

## Bibliography

### ***Practical and Transferable Skills***

- \*NEW\* Baggott, L., Nichol, J., Watson, K. & Poland, R., 1999. **Searching for information the World Wide Web.** *J.Biol.Educ.*, **33** (3), 158-163. How to find quality information with, and avoid the pitfalls of, the World Wide Web.
- \*NEW\* Barnard, C., Gilbert, F. and McGregor, P. 1993 ***Asking questions in biology.*** Harlow: Longman. ISBN 0-582-08854-2. An interesting introduction to the problem-solving approach to biological topics.
- \*NEW\* Birnie, J. & O'Connor, K.M. 1998 ***Geography Discipline Network Guide: Practicals and Laboratory Work in Geography.*** 64pp. Geography Discipline Network, Cheltenham. This Guide discusses the purpose of practical work, with a review of research on the effectiveness of laboratory teaching in science; the role of postgraduates who support practical work; and alternatives for laboratory work. Transferable skills in practical teaching and learning are considered. Checklists to assist in analysing the purpose of practicals are provided. The Guide provides a set of thirteen case studies of ideas for practical and laboratory sessions in geography. Throughout the Guide the emphasis is on practical advice.  
For more information, see also:  
<http://trapdoor.glos.ac.uk/el/philg/gdn/guides/summary.htm>
- \*NEW\* Clarkeburn, H., Beaumont, E., Downie, R. & Reid, N., 2000. **Teaching biology students transferable skills.** *J.Biol.Educ.*, **34** (3), 133-137. Biology students will require skills and abilities distinct from academic knowledge in their future working life. An educational programme based on interactive teaching units at the University of Glasgow is described to provide an opportunity for the development and practice of these skills.
- \*NEW\* Nield, E.W., 1987. ***Drawing and Understanding Fossils.*** Pergamon Press, Oxford. A theoretical and practical guide for students of palaeontology with self-assessment. Gives a grounding in theory in addition to teaching the graphical skills needed to make clear, representative and pleasing drawings of specimens.
- \*NEW\* Tariq, V.N., 2002. **A decline in numeracy skills among bioscience undergraduates.** *J.Biol.Educ.*, **36** (3), 76-83. This study provides evidence of a decline in basic numeracy skills among first-year bioscience undergraduate students. The results of two types of numeracy test are presented. Reasons for the perceived decline in numeracy skills and the educational implications are discussed.
- \*NEW\* Thomas, M., Hughes, S.G., Hart, P.M., Schollar, J., Keirle, K. & Griffith, G.W., 2001. **Group project work in biotechnology and its impact on key skills.** *J.Biol.Educ.*, **35** (3), 133-140. Group work approach to the teaching of ethical issues in biotechnology is described and its impact on the acquisition of the key skills of working together, communication, and problem solving, is evaluated. An attempt is made to identify the skill items that are influenced most by the group project work. Gender differences are also highlighted.

Compiled by Allan Jones, Co-ordinator of Special Interest Group: Practical work in the Biosciences

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- Jones, A.M., Reed, R. & Weyers, J.D.B., 1998. ***Practical Skills in Biology*** (2<sup>nd</sup> edition). Longman, Essex. A text adopted by several universities for practical modules. About to go into its 3<sup>rd</sup> edition (December 2002).
- Reed, R., Holmes, D. & Weyers, J.D.B. & Jones, A.M., 1998. ***Practical Skills in Biomolecular Sciences*** (1<sup>st</sup> edition). Longman, Essex. Another text adopted by several universities for practical modules in cell and molecular subjects. About to go into its 2<sup>nd</sup> edition.
- Jones, A.M., Duck, R., Reed, R. & Weyers, J.D.B., 2000. ***Practical Skills in Environmental Science***. Pearson Education, Harlow. Another text adopted by several universities for practical modules in Environmental Science and Ecology. This text contains more information about ecological aspects of biology.
- Dean, J.R., Jones, A.M., Holmes, D., Reed, R., Weyers, J.D.B. & Jones, A., 2002. ***Practical Skills in Chemistry***. Pearson Education, Harlow. The latest in the series with many aspects covered of relevance to modern biology as well as chemistry.

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