BOOK AND VIDEO REVIEWS

Animals in Education: The Facts, Issues and Implications

Lisa Anne Hepner (1994). Richmond Publishers: Albuquerque. 311pp. Paperback. Obtainable from the publishers, PO Box 91683 Albuquerque, NM 87199-1683, USA (ISBN 0 9639418 0 1). Price US\$12.95 plus US\$2.75 postage.

The title of the book is misleading in that the content tends to focus on a small and very specific component of animals in education, namely the dissection of whole mammals. Further to this, the main emphasis is on American University/College education with some reference to work in Biology in the final grades of American High Schools.

Consequently, the focus is on the dissection of cats, dogs, foetal pigs and frogs, for these appear to be the main organisms that are used in such contexts. There is not, then, the extended perception of animals in education that would pertain to the UK, where dissection of abattoir materials and perhaps invertebrates might be a feature. Let alone the idea that animals might be used for observation, behavioural studies, population dynamics, genetics and in a wide range of other contexts. As a result, the book generalizes to a degree which will be less well understood in the UK.

Lisa Anne Hepner has a clear message in the book: dissection of whole mammals at high school and university is unacceptable. She does appear to accept that others might choose to undertake such activities if they wish but does not say so in a clear manner. The book documents the personal crusade that she conducted throughout her high school and university years against the dissection of whole mammals. At some points it appears that the book, or about 200 pages of it, is a haphazard collection of all the letters, resources and information that she has collected and collated throughout her campaign. Such an opinion may be viewed, with some justification, as uncharitable, for the subtitle clearly reflects the three parts into which the book is broken down. In introducing the book the author asks four questions of the 'don't you agree . . . ?' format and then proceeds to assume that the reader does agree. If you find yourself not agreeing with some of the questions, as I did, then difficulty might be experienced in giving a fair review of the book.

The facts section of the book comprises four chapters which focus on the author's story, a brief history of dissection, an assorted collection of facts and a chapter focusing on students' legal rights to refuse to dissect. The author's high school experience is dismissed in a paragraph, leaving the rest of the opening chapter to focus on her progress towards a BSc degree in Biology.

The 'History of Dissection' is brief and not treated with academic rigour. It refers largely to a brief exploration of the dissection of human bodies and then leads on to the use of non-human animal substitutes.

The chapter entitled 'The Facts' presents selected facts relating to biological supply companies and sources from which the animals, used in dissection, are obtained. The author asserts that illegally taken pets form part of the trade and she follows this with details of how the reader might get the police to search for lost pets in the premises of dealers and biological suppliers. The chapter refers to some original research data from small-scale surveys, but such apparently factual studies are mixed in with speculation and opinion. There is no coherent theme running through this chapter which is largely a collection of unrelated issues presented in close juxtaposition. An example of this is the inclusion, towards the end of the chapter, of sections on school science fairs, animal care and use committees and undergraduate opinion surveys. Many valid points are made within the

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section but for me, they are lost amongst a rather unfocused and selective collection of information. For example, I fully concur with her views about collecting frogs from the natural environment for dissection (or any other organism for that matter), I agree too, that students should be offered alternatives to dissection should they wish, but the rather casual presentation of information of variable status and quality shows a lack of discrimination and this is often presented with minimal analysis or objective criticism,

The 'Legal and Legislation' chapter begins with the Jenny Graham story. This is summarized from a previously published article. Jenny, a Californian student, set a precedent for legal action such that alternatives to dissection be granted to students in elementary secondary schools who objected to dissection on moral grounds. The chapter goes on to explain that four American States had passed legislation similar to the above prior to 1994, with legislation pending in two other states. The chapter concludes, in a rather unsatisfactory way, with a sequence of action steps that might be taken to bring the dissection issue before your local school board.

