

# Teaching in the Biosciences: an Introduction for Postgraduates and Postdoctoral Fellows

28<sup>th</sup> April 2010

## Resources for Teaching Practical Labs

Short Guide to Postgraduate Demonstrators and Teachers

<http://www.bioscience.heacademy.ac.uk/ftp/resources/shortguides/demonstrators.pdf>

Demonstrating: provides key information and tips for demonstrators on practical teaching

<http://www.tla.ed.ac.uk/resources/tut-dem/Chap5.pdf>

Case Study: Mentoring scientific minds through group research projects – Maximising available resources while minimising workloads

<http://www.bioscience.heacademy.ac.uk/ftp/TeachingGuides/studentresearch/hejmadi.pdf>

Demonstrating in laboratories and practical classes

<http://www.brookes.ac.uk/services/ocsd/firstwords/fw111.html>

The Practical Compendium is an on-line collection of tried and tested practical exercises and associated student handouts and practical-related materials for laboratory and field classes, contributed by UK academics across the range of bioscience disciplines.

<http://www.bioscience.heacademy.ac.uk/compendium/default.aspx>

Feedback on Practical Teaching

<http://www.tla.ed.ac.uk/resources/tut-dem/Chap10.pdf>

Report on the Student View of 1st Year Laboratory Work in the Biosciences

In April 2008 the Centre for Bioscience (with financial support from AstraZeneca and the BBSRC) arranged a workshop involving 32 bioscience staff from across UK HE, to discuss the topic of first year undergraduate work in the biosciences.

<http://www.bioscience.heacademy.ac.uk/ftp/events/practicals08/hughes1.pdf>

- Students reported that they generally enjoyed practical teaching, preferably working with a partner rather than alone
- They also preferred practical classes taught at school rather than at university, due to better equipment, easier and less challenging activities, more relaxed approach and smaller groups
- Practical classes are valued by students for: learning new skills and using new equipment; the opportunity for social interaction; the function of practicals to illustrate material given in lectures; the acquisition of new knowledge through practical classes high interest value of practicals

Report: The student view of first year laboratory work in Biosciences

<http://www.bioscience.heacademy.ac.uk/ftp/reports/1styearlabs.pdf>

Report: First year practicals – Their role in developing future bioscientists

- Discussion points arising from the presentation on improving first year laboratory classes (p. 12)
- Examples of good practicals (p. 23)

<http://www.bioscience.heacademy.ac.uk/ftp/reports/pracworkshopreport.pdf>

Coping Strategies for Staff Involved in Assessment of Laboratory Write-Ups

Ian Hughes

<http://www.bioscience.heacademy.ac.uk/journal/vol3/beej-3-4.pdf>

- Reports on experience with the various strategies which may be used to cope with the increased marking load

Assessment of practical skills

<http://www.bioscience.heacademy.ac.uk/ftp/newsletters/ltsn11p4+5.pdf>