Interactive Teaching and Learning Observatories: Using videoconferencing for teaching and learning in HE

Dr Rolf Wiesemes, The University of Nottingham

rolf.wiesemes@nottingham.ac.uk

Introduction

The concept of the interactive Teaching and Learning Observatory was originally developed in the University of Nottingham's School of Education as a means to allow large groups of teacher trainees to observe and discuss live classroom lessons in secondary schools throughout their teacher training year through video conferencing. The concept of the i-TLO has been transferred into the School of Nursing where the i-TLO is also used as a means to link with nursing into healthcare practice settings and as a means to access experts more widely and easily. Similar video conferencing uses have been implemented in other schools at the University of Nottingham and beyond. Overall, this presentation will focus on the benefits of video conferencing uses in HE, its limitations, and how video conferencing uses for teaching and learning purposes can be theorized using multi-dimensional frameworks of analysis.

Video Conferencing Uses in Higher Education: case studies

The use of video conferencing for teaching and learning purposes is becoming more widespread. Whilst in the past the quality of video conferencing has been affected by reliability, bandwidth and connectivity issues these issues are less and less important. Increasingly, universities and schools have video conferencing facilities which are used for a variety of purposes ranging from informal meetings via small group discussions between remote partners to highly structured large scale observations of remote teaching and learning settings.

Use of video conferencing technologies is not new and has been discussed from a variety of perspectives, for example as a means to deliver and develop distance education (Freeman, 1998; Cullimore, 1999), learner-centred approaches (Sharpe et al, 2003), intercultural and collaborative learning (Furr et al, 2002) In terms of outcomes, video conferencing has been analysed in relation to student benefits (or lack thereof). (Dyke, 2006; Chen et al, 1998).

In this paper, we will present two case studies of video conferencing uses in two different university departments – video conferencing uses in the School of Education and in the Division of Nursing. In the context of initial teacher education, there has been some limited research work undertaken based on ongoing video conferencing activities such as the *interactive Teaching and Learning Observatory* (Coyle, 2004) at the University of Nottingham's School of Education and as part of the *in-Step* programme (Mitchell et al, 2008) at the University of Sussex's School of Education.

The *interactive Teaching and Learning Observatory model* developed initially at the University of Nottingham's School of Education (Coyle, 2004) has also been transferred to the Nursing Education setting. The Video Conferencing and Teaching and Learning Observatory Project in the University of Nottingham School of Nursing is an educational development project designed to implement and evaluate the use of video conferencing facilities for teaching and learning across a multi-site educational organisation and NHS clinical settings.

The University of Nottingham School of Nursing is spread over five major education centres, some of which span multiple sites, covering in total an excess of 3000 square miles. The School provides a range of provision from certificate and diploma through to Master's and Phds, most of these are offered in more than one of the School's education centres and run several times in a year. Many of the courses provided require that students spend a large percentage of time learning in nursing practice placements. This learning follows the apprenticeship model of learning and takes place in a variety of different health care settings. For example: hospital wards, doctor's surgeries, nursing homes, community health centres and care homes.

The size and complexity of the School of Nursing, both in terms of the number and type of courses delivered and its disperse geographical spread, make it an ideal site for using Video Conferencing for teaching and learning and for the development of a Teaching and Learning Observatory (TLO).

TLOs involve a network of interactive Video Conferencing and data sharing sites (Coyle, 2004) which provide students access to a wide range of workplace experiences during their university training. The TLO being developed in this project is transferring the model conceived and implemented by the University of Nottingham School of Education to a health care setting.

Discussion and Conclusion
This paper brings together evaluation and research findings from these two video conferencing projects and examines what constitutes best practices in video conferencing uses in HE settings where linking into practice and remote settings might be considered as vital for adding value to course content. As video conferencing practitioners we are aware of various activities in the field of video conferencing in formal teaching and learning contexts. However, to date there is little information about uses of video conferencing for teaching and learning purposes in HE and in schools. Also, whilst BECTA provides some information on video conferencing on their website, this information is mostly technical and purely descriptive. Drawing from Communities of practices theory (Wenger,1998) and Critical Incidents theory (Kain, 2004; Tripp, 1993) the paper will outline a theoretical model which will allow to identify and implement 'best practices' more easily.

The paper will examine various video conferencing uses in Nursing Education and Teacher Training settings and will also bring in other examples of video conferencing uses from the University of Nottingham and further afield. Through these examples we will develop a model based on Communities of Practices (Wenger, 1998) that will develop a better understanding of the breadth, the depth and the potential of video conferencing uses in HE settings.

Overall, the paper will develop a model that describes the impact of video conferencing uses on students in HE, the potential role of technologies for learning and teaching in HE (Siemens, 2008; Goldman et al, 2007) and will thus contribute to a better understanding of the impact of technology uses on learners. Additionally, we will present a conceptual framework for the in-depth study of video conferencing uses in a variety of teaching and learning settings in HE.