Using drama to introduce ethics to technology students and practitioners

How to cite:

For guidance on citations see FAQs

© 2009 The Authors
Version: Version of Record
Link(s) to article on publisher's website:
http://www.ics.heacademy.ac.uk/events/10th-annual-conf/programme_day2.php

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online’s data policy on reuse of materials please consult the policies page.

oro.open.ac.uk
T

The poster describes the use of Joe Penhall's play Landscape with Weapon and Knights of Pen and Ink in teaching ethics in technology. Landscape with Weapon is a play in three acts that revolve around issues confronting an engineer who works in the weapons industry. Ned, the protagonist, has a number of broad questions concerning intellectual property rights, day-to-day morality, and daily professional conduct, amongst other ethical issues. Crucially, however, the play raises big questions concerning technological development and the portrayal of relationships between individual characters each with their own personal ethical stance, and in the development of these relationships through conversations and outcomes that vital ethical questions arise.

INTRODUCING ETHICS IN ICS

Unit overview

Ethics is an established area of academic interest, but it is only fairly recently that the relevance of ethics to ICS started to emerge clearly outside philosophical studies. Professional bodies in Engineering and ICS have begun to realise, as a condition for accreditation, the study of ethics-related topics, and, partially in response to these requirements, new pedagogies for teaching and learning these topics are gradually emerging.

Introducing Ethics in Information and Computer Sciences explores the idea that drama and dialogue provide powerful tools to help students and professionals to identify, discuss and understand ethical issues in their professional practice. The core of the Unit is based upon discussion and selection of plays and dialogues that raise ethical questions related to reference to professional skills. The examples also represent different styles of argumentation and, hence, illustrate the relevance of rhetoric in ICS. Indeed, many of the questions taken from academic texts in the area of ethics, it does so to provide learners with a shared vocabulary that can be used for practical analysis and discussion of real-world problems.

The Unit development has capitalised on the lessons and feedback gathered during a trial course run by the authors in 2008 with a small group of students at the Open University. The Unit provides a videoconferencing tool available on OpenLearn. The Unit will be available in various formats for download and reuse within a Creative Commons License.

LANDSCAPE WITH WEAPON

An allegory

Landscape with Weapon centres on the development and exploitation of a weapon system, called the IPR, that can be viewed as representing the advance of any technology that has the potential to cause harm. Any weapon system will inevitably cause fatalities if used whilst, in many cases, the likely potential harms of different pieces of kit might be rather more remote. But this is also a play about the impact that IPR might create through a division of labour, the exploitation of a division, a technology that might have the potential to cause injury or, even, the extra-ordinary use of resources. Therefore, the play refers itself to the knife as a piece of technology, and to the weapon as a metaphor. Literature is, nevertheless, a valuable object when used for all sorts of practical purposes.

Ethical stances

As a dentist, Dan meets his customers face-to-face while he performs his work, and his professional skills put him in control of the immediate outcomes of his work. On the other hand, Ned is a technologist, and he is not normally in contact with the users of the system when they are designing something that is not yet known with certainty; perhaps a small part of a larger-scale system that is not intended to be deployed. Therefore, any discussion that a technologist has about the deployment of a technology is likely to be less speculative, and ensuring a ‘good’ outcome has to depend on a good understanding of how the clients are going to behave.

This also implies that, to ensure a ‘good’ outcome, the technologist has to have some authority over the technologist has to have some authority over the system to be developed and, on occasion, answered. Accordingly, such dialogues influence advice and guide conduct. Rather than merely discuss the formulation of a plan, the play encourages the technologist to consider the correspondences with characters that feature in works like Virtual visualisation and the ‘Ethics’ video, that can also be seen as a kind of handbook on the ethics of technology that might create new divisions, a technology that might have the potential to cause injury or, even, the extra-ordinary use of resources. This implies that the play itself refers to the knife as a piece of technology, and to the weapon as a metaphor. Literature is, nevertheless, a valuable object when used for all sorts of practical purposes.

Theoretical grounding and terminology

G. E. Moore on ‘ethics’ (Moore, 1903)

R. Rorty on ‘final vocabularies’ (Rorty, 1989)

L. Wittgenstein on ‘language and the use of conditions’ (Wittgenstein, 1967; 1992)

M. Nussbaum on ‘emotions’ (Nussbaum, 1998)

Some lessons

The Unit contains lessons on drama and questions that dramatists and audiences are able to discuss in relevance to practitioners in ICS as well as technologists. Generally, these include: expand your final vocabulary; recognise the limits of your authority; recognise that technology is for people and they have preferences and interests.

Learning Outcomes

After studying this Unit you should be able to:

- Discuss what ethics is and what constitutes an ethical issue.
- Identify and discuss ethical issues that arise in the media, in routine conversations and, in particular, in professional practice.
- Discuss the role of emotions in ethical deliberations.
- Discuss the notion of consent and its different ethical considerations.
- Identify and discuss the ethical issues presented in the play and how they arise, with an emphasis on explaining how language is used to affect other people’s ethical perceptions and convince them of specific points.

Core resources

In addition to various excerpts from the 2008 trial video discussions, the following materials are used in the Unit:


Synopsis

The play revolves around the issues faced by Ned, an engineer who has created a novel technology, originally envisaged for surveillance but eventually construed as a weapon of mass destruction. The play begins with a powerful conversation between Ned and his brother Dan, a dentist, who needs to come to terms with not only the potential implications of his invention, but also his own motivations and feelings towards this technology. As the play unfolds and other characters appear, Ned is led towards a changed outlook on technology and the professions who create it.

Relationships: does mom know?

The beginning of the play presents a fairly naive Ned, who initially believes himself to be in control. He is clearly very proud of his intellectual achievements and less concerned about matters that he is to blame. He explains his inventions, and when he does so, he finds analogies that highlight the aesthetics of what he is designing. At a crucial point in the conversation, his brother Dan asks: ‘does mum know?’ This is a really significant point in the play because it draws in another relationship and, accordingly, the potential of different ethical positions.

In the end

Ned makes a number of statements in the final act. He says, ‘The engineer’s prime task is to make a machine’, or ‘perhaps, the technology is as effective as possible.’ That is the duty of the engineer; that is the task. Perhaps most developers would agree that this is their job, that they need to make ‘systems’ or ‘devices’ effective, the ‘best’ technology they can.

However, Ned then introduces the artist’s imperative to discover something: a discovery that gratifies the artist directly and/or indirectly, if the audience betrays its satisfaction with what the artist presents. But, of course, art also has the potential to transform the way we see things and bring about changes to the way we live our lives. In the context of technology development, this implies that the developer may merely provide gratification, but it is the artist that has the potential to create something that is within an industrial complex, which may have the capability to make and distribute what has been discovered. Therein lie big ethical issues.

Ned also talks about how technology can come into conflict with personal morality, which is a concern that he doesn’t explore in the technical task, the kind of everyday morality that might be deployed in dealings with friends or family. As a developer and artist, Ned has come to realise that, once the potentially damaging technology is moved out of the hands of the developers, the kind of everyday morality that might be deployed in dealings with friends or family.

Acknowledgements

We are indebted to the HEA Subject Network for ICS, OpenLearn and COLMSCT for their support at various stages of the work described here. We are also deeply grateful to the participants in the 2008 OpenLearn trial.