



香港城市大學  
City University of Hong Kong

專業 創新 胸懷全球  
Professional · Creative  
For The World

## CityU Scholars

### Learning in a WWW Based Teaching Environment Reconsidering Ethical Principles and Legal Issues

Dhillon, Gurpreet; Davison, Robert

Presented: 01/06/1999

#### Document Version:

Post-print, also known as Accepted Author Manuscript, Peer-reviewed or Author Final version

#### Publication record in CityU Scholars:

[Go to record](#)

#### Publication details:

Dhillon, G., & Davison, R. (1999). *Learning in a WWW Based Teaching Environment: Reconsidering Ethical Principles and Legal Issues*. 11th World Conference on Educational Multimedia, Hypermedia & Telecommunications (ED-MEDIA 1999), Seattle, Washington, United States.

#### Citing this paper

Please note that where the full-text provided on CityU Scholars is the Post-print version (also known as Accepted Author Manuscript, Peer-reviewed or Author Final version), it may differ from the Final Published version. When citing, ensure that you check and use the publisher's definitive version for pagination and other details.

#### General rights

Copyright for the publications made accessible via the CityU Scholars portal is retained by the author(s) and/or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights. Users may not further distribute the material or use it for any profit-making activity or commercial gain.

#### Publisher permission

Permission for previously published items are in accordance with publisher's copyright policies sourced from the SHERPA RoMEO database. Links to full text versions (either Published or Post-print) are only available if corresponding publishers allow open access.

#### Take down policy

Contact [lbscholars@cityu.edu.hk](mailto:lbscholars@cityu.edu.hk) if you believe that this document breaches copyright and provide us with details. We will remove access to the work immediately and investigate your claim.

Dhillon, G., & Davison, R. (1999). *Learning in a WWW Based Teaching Environment: Reconsidering Ethical Principles and Legal Issues*. 11th World Conference on Educational Multimedia, Hypermedia & Telecommunications (ED-MEDIA 1999), Seattle, Washington, United States.

# Learning in a WWW Based Teaching Environment: Reconsidering Ethical Principles and Legal Issues

Gurpreet Dhillon<sup>1</sup> and Robert Davison<sup>2</sup>

<sup>1</sup>College of Business, University of Nevada Las Vegas  
Las Vegas, Nevada, USA  
Email: dhillon@nevada.edu

<sup>2</sup>IS Department, City University of Hong Kong  
Kowloon, Hong Kong  
Email: isrobert@is.cityu.edu.hk

## Abstract

*This paper explores the nature and scope of web based teaching. We argue that since the use of Web technology has transformed the nature of the 'delivery channels' and 'teaching relationships', we are witnessing an emergence of radically different 'instructor ethics'. The argument is conducted by analysing the authors' personal experiences in the development and delivery of web based teaching materials. We adapt the framework proposed by Vepsäläinen and Mäkelin [3] to interpret various issues in web based teaching and the resultant ethical challenges.*

**Key Words:** Web based teaching; ethical principles; legal issues.

## 1. Introduction

Advances in information and communication technologies have had a dramatic impact not only on the delivery of teaching material to students, but also on the nature, scope and content of materials presented by teachers. Nonetheless, changes in teaching methods are not taking place in a vacuum, since economic, organisational and social forces are increasingly making teaching and learning a complex exercise. In this paper we explore the nature and scope of web based teaching and argue that because of changes in the 'delivery channels' and 'teaching relationships', we are witnessing the emergence of radically different 'instructor ethics'. The argument is conducted through a case of web-supported teaching in Hong Kong.

## 2. Learning support systems

In the context of economic activities, Ciborra [1] identifies three kinds of organisational forms: markets, bureaucracies and clans. In the context of an educational

setting, a market exists if a student has total freedom of choice in taking up any course from any institution for a degree program and also had the ability to identify the relevant instructor. An instructor in turn would take on the role of a facilitator. A bureaucracy exists when a student does not have any choice in determining either the nature and content of the courses or the nature of instruction. A clan relies on a high level of goal congruence, shared norms, values and traditions. A careful selection of individuals determines a high level of homogeneity and trust. Most educational institutions today function in a clan mode.

One of the main objectives of any educational establishment is to leverage all known resources to impart knowledge to students. In that sense an educational institution can be considered as an arrangement enacted by the interaction of partially ignorant agents who need to acquire and subsequently communicate knowledge. An instructor, then, is merely a teacher or a facilitator in the process of gaining knowledge. Two important questions emerge. First, what is the nature of the relationship between the teacher/facilitator and the student? Second, what mode or channel is adopted in the delivery of knowledge?

While tackling complex design issues with respect to electronic markets in a corporate environment, Vepsäläinen and Mäkelin [3] focus on the nature of relationships and the delivery channels to provide a synthesised framework to understand the various relationships. We have adapted the framework to study the changes, enabled by information technology, taking place in teaching and disseminating knowledge (see Figure at <http://fabweb.cityu.edu.hk/is4532/images/fig1.doc>).

The nature of the relationship between the teacher/facilitator and the student can be defined on the basis of the scope and the type of student-teacher contact. In an educational setting, the scope ranges from *simple* to *complex*. Simplicity refers to an undifferentiated relationship between, say, one teacher/facilitator and many students. A complex relationship, on the other hand, could take the form of customised service. Most traditional institutions operate on a *simple* relationship model.

The delivery channel can be defined by the *channel type* and *channel structure*. In the context of disseminating teaching materials, channel types could range from standalone and decentralised ones (e.g. independent means adopted by an instructor to deliver teaching material) to a networked infrastructure (e.g. an institution-wide initiative). Channel structure could take the form of independent agents (e.g. private tuition) to internal institutional employees (as in the present day educational system) to self service by direct student access.

