

# PROMOTING CULTURAL AWARENESS IN HEALTH CARE STUDENTS WITH THE USE OF VIRTUAL MOBILITY, COMMUNICATION TECHNOLOGIES AND AUTHENTIC CASE STUDIES

*D. Chambers<sup>1</sup>, H. Wharrad<sup>1</sup>, F. Todhunter<sup>1</sup>, K. Chambers<sup>1</sup>, D. Nencini<sup>2</sup>, J. McGarry<sup>1</sup>*

<sup>1</sup> *University of Nottingham (UNITED KINGDOM)*

<sup>2</sup> *Free lance (UNITED KINGDOM)*

*derek.chambers@nottingham.ac.uk, heather.wharrad@nottingham.ac.uk*

## Abstract

A significant outcome of globalization has been a greater movement of peoples, and societies around the world are increasingly becoming multi cultural. Recent European statistics show that, in 2009, the UK had just over 4 million foreign-born citizens (6.6% of the UK's total population). Those who come from outside of the EU constitute 3.9% of the UK's population. The changing demographics and economics of a growing multicultural world and long standing disparities in the health status of people from diverse ethnic groups and cultural backgrounds has led to cultural awareness (also referred to as cultural competence, cultural sensitivity and multiculturalism) in nursing curricula receiving renewed emphasis (Lipson & DeSantis 2007; Law & Muir 2006). A Commission of the European Community (2007) report on nursing stated that experts of today should be able move in global labour markets and they should be able communicate with foreigners. An essential way the report sees this being achieved is through student exchange programmes.

Studies have demonstrated that the most effective way of engendering cultural awareness in students is through student exchange (Koskinen & Tossavainen 2004) since they enhance student's understanding of the complex dynamics of cultural health and awareness. In addition nursing students who experience an exchange have demonstrated an increased tolerance and willingness to work globally (Kokko 2011). As well as the cultural benefits of student exchange it has also been found to promote personal growth including self reliance and self confidence. Since there are massive numbers of students studying nursing and few have the opportunity to travel for a student exchange experience, we need to find ways to scale up this element of the curriculum so that all students can experience authentic cultural study.

Virtual mobility programmes utilising communication technologies to allow students from different countries and cultures to study together offer a possible solution. Within the context of this paper virtual mobility (VM) means the use of information and communication technologies (ICT) to obtain some of the benefits as one would have with physical mobility but without the need to travel. We have been piloting virtual mobility programmes with healthcare students from other countries using a mix of institutional and social communication technologies. With support from the Universitas21 Health consortium, we are now expanding the programme to involve more countries. The programme uses authentic visual and auditory stimuli in order to engage interprofessional groups of students in health care problems facing populations from countries other than their own. Using this problem solving, case study approach students are confronted with scenarios that require them to engage far more than with more static, text based, instructivist informational material. Evaluation research will determine whether this approach does develop cultural awareness and whether learning is more meaningful and enduring. This paper will present the virtual mobility programmes we are delivering, highlighting the benefits and challenges as well as reporting on research findings.

Keywords: Cultural awareness, ICT, case studies, virtual mobility, student electives.

## **1 INTRODUCTION**

Globalization is a key feature of the contemporary world. A significant outcome of globalization has been a greater movement of peoples, and societies around the world are increasingly becoming multi cultural. Like many countries, the United Kingdom (UK) has seen a substantial increase in its immigrant populations from both within the European Union (EU) as well as from Non EU countries. Recent European statistics show that, in 2009, the UK had just over 4 million foreign-born citizens (6.6% of the UK's total population). Those who come from outside of the EU constitute 3.9% of the UK's population, placing the UK 40th in the world for net migration [1]. Thus the population of the UK is increasingly becoming more diverse.

Such mass movement of populations has major implications for the world's health care systems. To some extent this has been acknowledged by the World Health Organisation, through its International Health Regulations, which promotes country co-operation in order to prevent and respond to acute public health risks which may cross borders and trigger pandemics [2]. But as important as emergency measures are the implications of mass immigration extend to all aspects of health care with host nations needing to ensure that their health professionals are equipped to cater for people from different cultural backgrounds and their different disease profiles, cultural beliefs and health values. This is particularly so of nurses whose preponderance of numbers means that they are particularly likely to encounter diverse populations who enter the health system. This fact was recognised by a Commission of the European Community report [3] on nursing which stated that experts of today should be able move in global labour markets and they should be able communicate with foreigners. Therefore, in order to prepare nursing students to be 'culturally aware' and proficient within a diverse health care environment a curriculum is required that offers significant cultural perspectives [4].

