

Summary of

Teaching Ethics to Bioscience Students

Erlas Centre, Wrexham, Wednesday 1 November 2006

This event provided an opportunity for colleagues to discuss practice and share ideas on how to prepare students to deal with ethical issues. The day consisted of presentations from bioscientists describing the delivery and assessment of ethics teaching and practical examples of effective approaches, techniques and methods. The afternoon was split into two sessions: one aimed at the more experienced ethics teacher and the other at those new to the teaching of ethics.

- As a result of attending this event you would have had the opportunity to:
- Hear views of why it is important to teach ethics and help bioscience students to develop their ethical decision-making skills

Listen to accounts of practical examples of appropriate approaches, techniques and methods for teaching ethics to bioscience students

Keynote: Ethics - What should we teach and how should we teach it? Dónal O'Mathúna, Dublin City University

Using high profile cases Dónal illustrated some of the lapses in scientific integrity and procedure that have occurred in recent years. This is not just an issue for science and scientists but for society as a whole. A prime example is the publication of the 1998 study suggesting a link between the MMR vaccine and a bowel syndrome with autism. Subsequent to this article within 7 years the use of the vaccine dropped from 92% to 82% coverage. Merton's scientific norms of universalism, communalism, disinterestedness and organised scepticism are under pressure and in response to this, the teaching of ethics to bioscience students and other ethical training has been introduced (along with ethics codes, committees, misconduct statements). Teaching ethical theory presents bioscientists with an opportunity to venture into new teaching methodologies. Dónal highlighted the potential role of both stories and music in getting students to engage with the issues.

The use of drama in teaching ethics

Janet Marks, Y Touring

Following on from Dónal's examples of the potential for using stories and music, Janet gave the delegates a participatory introduction to using drama in teaching ethics. Drama and theatre are not only a refreshing change for most science students but also an excellent way for them to deal with complex issues. Despite the limited time slot Janet introduced the group to icebreakers, a simple exercise to explore 'what do we think?' and, importantly, role play. Details of the session are given in the handout below. More information on using drama with students can be found on the Y Touring web site.

Parallel Workshop Sessions

1. Teaching ethics - past, present & future

Facilitated by John Bryant and Dónal O'Mathúna, University of Exeter

John and Dónal facilitated the discussions, which were focused mainly around the following topic areas:

- Ethical theory/philosophical background
- Assessing student performance
- Class sizes
- Responses to the embedding of ethics in school curricula

2. Teaching ethics - a case study approach

Facilitated by Chris Willmott, University of Leicester

Chris' workshop, based around the use of case studies, was targeted at delegates who are new to the challenges of teaching ethical theory to bioscience students. Chris demonstrated how case studies provide a convenient way to enthuse students about ethics and provide a framework around which students can develop their thinking. Once aware of the benefits of a case study approach the next question becomes; where to gather material to build case studies? News items (generally available as video clips) provide good 'hooks' to promote student engagement with current bioscience issues. These can then be built upon and used as a springboard to complex (and perhaps less sensational) issues.

Swapshop

Swapshop sessions provide an opportunity for participants to share experiences, ideas and resources for others to try

Interactive student booklets for teaching ethics to animal behaviourists - John Cartwright (University of Chester) outlined his module on teaching ethics and animal welfare to animal behaviour students. The module is an example of resource-based learning and a useful and comprehensive booklet accompanies the course.

Bioethics Resources - Chris Willmott (University of Leicester) squeezed three items into his slot. He flagged up the latest Bioethics Briefings (Stem Cells and Issues at the End of Life), promoted BioethicsBytes (www.bioethicsbytes.wordpress.com a site hosting a collection of resources to assist in the teaching of bioethics) and announced 'Dolly' as the winner of his recent e-mail poll to find the top ten bioethics news stories.

Young People's Research Ethics Committees: Educating Science, Citizenship and Ethics - Linda Baggott la Velle (University of Bristol) presented the Young People's Research Ethics Committees pilot. This is an innovative two-year project to teach young people about science by training them as a research ethics committee.

Mass teaching of bioethics - practice in developing thinking and analysis - Roger Pearce (Newcastle University) teaches bioethics to classes of up to 100. Roger highlighted his 'mass sessions to practice thinking and writing of an argued case' as a way of moving away from essays and teaching ethical theory to cohorts of this size.

Ethical Frameworks CD - Andy Bond (University of Westminster) showed a brief clip from a CD based on a moral framework lecture given by David Cook

Related Resources

Willmott, C.J.R., Bond, A.N., Bryant, J.A., Maw, S.J., Sears, H.J. & Wilson, J.M. (2004) Teaching Ethics to Bioscience Students - A Survey of Undergraduate Provision. Bioscience Education E-journal, volume 3 Available at http://www.bioscience.heacademy.ac.uk/journal/vol3/Beej-3-9.htm

Ethics Audit Tool (incorporating sustainability) a developmental tool to help teachers consider the content and design of a course/programme with respect ethics http://www.bioscience.heacademy.ac.uk/resources/audit.aspx

Teaching Ethics to Bioscience Students Special Interest Group http://www.bioscience.heacademy.ac.uk/network/ethicsig.aspx