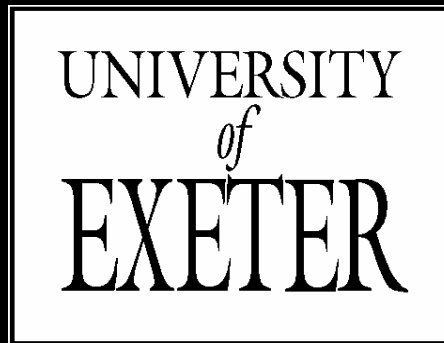


PROJECT WORK IN BIOETHICS

JOHN BRYANT



CONTEXT

- Are dry projects suitable for an honours degree programme in Biology?

WHAT ARE THE COMPONENTS OF A PROJECT IN BIOLOGY?

- Define a research problem
- Design / define the methods
- Collect the data using those methods
- Analyse the data
- Discuss the data / present conclusions

BIOETHICS FITS THE BILL

- Research problem - examples
 - What are the attitudes within a group or population to bioethical issues
 - What factors influence people's attitudes to bioethical issues?
 - Does exposure to a set of issues influence attitudes?

HOW WILL WE ANSWER THE QUESTION?

- The methods are those most often used in social science
 - Questionnaires
 - Structured interviews
- Need for ethics committee approval: the research subjects are humans
- There is a steep learning curve for biologists!

CARRYING OUT THE PROJECT

- Select the method that is appropriate for the problem
 - Questionnaire - different types
 - Can responses be 'quantified'?
 - Population sampling versus group comparisons
 - What are the variables?
 - Structured interview - gives opportunity for more open responses

'QUANTITATIVE' QUESTIONNAIRES

- A well-established method is to provide a series of statements
- Responses are given on a scale of 1-5, *e.g.* from 'Strongly agree' to 'Strongly disagree'
- Need to avoid bias
- Similar methods are used to obtain student feedback on lectures

CARRYING OUT THE PROJECT

- Collect the data
 - Sample size
 - Controlling the variables
- Analyse the data
 - Appropriate statistical methods
 - For interviews: 'coding' the responses
- Discuss and conclude

EXAMPLES

- Does visiting the Eden Project affect attitudes to environmental issues?
- Comparison of UK and USA academic attitudes to teaching bioethics
- What factors affect attitudes of students to stem cell research
 - Gender?
 - Religious commitment?
 - Subject of study?

MORE EXAMPLES

- Topics
 - GM crops
 - Abortion
 - Euthanasia
 - 'Designer babies'
- Variables
 - Level of education
 - Age

CONCLUSION

- Bioethics is a suitable topic for final-year projects in Biology