Despite the changing demographics and economics of a growing multicultural world, nurse education, in the UK, has been relatively slow in incorporating cultural care into its curricula. According to Wilson Covington [5] this is because nursing in the UK is grounded in western middle class values, which have subsequently produced a degree of ethnocentrism. Contemporary multicultural health care environments require nurses to discard certain assumptions. For example it is often assumed that all recipients of health care evaluate quality of care using the same criteria originally designed for a largely homogenous mainstream culture [6], but as we are discovering this assumption has produced health disparities [7]. These disparities largely occur because of a failure to acknowledge differing patient characteristics. People from differing cultures will often: describe symptoms differently; have different thresholds for seeking care and have unfamiliar beliefs, in comparison to the dominate culture, all of which will influence whether or not they comply with nursing advice [8].

## **2. CULTURAL AWARENESS & STUDENT EXCHANGE**

Although originally slow to respond to the changing demographic these long standing disparities have now led to cultural awareness (also referred to as cultural competence, cultural sensitivity and multiculturalism) in nursing curricula receiving greater emphasis [9,4]. One way that this is being achieved is through student exchange programmes [10].

Student exchange, as a means of promoting cultural awareness, has also been endorsed by both the Commission of the European Community [3] and other studies [11] as being the most effective way of engendering cultural awareness in students. According to Kokko [12] student exchange programmes not only enhances student's understanding of the complex dynamics of cultural health and awareness it also increases their tolerance and willingness to work globally.

The problem for nurse educators is that the numbers of students studying nursing are considerable subsequently very few have the opportunity to travel for a student exchange experience. However given the need for nursing students to become more aware and responsive to the needs of culturally diverse groups nurse educators need to find ways of 'scaling up' this element of the curriculum so that all students can experience authentic cultural study. The provision of this experience has been a major concern of the Universitas 21 (U21) Health Sciences group.

Founded in 1997 U21 is a collaborative network for international higher education and consists of 23 research intensive universities from 15 countries. The core values of U21 are:

1. a global focus and perspective
2. a commitment to excellence in all we do
3. a commitment of those involved to collaborative and co-operative work and spirit while ensuring there are clear outcomes
4. a determination to achieve added value
5. a constant striving for innovation and the creation of multilateral opportunities for members
6. sustainability of activity

U21 has a number of Collaborative Groups which comprise colleagues from the same (or similar) disciplines who meet to discuss topics of mutual interest and who collaborate on issues of importance within their field. One of these groups is the U21 Health Sciences group whose membership includes: dentistry, [health and rehabilitation sciences](#), medicine, pharmacy [public health](#) and [nursing](#). Concerns about the paucity of students able to experience student exchange led the Health Sciences Group to consider how to utilise new technologies to introduce cultural perspectives into the curriculum thereby moving closer to an internationalised or 'multi-perspective curriculum' [13].

### **3. ROLE OF TECHNOLOGY**

Information and communications technology (ICT) can support the development of a multi-perspective curriculum in many ways and using a range of technologies, including lower fidelity text/audio based platforms such as texting, email [14] and Skype, through to higher bandwidth technologies such as videoconferencing [15]. ICT therefore has an important part to play in supporting students going abroad by enabling synchronous and asynchronous access to tutor support in the home institution and by providing web based accessible course materials (assuming an internet connection is possible). Provision of a *virtual* elective experience by utilising institutional technologies such as virtual learning environments (VLEs) and personal technologies such as mobile phones and social networking tools is now being explored. The possibilities for using ICT to create virtual electives/mobility for those who cannot physically go abroad are indeed exciting and have the potential to radically change the educational experience of healthcare students.

To date reporting of studies evaluating virtual mobility initiatives have been relatively small scale projects and involve communication between institutions that have been described as 'monocultural' for example Bell (2008) investigated the use of videoconferencing involving 16 students from American, Australian and Irish Universities. A larger initiative called Communication across Borders using the CABWEB portal involved nearly 2000 students who engaged in online collaborative activities, and 85% agreed that their participation enhanced cultural exchange, helped with language learning, enabled development of critical evaluation skills and generally helped them in their coursework [16].

