Promoting active learning with a Generic Skills Guide

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A "No Frills Generic Skills" guide for physiology students was compiled in 2000 to bring together various learning resources and exercises which had been produced over the previous decade, and presented to students in a series of learning tutorials. It was initially provided in paper form, but with the advent of WebCT as a means of managing resources for our units of study, it was incorporated into this platform for 2003.

The guide consists of nine sections, each headed by fairly simple questions which a student might ask in relation to a particular topic, and for which the answer is then provided. Anecdotal accounts of experience with earlier student cohorts are included in order to illustrate the development of our ideas over time. Additional documents include Exercises, a Skills Development Table, and five Appendices on different aspects of learning.

Use of the guide to foster active learning is encouraged by various links:

- 1. from Course Resources, the complete hyper-linked text
- 2. from Learning Tutorials, a summary table showing relevant connections
- 3. from notes for Writing Essays and Practical Reports
- 4. from Challenge Questions for practical self-assessment

The questions relate to three broad topic areas:

skills for science graduates -

- What are generic skills?
- Which generic skills are most relevant to science graduates?

skills for designing experiments, analysing and reporting data -

- What is meant by scientific method?
- What are the main ingredients of a successful experiment?
- How should I record my data? How should I analyse my results?
- How should I report my findings? How should I write scientific material?

skills for effective learning and exam performance -

- What are the characteristics of a successful learning style?
- What is the best way to study for exams?
- What new ways of learning can I try?

The additional documents include exercises on data handling, common confusions, logical thinking and concepts, excerpts from "The Making of Memory" (Rose, 1993), extended matching exercises and problem-based learning examples.

The question on a successful learning style is the most relevant to our symposium on Active Learning. The answer begins with three definitions of learning, lists four essential attributes of successful learning, then uses the analogy of building a wall, first developed by Mike Prosser (personal communication), to expand on eight key characteristics. It concludes with seven tips for taking responsibility for personal active learning, which are also included in our course guide.

How effective this learning resource for active learning has proven to be will be discussed with reference to various outcomes.

Rose, S. (1993) The Making of Memory. Bantam Books: London.