The second section of the book focuses on issues, the ethical and educational issues as well as alternatives to dissection. The author here shows a deficit view of those prepared to offer or undertake dissection. She assumes that such an attitude is a consequence of a lack of training in ethics and philosophy. She then provides a rather brief and unsatisfactory philosophical discussion before referring the reader to other authors such as Peter Singer and Tom Reagan. No discussion is offered on the use of human dissection in medical schools or on, for example, the dissection of stillborn animals. Many points in this section are discussed in a rather superficial way. Some elements are presented in a pseudo-academic manner by taking an authoritative stance through reference to the literature. However, the literature referred to is solely that of the anti-dissection groups. Much of the logic offered is tautological. For example animal abuse is often seen as a first step towards human abuse and in support of this view two notorious American criminal cases are cited. Some data from a small-scale US study are also presented but at no point is there any attempt to make comparisons with criminals and non-criminals who have had similar school experience.

In the 'Educational Issues' chapter a number of studies are reviewed where student test results are compared for groups who have had some form of equivalent alternative experience. The discussion and treatment in much of this section is non-academic and non-scientific. The information is presented in a way which leaves the reader unable to judge the validity of the author's interpretations. Other studies quoted in this chapter appear to be prone to 'Halo' effects where the novelty of the approaches may have been a factor that influenced performance. Yet further studies appear to be making comparisons between unmatched samples.

The author sees whole mammal dissection as a rote learning activity rather than viewing it as a potential problem-solving approach to work where students, for example, may be asked to use Clinistix to test the null hypothesis that sugar concentration in all blood vessels of a mouse is the same. Yet further elements in this chapter (page 104) show that the author does not consider an insect to be an animal and hence perhaps some of the confusion caused by the title. There are claims that the author could find no literature on the rationale for dissection. Such a claim is rather weak when some articles quoted in the book were in the same journal issues as articles written in favour of dissection. The scope of the literature throughout the book is limited principally to North American sources. However, for a UK

reader interested in the topic the book does provide a useful reference to a selection of US literature.

The third chapter in this section on alternatives centres around animal anatomy, where models, simulations and video discs are involved, but it also suggests that the discussion of ethics should be integrated into science lessons. This is a further point that I would strongly condone, although it appears that the author is reluctant to accept that some students might make up their own minds to use animals in a number of ways which she sees as unacceptable. The author does make a good case for using alternatives on cost-efficiency grounds but there may, however, be other reasons that need to be taken into account.

The third section of the book, dealing with the implications, is where the coherence and flow within and between chapters breaks down. All chapters within this section of the book comprise loosely linked materials from a wide range of sources. In chapter 8 the sources are students recounting their experiences of dissection while in chapter 9 contributions from those who 'braved the system and won' are included. Chapter 10 reports on organizations run by groups of psychologists, medics and vets, who are against live animal use in experiments that would all qualify as regulated procedures under the Animals (Scientific Procedures) Act in the UK. Chapter 11 contains a collection of statements from a range of other professionals with regard to their feelings about the use of animals in education. The final chapter provides plans of action for High School/University students who wish to request alternatives to dissection.

The final 80 pages consist of appendices and a bibliography. For those who wish to follow items of American State Legislation relating to dissection, some parts may prove useful.

Overall, the book is of very specialist interest. It does not have an easy reading style and in many places a coherent theme is not followed. The final chapters are collections of loosely connected material that is presented without analytical comment. For me the book was sloppy. It contributes little to the dissection debate.

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Dolphins

Peter Evans (1994). Whittet Books Ltd: London. 128pp Paperback. Obtainable from the publishers, 18 Anley Road, London W14 0BY, UK (ISBN 1 873580 13 4). Price £7.99. The real world of dolphins, porpoises and small whales is described by one of the senior British mammalogists. The text is written particularly from an ecological point of view, giving not just the 'what' but also – as far as we know at present – the 'why'.

Some controversial matters, such as hunting, are simply reported in a factual way. However, as readers of recent issues of *Animal Welfare* will be aware, the Faroese do not kill pilot whales 'with a long knife called a "gaff". The gaff (shown in the illustration on page 84, wielded by an extraordinarily fierce looking man) is used to secure the animal, while the killing is done using a traditional knife, with a 15cm blade. The section on captivity, another controversial subject, is somewhat spoiled by repetition of the received opinions that captive dolphins 'generally suffer sensory deprivation and stress causing various