### **4. VIRTUAL EXCHANGE PROGRAMMES**

Three virtual mobility projects based at the School of Nursing, Midwifery & Physiotherapy at the University of Nottingham, UK have been initiated as a result of the U21 goals to increase global awareness in healthcare. The first study - the Virtual Exchange Programme (VEP) began by linking students at Nottingham and Queensland. The pedagogical framework for the VEP has a strong collaborative component based on a constructivist approach aligned to the learning activities presented. Initial tasks were facilitated using a light touch around socially mediated enquiry about

hobbies and interests. The academic depth of inquiry and curiosity-driven exploration about nursing and other health related issues was increased incrementally [17]. The technical platform used was the institutional VLE - WebCT.

The U21 Health Sciences Group has been engaged in two major goals, alongside facilitating cultural awareness within health care students' through programmes of student exchange/mobility as mentioned earlier, the second goal is to promote students' understanding global public health issues and the United Nations Millenium Development Goals (UN MDG's Fig. 1). Since there was a clear synergy between these two U21 aims, what was needed was a learning activity that would incorporate these two goals. To this end a number of case studies based around the UNMDGs have been developed that engage students in problem solving activities to facilitate students in gaining insights into the health and social care problems faced by people from poorer nations & social economic groups. Using a constructivist pedagogical model these case studies will be used in problem solving activities to promote cultural dialogue between students. Two studies at Nottingham are using UN MDG case studies and virtual communication via ICT in this way. Both are in the development phase. In one project, we are using another VLE - Moodle to present learning activities based around the UN MDGs specifically focusing on women's health involving students at Nottingham, Dundee and Dublin. The third study which has been funded by the U21 consortium aims to scale up the VEP by engaging 4 more partners to join Nottingham, Queensland and Aukland and to involve other professional groups alongside nursing students. If successful ultimately all U21 university members (and others outside the consortium) could be involved in the programme.

## Millennium Development Goals UNMDGs to be achieved by 2015



Figure 1 Schematic diagram showing the United Nations Millenium Development Goals

### 4.1 Case study generator tool

A case study development tool that will allow further case studies around the UNMDGs to be generated, adapted and shared by all the partners (and their students) has been developed in Adobe Flex. The tool was modelled on the case studies in the award winning Breaking Barriers CD (Fig. 2, [18]). The tool will provide a flexible template in which to develop the cases from a computer desk top and delivered to students as web based package. The tool allows lecturers to develop highly adaptable and interactive case studies which will form the basis of online collaborative discussion between diverse student groups.

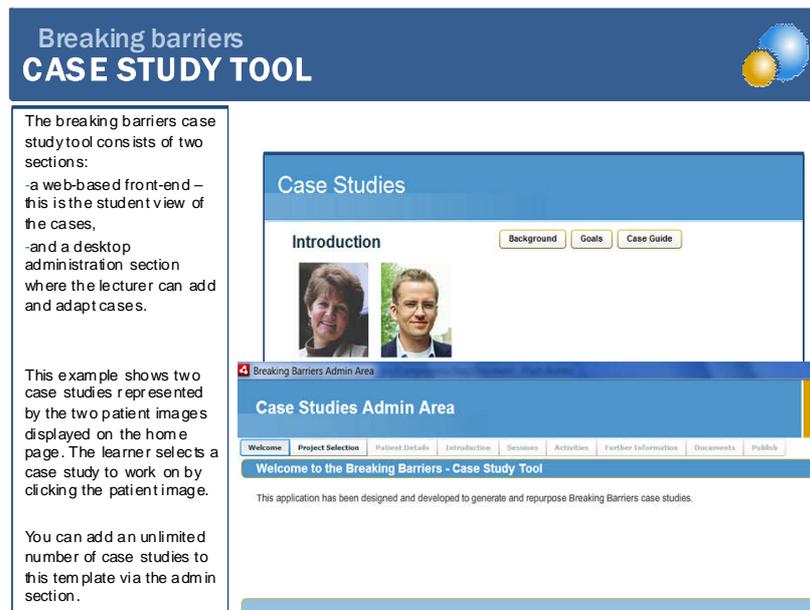


Figure 2 Screen shot from the Case study tool showing the user and administrator interfaces

