

## **Title: International collaboration: Developing an international nursing module through the use of Wiki technology**

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### **Introduction**

The internationalisation of education gathered momentum with the Bologna process initiated in 1998, which focused upon lifelong learning, involvement of students into HEI's (Higher Education Institutions), and easing mobility of students for job placements by 2010 (Davies, 2008). This goal for globalization continues to be unmet due to obstacles related to migration and language. Other barriers exist with cultural, social, and ethical factors. Educators are seeking creative virtual learning environments (VLE) to augment the learning experience for all students to help meet these goals by 2020.

With shrinking of the world economies and technological revolutions of the past ten years, educators desire innovative methodologies enhancing students' international experiences. Traditionally, nursing students were encouraged to engage in overseas clinical placements to gain cultural and diverse experiences. Due to increased costs of overseas travel, these types of culturally enriching experiences are waning. With increased global migration, students must be prepared to become active world citizens in the care for their patients. Regardless of background of the student, educators want technologies to enable culturally authentic experiences that simulate the previous era. The authors of this paper sought to utilize Wiki technology to broaden the global learning experiences for students from three higher education institutions (HEI's).

### **Use of Wiki technology**

Using online Wiki technology, students from three universities were virtually connected to experience international education through a pilot study which lasted for a 15 week trimester during the autumn 2011. Shared and secure wikis were developed to create a VLE for interactive dialogue pertaining to mutual health and societal trends. There were a total of three shared Wiki sites which encompassed the following: one Wiki was established between Edinburgh Napier (Scotland) and Lahti University of Applied Sciences (Finland); another Wiki was established between Edinburgh Napier (Scotland) and Western Carolina University (USA); and the third Wiki was established between Western Carolina University (USA) and Lahti University of Applied Sciences (Finland). In total, there were 22 students from the three countries enrolled in the pilot study. Each of the three Wiki sites had student and faculty members from the three universities. There were a mixture of students that were both post-graduate and undergraduate.

## **Collaborative planning**

Logistical arrangements for the execution of this collaborative learning experience began with obtaining the administrative approval of each of the HEI's. The members of the educational team met with the individual head of school's to introduce the concept of this new module. Although this type of educational programme was quite revolutionary in scope and depth, the administration of the three HEI's were supportive and granted permission. Accreditation was granted from each of the universities for academic credit.

The planning for the shared Wiki module was conducted during the summer of 2011 with faculty from each of the HEI's. Extensive implementation meetings were conducted both face-to-face as well as online through Skype to discuss the parameters. The module was developed with the overarching framework of increasing international awareness. Student input and guidance for modular content was sought, encouraged, and provided to the faculty staff by the student president of the International Nursing Society at Edinburgh Napier University.

Asynchronised learning and use of the English language were a requirement. Despite different institutional platforms for learning, the Wiki 2.0 technology was utilized for student enhancement as it offers an effective platform for facilitating cross-institutional and cross-cultural interactive learning (Ertmer, et al., 2011). A learning technologist from Edinburgh Napier (Scotland) developed the three private and secure Wiki web sites. Each student and lecturer was provided with a private password to enter the Wiki sites. Lecturers and students were provided with an orientation of the teaching and learning process to the use of the Wiki platform prior to the commencement of the module. These orientation processes were found to be mandatory as students may have been familiar with such social media sites as Facebook, but were unsure of the methods for using Wiki's for sharing information, posting links to important topical websites, and understanding the creation of new Wiki web pages. The freedom of using Wiki technology which allows multiple users to continuously edit and add pertinent web links, podcasts, and You-tube video links was one of the prime reasons that the faculty decided to utilize this technological methodology. (See figure 1)

