

Problem solving activities in biology for Open University Students

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Problem-based learning is a valuable tool for enhancing student learning and for providing remedial help in grasping difficult concepts in Biology. Most teaching at the Open University is by course texts, DVDs and television. Teaching material is written by academics and expert consultants. An important feature of the material is that it includes interactive in-text and self-assessed questions, and also activities which may be home experiments or computer-based. Students are provided with a study calendar that outlines reading and other learning activities for each week of a course.

There is provision for face-to-face learning at regional tutorials delivered by associate lecturers. For Biology, Associate lecturers may give a short lecture prior to the problem-based learning exercise, to help students to focus on the relevant concepts. Problem based learning at tutorials provides opportunities for students to engage with teaching materials and to apply principles to new scenarios not mentioned in course materials e.g. species enzymes, signalling pathways. Problem based learning also forms part of activities at Residential Schools.

Examples of problem based learning activities that have been used successfully in tutorials for Biology at Levels 1-3 are presented. We demonstrate how the activities meet learning outcomes for courses and link to level indicators within programmes of study. Some feedback from students is included.

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