

Event Report

Teaching Ethics to Bioscience Students: engaging with the issues

Thursday 16th December, 2004

University of Leicester

This, the fourth of a series of meetings organised by the Special Interest Group on Teaching Ethics to Bioscience Students, was attended by over thirty delegates. Unlike earlier meetings, it focused on connecting ethical theory with real problems, through two workshops.

Methodologies in teaching ethics

Dr Roger Downie, University of Glasgow

Roger asked who should teach bioethics, what should be taught, and how. There was, he said, no single right answer to any of these questions. Alternatives included: optional course/compulsory course/material embedded in other courses; trained philosopher/informed biologist/both. At Glasgow the answers were devised by a Finnish philosopher and visiting Marie Curie Fellow, Henrikka Clarkeburn, who established a course and then trained biologists to deliver it. Since then, experience had shown the importance of evolution, to respond to changes in students and society and to take opportunities offered by changing or visiting staff. Roger also made important specific points, that learning philosophical terms could be helpful, though not essential, that the teachers needed to make connections between ethics teaching and other parts of the syllabus, and, finally, that one should not expect miracles.

Workshop - Biomedical Ethics

Rev Dr John Searle, President, Exeter and District Hospice

John gave an insightful and entertainingly illustrated history of the issue "When am I dead and when may I die?" that covered death from the 1960's (when if there was no pulse and no breathing, you were dead), through the introduction of brain stem death as a criterion, to today's concern with the "right" to die. Groups of participants then examined scenarios illustrating current dilemmas. Their remit was to decide what to do, following the instructions:

- identify the issues,
- agree a process by which the group will make a decision,
- make a decision, or if unable to decide identify the point of disagreement,
- set out the arguments for and against the decision.

The cases were deliberately controversial, such as "mercy"-killing; surgical separation of twins where medical opinion of what was best and the view of the parents differed; producing a "designer" baby to treat a sibling. Factors that came into play included the rights of individuals, utilitarianism including the limitation that funds may pose in medicine, the question of whose interests should be paramount, and, in the case of those unable to speak for themselves, who was responsible to protect their interests. The pooling in each group of different perceptions and principles proved a creative experience.

Workshop - Environmental Ethics

Rev Christopher Southgate, University of Exeter

Chris introduced the session with perceptive points: that we don't have the option of a low-impact existence because we are so many; that human interests should not necessarily be sacrificed to non-human interests; that ecosystems are not stable. Two case studies for group discussion were presented, chosen from the real world and typical of it, that is, complex and intractable. The first concerned degradation of the rainforest of a hypothetical poor country. Selling the rights to logging could help the national finances. It would also help wealthy ranchers by creating new grazing areas but would compete with the needs of subsistence farmers for wood and timber and with the life style of an indigenous tribe. An alternative was to sell rights to exploit the pharmaceuticals and biodiversity of the forest. This would preclude logging but was less beneficial to national finances; however it was potentially very valuable to the company buying the rights. The participants in the workshop were asked to form a hypothetical "Global Ecological Authority" and then argue how it should resolve this issue. The second case study concerned the use of nuclear power as a means to reduce CO₂ outputs and thus reduce the severity of global climate change. Amongst other ideas, the workshop members were asked to consider the "polluter-pays" and the precautionary principles; they found that these were not up to the challenge. They were also asked to consider how risk could be assessed. The ideas aired included: that nuclear power was a complex technology and too dangerous; that the climate was no less complex but was less understood than nuclear power; that there must be a third way (a popular view, though time-scale was possibly a problem); that the choice was a false one; that democracy and potential reductions in living standards made some solutions impractical. Most interesting was the potential ethical aspect of risk assessment. No single view was possible in such a complex subject, but the discussion was engaging and provoked considerable thought.

Swapshop

In this session participants briefly contributed experiences and ideas for others to try.

Ben Mephram (Nottingham) outlined utilitarian arguments for and against animal experiments and compared the advantages and disadvantages of causal analogue models (CAMs) and hypothetical analogue models (HAMs) for animal experimentation. Neither, Ben said, was perfect but together they formed a useful focus for discussing the use of animals in research.

Chris Willmott (Leicester) advertised the Bioethics Briefings he has organised (Ethics and Bioethics; Crop Plant Genetic Modification; Preimplantation Genetic Diagnosis; Xenotransplantation: available from the Centre for Bioscience).

Annette Cashmore (Leicester) described a role-play exercise on inherited disease as part of stage 1 genetics teaching. This linked ethics with genetics through a decision-making sheet for students asking whether, based on probabilities calculated from genetic data, they would consider genetic or pre-natal screening.

Roger Pearce (Newcastle) argued that the teaching of thinking was a wider objective than the teaching of ethics, and that ethics provided an excellent platform for teaching thinking. Finally, **John Bryant** (Exeter) discussed project work in bioethics, for example investigation of what groups of people, with possibly different preconceptions, thought of a current issue such as stem cell research. He showed how "dry", questionnaire-based, bioethics projects could meet the same requirements as "wet" projects in biology.