### **3. Learning support systems and the case of WWW based teaching**

We now illustrate the concept of learning support systems with reference to a web-supported course that has been running for the last two years at the City University of Hong Kong (CityU). The course, IS4532 – Information Systems Ethics and Professional Issues – is taken by all final year BBA in Information Systems students.

### **3.1. Background**

The objective of IS4532 is to sensitise students to various aspects of ethics in Information Systems and is geared towards providing *local* content topics and cases for analysis. The course introduces both the philosophical concept of ethics and also a framework (after [2]) that can be used for analysing ethical dilemmas. It then embarks on an in-depth investigation of several major themes in ethics, viz.: IPR, data privacy and protection, electronic monitoring, computer law, and accountability/liability of software developers.. In addition, guest speakers from the Independent Commission Against Corruption (<http://www.icac.org.hk>) and the Office of the Privacy Commissioner for Personal Data (<http://www.pco.org.hk>) are invited to talk to their areas of expertise as it concerns Information Systems.

The mode of teaching is a mixture of tutorials and lectures. In tutorials, cases are typically analysed by students. In lectures, approximately half the time is reserved for the course instructor (or guest speaker), while the other half is used for student-led presentations. In the latter, students are required to write and act out a scenario that illustrates a particular ethical theme. The role play scenarios are always enjoyable, sometimes scandalous or suggestive, and colourfully illustrate the ethical themes.

### **3.2. The Service Package**

The nature of the relationship between instructor, guest speaker and students is a multifaceted and complex one, with changing roles evident. Around half of the students are required to develop and act out scenarios for the rest of the class, thus temporarily transforming themselves into facilitators. The relationship between instructor and students is dominated by transactions, rather than the development of personal relationships, given the size of the class (120 students) and the temporary nature of the course (one semester).

### **3.3 Delivery Channel**

Course materials (presentation notes, videos, slides, documents, external links) are disseminated primarily via the course web pages. All presentations are video-taped and subsequently made available in RealVideo format. On occasions, the comments that are made in a lecture cannot be substantiated or could be construed as libellous; these are edited out before the file is released. The web pages themselves are located on a server maintained by CityU's Faculty of Business (<http://fabweb.cityu.edu.hk>).

## **4. Discussion**

In the following discussion, we focus on two key issues in ethics, viz.: accountability and Intellectual Property Rights (IPR). These two issues are closely linked, since a number of people are involved in creating material (instructors, guests and students), and potentially a number of people could claim ownership rights of the material (creators, administrators, the institution itself). In our own experience, little information regarding either IPR or

accountability in a teaching context has been disseminated within CityU, nor indeed is there much public debate or concern about this relatively new issue.

The issue of control of material (and hence its effective IPR status) is critical. Instructors, as regular University staff, might be expected to cede IPR to the University, but does this apply to guest instructors or to students? If a Dean, for example, decided to make a sample set of such materials available to an external entity, should he consult any of the involved creators? And if he did not, would any of them have any recourse to take action to protect their IPR? Since the web pages are currently not password protected, what would the situation be if an external entity repackaged and sold material without requesting permission (and in any case who has authority to give permission)? Who in CityU would be authorised to take action in defence of copyright? Alternatively, if a complaint was made about the libellous content of available materials, would accountability lie with the University (for staff), the guest instructor's employer or students themselves?

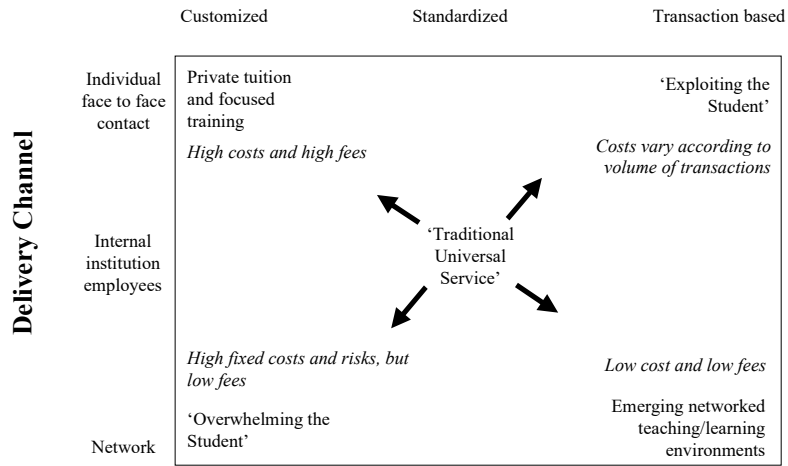
## **5. Conclusions and Recommendations**

The ethical challenge in this case concerns convenience in access versus protection/control/ownership of materials. We seek to protect the IPR of all creators, yet acknowledge that accountability for that IP is critical. In order to attempt to resolve the dilemma, a serious dialogue within the university itself is critical – to establish lines of authority and ownership, and very likely a code of practice for all involved parties. Failure to do so may result in IPR and legal challenges from both internal and external entities, with little assured protection for any of the parties concerned. Instructors have an obligation to ensure that they know what their universities' policies are, and if there are none, then to stimulate their development.

## **6. References**

- 1 Ciborra, C., *Teams, markets and systems: business innovation and technology*. 1993, Cambridge: Cambridge University Press.
- 2 Kallman, E.A. and Grillo, J.P. (1996) *Ethical Decision Making and Information Technology*, McGraw Hill: New York.
- 3 Vepsäläinen, A. and M. Mäkelin. *Service oriented systems and the economics of organizational transactions*. in *10th IRIS Conference*. 1987. Vaskivesi, August.

## Nature of student-teacher relationship



**Figure 1. Learning support system matrix (based on concepts proposed in [1,3])**