## **Ethical considerations**

Ethical approval was sought from the lead institution (Edinburgh Napier University) in the summer of 2011 to conduct the collaborative programme as a pilot study with the use of Wiki technology. Formal approval was granted from the Faculty of Health, Life, & Social Sciences Research and Knowledge Transfer Ethics and Governance Committee. Students were notified upon registration for the programme that the module was part of a pilot study and were invited to participate in the evaluation. The lecturers carefully developed a learning outcomes focused questionnaire which had a simple 5-point Likert

style format for assessing student responses. The guidance for the questionnaire detailed for the students that by completing the questionnaire at the completion of the programme, they were providing explicit consent for partaking in the pilot study assessment. The questionnaire survey was developed to be analyzed using the Ultimate Survey assessment online tool. Additionally, students were provided a series of open-ended survey questions to determine the ease of use of the Wiki technology and their individual comfort with the learning provided using Wiki 2.0 technology. By completion of the open-ended survey questions regarding the use and application of learning with Wiki technology, the students provided both implied and explicit permission to ensure ethical considerations for use of data information in assessing the outcomes of the international collaborative programme.

### **Educational conceptual framework**

The educational approach in this module was based on the communal constructivist theory for its potential to allow students to collaboratively unite in teams to transform their learning through theory of knowledge, and experiences and practices of their own country on the Wiki (Leask & Younie 2001). The '3E' framework developed by Smyth et al (2011) provided the pedagogical framework which supports the notion of the learning experience being a transformative process which can empower students to have influence over the nature and direction of their own learning. The 'empower' category is thus congruent with communal constructivism. As each week progressed within the modular programme, the students became more involved and undertook ownership of crafting the topical content for sharing with one another. Through peer engagement with one another and with faculty staff, students were encouraged to become advocates of their own learning and to become accountable for the world around them, and through becoming an activist leader (Garner, Metcalfe, & Hallyburton, 2008). The faculty staff for each of the HEI's were pleased that the students as learners became increasingly more in control of the development of the weekly content and eagerly assisted one another in gaining an appreciation of different cultural beliefs and practices. Students became empowered in facilitation of their own learning throughout the international collaborative modular programme.

### **Description of international module**

Each university was responsible for maintaining their own virtual technological learning environment (VLE) such as Blackboard or Moodle. Additionally, the three universities maintained their own module home guidance page where students were notified of announcements and criteria for student assessment. This also served as the main communication site for background resources, general module information and support from academic staff in their own university.

To initiate the international Wiki module, students were invited to choose which country and Wiki website they would like to participate within for the module with no more than eight students within a group. The students from different countries were then assigned roles either as leader (opener) of the discussion activity or summarizer for each of the weeks and Wiki module. Every student undertook each of these roles once during the module. These assignments allowed the students to develop as leaders for the weekly discussions. All students were expected to contribute to each discussion and become an active participant while interacting and engaging with other learners from the other countries. The primary idea behind assignment of such roles was to ensure every student had the opportunity to lead and summarise so that no particular student emerged as dominant in the discussions. The goal of the programme was to create a unified environment where sharing of information was the key aspect of learning through the Wiki technology.

Every two weeks during the eight week collaboration period students were given a discussion topic on which to focus their collaborative learning. This provided a focus for learning and helped to add structure to the learning process whilst maintaining a degree of flexibility and student choice around the specific health condition or area of nursing they focused on. From observations and discussions in providing academic supervision to the cohort, the faculty noticed that students found this aspect both liberating and challenging as previous learning experiences had perhaps been more defined, offering less scope for creativity. In essence the module provided a basic structure with some learning resources and a series of discussion based activities allowing students to generate their own content.

All students engaged well in the discussions on the Wiki sites and showed real depth to their learning and understanding of international health care and issues of cultural competence. The use of the Wiki technology allowed the students to continuously add new and important information for the fortnightly topics and provided a supportive platform for exchanging content from resources around the world.

