>) contains an extended version of this case study and the following additional material:

- student assignment;
- assignment front sheet;
- peer reviewer's evaluation sheet; and
- author's response to peer reviewer's comment.

'HOW TO DO IT'

During the final week of research activity, students are reminded about the mini-conference presentations which are required as their assessment of the case study. Guidance is given on presentation techniques and the use of graphics and IT in presenting information using MS PowerPoint. Examples of previous conference presentations are provided as a benchmark. At the same time, the marking strategy is discussed and the elements of presentation to be assessed, together with the balance of marks associated with each element, are agreed within the group. This process is mediated by the academic; however the students lead the discussion and formulate the marking criteria.

On the day of the student presentations, evaluation sheets are distributed amongst the group and the process of peer-assessment is reinforced. The presentation evaluation sheets are graded on a scale 1–9 using the criteria already agreed on. A total of 10 criteria relating to both product and process are used, such as relevance of information supplied, evidence of sound laboratory practice, evidence of teamwork, timekeeping, readability of slides and amount of information supplied.

Students are then expected to evaluate each groups' performance (according to the criteria already laid down), and any additional information about a groups' performance is noted on the evaluation form. At the end of the series of presentations, all evaluation sheets are collected in by the academic. Evaluation sheets obtained in this exercise are then scrutinised by the academic and the marks allocated to each group (for every element of the assessment) are fed into a database. The final mark for each specific element of the exercise is given as the mean awarded to the group by their peers, and the overall mark is derived according to the marking criteria as agreed by the students.

Follow-up workshops are used to disseminate good practice to students and to evaluate student perception of the process.

TIPS/THINGS TO LOOK OUT FOR

Staff need to be willing to explain (openly) how and why student assessment criteria are set. This facilitates the students' understanding of developing their own marking criteria and leads into the idea of peer-assessment. Sometimes the actual idea of peer-assessment is so strange to the students that additional time needs to be spent in reassuring them of the fairness of such schemes, and the importance of treating the process professionally.

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Peer-assessed problem-based case studies

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BACKGROUND AND RATIONALE

Final Year Food Technology students participate in a real-life problem-based case study. Each case study focuses on a small problem within a larger graduate research project being undertaken by the university with an industrial partner. As such, the project tends to be a blend of the practical use of food technology pilot plant equipment and background theoretical research. Students are allowed to organise their work pattern in order to meet the objectives of the particular project.

The final assessment of the case study is as a group, conference-style, oral presentation. These presentations are exclusively peer-assessed. Time is taken within the module to discuss and devise appropriate marking strategies and descriptors. Thus the students take ownership not only over their working time but also in the style of assessment strategy, giving them greater understanding of learning patterns.



DOES IT WORK?

The use of peer-assessment in this case study benefits the students. Although there may be a slight reluctance to use peer-assessment for the assignment initially (sometimes students express a wish that the assignment is evaluated by academics, following usual guidelines). However, the students do accept their roles in the assessment procedure and act responsibly. Through completing the assessment they do learn how to reflect on the work of their peers, how to assess and evaluate work separate from personal friendships, and how to accept positive criticisms regarding the quality of their own work. Indeed, it is interesting that the process also allows the students to reflect on their own learning styles and choices of appropriate communication tools.

As such the case study is extremely useful in developing critical evaluation of their own compositions, and a greater autonomy over their working practices. This development of self-evaluation, and self-worth, is noteworthy when you also take into account the students' greater awareness of the use of their skills and knowledge acquired so far, in problem-solving real-life situations.



FURTHER DEVELOPMENTS

Further developments may be to devise workshops specifically aimed at introducing the principles and aims of peer-assessment. This would have the advantage of reducing student reluctance to participate in such exercises, and also help with their understanding of assessment marking strategies. A result of such could be their ability to better manage their own assessment achievements in modules.