## 5. CONCLUSIONS

We have argued that cultural awareness in healthcare students may be facilitated by virtual exchange or virtual mobility programmes of study. A number of studies and our own experiences with the VEP have identified some challenges in setting up virtual mobility programmes, and there are clearly issues to be resolved in scaling up these activities so that whole courses of students can benefit. Evaluation of the case study tool and technical platform(s) that maybe used for delivery of a virtual cultural experience will prove important in guiding this up-scaling. The studies described highlight the important role global collaborations such as Universitas 21 have in driving cross cultural educational initiatives and there will be a future need to carry out research to investigate the effectiveness of these initiatives in altering cultural awareness and dialogue.

“International digital projects are challenging, difficult to coordinate, hard to slot into rigid modular systems, but exciting to teach and fun to learn” [14, p19].

## REFERENCES

1. Smith, L., (2010) Immigration: How the UK compares to other EU countries. <http://www.aboutimmigration.co.uk/how-uk-compares-other-eu-countries.html>. Accessed 25th June 2011
2. World Health Organisation (2005) International Health Regulations. WHO Lyon.
3. Commission of the European Community (2007) Focus on the Structure of Higher Education in Europe. National Trends in the Bologna Process. Directorate-General for education and culture. Office for Official Publications of the European Communities, Brussels, Belgium
5. Covington, L.W. (2001) Cultural competence for critical care nursing practice. *Crit Care Nurs Clin North Am.* Dec;13(4) pp. 521-30
4. Law, K., Muir, N (2006) The internationalisation of the nursing curriculum. *Nurse Education in Practice* 6 pp. 149–155
6. Salimbene, S. (1999). Cultural competence: A priority for performance improvement action. *Journal of Nursing Care Quality*, 13(3) pp. 23-35.

7. Betancourt, J,R., Green, A,R, Carrillo, J,E., Park, E,R. (2005) Cultural Competence And Health Care Disparities: Key Perspectives And Trends. *Health Affairs*, 24 (2) pp. 499-505.
8. Holland, K., Hogg, C., (2001) *Cultural awareness in nursing and health care*. Arnold London
9. Lipson, J, G. Desantis, L,A., (2007) Current Approaches to Integrating Elements of Cultural Competence in Nursing Education. *Journal of Transcultural Nursing*, Supplement to 18 (1):. 10-20
10. Greatrex–White, S. (2007) Uncovering study abroad: Foreignness and its relevance to nurse education and cultural competence. *Nurse Education Today* 28 (5) pp. 530-538.
11. Koskinen, L., Tossavainen, K. (2004) Study abroad as a process of learning intercultural competence in nursing. *International Journal of Nursing Practice* 10: 111–120
12. Kokko, R. (2011) Future nurses cultural competencies: what are their learning experiences during exchange and studies abroad? A systematic literature review. *Journal of Nursing Management*. Published on line March 2011
13. Welikala, T. (2011) Rethinking International Higher Education Curriculum: Mapping the research landscape. Universitas 21 Teaching and learning position paper ISBN: 978-0-9570066-0-7
14. Milligan, A. Mohr, C. (2008) Internationalising the curriculum: Exploring proxy designer and pseudo client relationships through virtual, physical and textual design, *Centre for Education in the Built Environment, Higher Education Academy, York*
15. Bell, M (2008) Internationalising the Australian higher education. Proceedings 31<sup>st</sup> HERDSA conference
16. Whately, J (2006) CAB – Collaboration Across Borders in: Innovative learning in Action Issue Five: Learning Technologies in the Curriculum University of Salford, pg 44
17. Todhunter, F., Hallawell, B. Chambers, D., Tuckett, A. Pittaway, D. Baker, H. (2010) Virtual Exchange project ICERI2010 Proceedings 3rd International Conference of Education, Research and Innovation 15-17 November, 2010 Madrid, Spain pp 1384 ISBN: 978-84-614-2439-9
18. Institute of Cancer Research (2011) Breaking Barriers [http://www.icr.ac.uk/education/education\\_strategy/elearning/breaking\\_barriers/index.shtml](http://www.icr.ac.uk/education/education_strategy/elearning/breaking_barriers/index.shtml) (Accessed 21.9.11)