

‘Animal Ethics Dilemma’: an interactive learning tool for university and professional training

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Abstract

‘Animal Ethics Dilemma’ is a freely available computer-supported learning tool (www.animaethicsdilemma.net or www.aedilemma.net) which has been developed primarily for veterinary undergraduates but is applicable also to students in other fields of animal science. The objectives of the computer program are to promote students’ understanding of the ethics related to animal use, to illustrate ethical dilemmas that arise in animal use, to broaden students’ moral imagination, and to enable students to differentiate between types of ethical argument. The program comprises five case studies: (1) the blind hens; (2) ANDi the genetically modified monkey; (3) euthanasia of a healthy dog; (4) animal slaughter; and (5) rehabilitation of seals. Special consideration has been given to enhancing the pedagogic value of the program. Students can control their learning by selecting a variety of ways to explore the program; for example, they can navigate the program using the ‘Assist Me’ option, which explains the basis of the ethical arguments. Reality text provides details of real events on which the case is based, and a glossary of terminology is available for the students to explore. Selected access to a case template is also available, enabling students and teachers to create their own case studies. Evaluation of the program has been ongoing during its development.

Keywords: animal ethics, animal welfare, e-learning, teaching, veterinary curriculum

Introduction

Issues surrounding animal use have dramatically increased in number and complexity over recent decades. This has culminated in widespread changes to livestock production and other commercial sectors using animals, because economic factors must now be balanced against other factors including animal welfare. Such changes have been generated by increased funding of animal welfare research and new legislation regarding animal welfare (Lawrence 2006). Animal welfare groups have often instigated such changes. Debates on animal issues are typically polarised between animal advocates demanding change to the *status quo* and those opposed to change, such as the farming lobby. It is widely believed that all parties involved in animal use should be able to engage in ethical debate, including veterinary surgeons (Sandøe & Holtug 1998). If there is a lack of dialogue, this may reflect badly on the veterinary profession and others involved in animal use. It is, therefore, important to make sure that veterinarians do not suffer from a lack of understanding of ethical arguments and debating skills. The provision of training in bioethics is therefore essential for veterinary undergraduates, to ensure that veterinarians are able to contribute to improvements in the treatment and use of animals and to participate in societal debates on animal issues. The importance of ethical training in the veterinary

curriculum has been recognised by the European Union and is a requirement of the European directive (78/1026 and 78/1027). However, a recent European survey on the inclusion of animal ethics courses indicated a lack of consistency across veterinary schools in Europe (Edwards 2002; Gandini & Monaghé 2002; von Borrell 2002).

‘Animal Ethics Dilemma’ has been developed as a learning tool to facilitate the teaching of animal ethics and is freely available at www.animaethicsdilemma.net or www.aedilemma.net. It is intended to complement existing courses and not as a stand-alone module such as ‘Concepts in Animal Welfare’ developed by WSPA and the University of Bristol (WSPA 2002). This paper will provide a description of the program and discuss its role in the teaching of animal ethics.

Description of ‘Animal Ethics Dilemma’

‘Animal Ethics Dilemma’ is an interactive web-based program which is currently available in three languages: English, Danish and Swedish. It consists of five case studies: (1) the blind hens; (2) ANDi the genetically modified monkey; (3) euthanasia of a healthy dog; (4) animal slaughter; and (5) rehabilitation of seals. Each case study is intended to represent ethical dilemmas that can arise in different animal sectors. Every case has been written as a narrative, which has been divided into at least four levels.

Table 1 A summary of ethical perspectives described in the case studies in www.animaethicsdilemma.net.

| Ethical perspective | |
|---------------------|---|
| Utilitarian | According to the utilitarian perspective the only significant ethical concerns regarding animals are animal and human welfare. Activities which have an adverse impact on the well-being of animals may be justified if, all things considered, they lead to a net increase in welfare (for humans or other animals). |
| Animal rights | Defenders of animal rights believe that fixed ethical rules place limits on our treatment of animals: there are some things that we are not permitted to do to an animal whatever the circumstances. |
| Contractarian | The basic contractarian idea is that ethical obligations originate in mutual agreements or contracts between people. Non-human animals cannot make agreements. They lack the understanding and control needed to enter a contractual arrangement. As a result, animals neither create nor have moral duties. |
| Relational | The relational view is really a group of associated views, which emphasise the ethical importance of relationships between animals and human beings, and between and among humans. |
| Respect for nature | Advocates of respect for nature believe that we have a duty to protect not just individual animals, but also the species to which they belong — and, in particular, the integrity of each species. |

Within each level, the student is presented with a statement, an ethical dilemma, and then four or five possible responses. Both the statements and the responses correspond to different ethical perspectives, namely, contractarian, utilitarian, animal rights, relational, and respect for nature (Table 1). The narrative or storyline changes depending on the ethical choices selected by the student, and this is intended to challenge their perspective. Narrative twists are used as the student progresses through the levels, with the final level giving an outcome to their choices.

On first entering the program, the student is required to answer a set of 12 multiple-choice questions, based on the ethical perspectives listed above. Once completed, their choices are used to generate a personal profile, to illustrate the proportion of their choices that are characteristic of the contractarian, utilitarian, animal rights and other perspectives. This is represented as a bar chart, which is updated as the students progress through the program to reflect changes in their ethical choices.

Following registration, the student can begin to explore the case studies. Cases can be explored in a number of ways, by using the student's personal profile or by adopting a particular ethical perspective. This selection will determine the first dilemma with which the student is presented, so that if they decide to navigate the program using a personal profile

which shows a high preference for contractarianism, the first statement will be written from an animal rights perspective.

Terminology used in the case studies appears as highlighted text, enabling the user to click and learn more about the term, if they so choose. Terminology is also listed in a glossary, which can be viewed separately. In addition, explanations of the theories used are also available for the student to explore, by clicking on headings in the main menu.

The program continues to be developed in the form of a case template. The template will enable both students and teachers to develop their own case studies.

Pedagogic approach

In contrast to other components of the veterinary curriculum, animal ethics is a philosophically based subject, requiring a different set of learning skills. Pompe (2005) contends that a traditional didactic approach based on knowledge transfer is inappropriate, because it will not help students to learn how they should behave when confronted with an ethical dilemma. The learning outcomes of an animal ethics course will be influenced by the teaching strategies.

O'Neill (2004) and Reiss (2005) make several suggestions on pedagogic strategies to teach animal ethics, including the use of case studies and role-play. Special consideration has been given to the pedagogic value of the program.

Student-centred learning

'Animal Ethics Dilemma' adopts a student-centred approach to learning and has been designed to enable students to tailor their learning according to their needs. This has been achieved in a variety of ways. For example, students are provided with the 'Assist Me' option at the beginning of each case (Figure 1). This option provides additional information on the ethical rationale for the responses. Students can also test their knowledge by selecting to navigate a case from a particular ethical perspective.

Learning styles


In any group of students, there will be a variety of learning preferences or styles. The content, appearance and mechanism of the program have been developed with learning styles in mind, eg visual, audio, read/write and kinaesthetic (Fleming 2001). Although text-based, attention has been given to providing relevant photographs and other visual material such as graphs and videos. The amount of text on-screen has been limited, to appeal to students who are not strong in the read/write learning style. The interactive nature of the program aims to facilitate kinaesthetic learners.

Role-play

In all of the case studies, the students are required to adopt the role of a particular stakeholder, normally either a junior veterinary surgeon or a postgraduate student. The cases follow the career path of the person, dramatising the potential pitfalls and highlights of their ethical choices. The aim of role-play in the program is to engage the student, to provide them with a memorable experience (Reiss 2005).

Figure 1

ANIMAL ETHICS DILEMMA
AN INTERACTIVE LEARNING TOOL
FOR UNIVERSITY AND PROFESSIONAL TRAINING



The ANDi the GM monkey Case

Level 1 (4)

You have applied for a postgraduate research post with a team investigating an important zoonotic disease.

During the interview it is revealed that the research will use specific pathogen free (SPF) monkeys because they offer the best experimental model for the disease. Two days after the interview you receive a letter offering you the position. Further information on the post is also included: genetic engineering has been used to breed the SPF monkeys.

Does it make any difference that the animals involved are genetically modified? Will you accept the post?

Your choice: Find your **personal priority!**

Yes, I will accept the post. Nature changes! Genetic engineering is a tool to advance scientific knowledge and will, over the long term, benefit humans.
(Contractarian: [Theory](#) / [Why?](#))

Yes, I will accept the post. I think genetic engineering is acceptable as long as the benefits outweigh the costs to the animals.
(Utilitarian: [Theory](#) / [Why?](#))

No, I will not accept the post. Irrespective of the GM issue, I am against using monkeys in research, because monkeys are sentient and similar to humans.
(Relational: [Theory](#) / [Why?](#))

A screen-shot from the program 'Animal Ethics Dilemma'. Terminology is included as highlighted text in the case studies, enabling the student to control their learning. This screen also shows the different 'Assist Me' options, which identify the ethical perspectives and explain why each response represents a different ethical perspective.

Case studies

There are a variety of ways of motivating student learning. Reiss (2005) considers case studies to be highly motivating, because students perceive them to be relevant, especially when they are based on real-life events. The learning outcomes of case studies are partly determined by the level of detail provided: too much information may prove overwhelming, whereas too little can appear superficial and thus demotivate learning (Reiss 2005). In this context, the program enables the student to determine the level of information, adapting to the needs of the learner.

Personal profile

The learning objective of the personal profile is to provide the student with an understanding of their ethical choices and relate them to ethical theories. It is also a mechanism to increase their ethical awareness, in addition to increasing their knowledge. The profile gives the student feedback, and will be of inherent interest because it offers an explanation of their responses. Reiss (2005) suggests that teachers could also provide feedback during a debriefing tutorial when the students have finished using the program. Such a tutorial would provide an opportunity to discuss issues that have arisen.

Evaluation

With any new teaching resource it is important to evaluate the learning benefits. Evaluation has been conducted in a variety of ways during the development of 'Animal Ethics Dilemma'. The first stage of evaluation, to determine the user-friendliness of the program, was conducted early during its development. This was achieved by observing students using the program, followed by face-to-face interviews afterwards. Thereafter, questionnaire-based evaluation of the program's learning benefits has been carried out among first-year veterinary students enrolled on an animal ethics module at University College Dublin and students at the Swedish University of Agricultural Sciences. The evaluation process has continued during 2006 using larger cohorts of students at The Royal Veterinary and Agricultural University in Denmark. The editor of the program, who was not involved in the development and preparation of cases, also evaluated the program in order to assess the ethical arguments and the flow of arguments within a narrative string.

Since its launch, both students and teachers using the program have been invited to complete an evaluation sheet, which can be accessed from the main menu of the program. The evaluation results will be used to review the

program, in terms of both its mechanistic functions and its pedagogic goals.

Animal welfare implications

'Animal Ethics Dilemma' is a learning tool for undergraduates in veterinary medicine and related courses of study. In the broader context of animal welfare, it will help students to develop an understanding of the ethical theories that underpin debates on humans' use of animals. The program is designed to challenge ethical perspectives and thereby increase the ethical sensitivity and the moral imagination of its users.

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