### **Learning outcomes**

This module provided the students with the opportunity to learn about contemporary issues in international nursing and health care systems. Throughout this module specific tasks were given for the students to learn about issues in partner countries. Therefore to achieve the learning outcomes the student was responsible for searching for, and answering queries relating to nursing and the health care systems within their country. The ultimate outcome was for the students to compare and contrast the differences between their own country and the other country. Below is the module learning outcomes for the international collaborative module. The students were asked to successfully complete the following to achieve this module:

- Introduction week for student exchange
- Compare and contrast health and social care issues and trends in different countries
- Determine the relationship between health and social care trends and nursing roles
- Evaluate the implementation of international health and social policy by national governments.
- Critically reflect on the contribution of nursing to international health and social care systems
- Provide examples of engagement with module content including active participation in on-line discussion activities and engagement in wiki based contributions

### **Module learning assessment**

Each of the institutions assessed their students through a written essay assignment where students compared and contrasted the health care issues and nursing roles of their home country and the country they chose to collaborate with during the module. Additionally the students had to provide examples of their individual online contributions via the Wiki platform. The lecturers supported the contributions of the discussions through minimal encouraging comments regarding the quality of their discussions. All 22 students sat and passed their assessment which is a very positive outcome for both the students and the international module teams. Accreditation for each individual module was provided by each of the students HEI.

### **Roles of the educators**

In designing and developing the international collaboration, the lecturers sought to create a modular interactive programme which allowed the students a tremendous amount of freedom in selection of fortnightly topics and content. All of the students were adult learners, and adult teaching methodologies embrace the concept of encouraging adult students to plan and implement their learning activities. With the mixture of both undergraduate and post-graduate students enrolled within the programme, the faculty staff decided to encourage the learners to take ownership of the content and fortnightly discussions. The role of the lecturers became one of “guiding by the side” rather than being a “sage on the stage” as is evident in pedagogical education. After the initiation of the international collaborative programme in which instructions and guidance were provided for the students during the first fortnightly period for navigating the use of Wiki pages and Wiki technology for editing their submissions and comments. The lecturers were equally assigned throughout the programme to take ownership of a particular Wiki page and ensure that students were posting their discussions and material for that fortnightly period. The lecturers would welcome the students to the new week of

learning, and the leader (student leader from country A) and summarizer (student country B) would then take the roles of guiding the discussion for the fortnightly topic. The lecturers met regularly on Skype to discuss the progression of the programme and the student's individual progress in their evolving roles as leader and summariser.

### **Evaluation and lessons learned**

Students from the USA, Scotland, and Finland matured in their leadership development as informed citizens of global societal issues. This was highlighted from the overall success from the students overall comments from the open-ended questionnaire survey at the completion of the international programme. Student's comments reflect their satisfaction with the module process and the learning environment through the use of the Wiki technology. The following quotations capture the depth and authenticity of the actual student's degree of learning and experience:

*"Sharing and discussing the issues with our peers in the other countries provided us with a more realistic view than we would have had by just reading about these topics in relation to the other countries. We learned considerably more through the interactions with other nurses than we would have on our own" (student comment 1).*

*"Perhaps the most striking feature of the wiki was to highlight the similarities between nursing in the UK and the US. Through direct communication with American nursing students, I now understand that the struggles, triumphs and challenges faced by student nurses in the UK are not unique, that nursing is something bigger than my hospital and bigger even than the NHS" (student comment 2).*

*"This expanded outlook has made me ambitious to make a difference not just in the lives of my patients, but in the structure and organization of healthcare as a whole" (student comment 3).*

These comments and student evaluations will be utilized to plan for future development and planning of this international module with Wiki technology. Additionally, students were able to learn through web links and photography and were encouraged to post their picture with their submission to personalize their discussions. This use of social media created bonds despite geographical distance.

### **Future planning**

The vision for the future is to continue to work collaboratively with our existing international partners and also to engage with other possible international partners in replicating this modular programme. The lessons learned to-date are that the use of the Wiki 2.0 platform has been highly successfully in allowing students to learn regardless of chronological, geographical and spatial barriers.

From student and faculty assessment and evaluation this international collaborative programme demonstrates that future modules can encompass team teaching methodologies where each lecturer is located around the globe. Additionally students will also be able to be located within various locations throughout the world. This international module has shown that students can receive academic accreditation for participation regardless of their own HEI regulations.

This pilot study poses the question on how educators can further exploit technology to encourage mutual learning to enhance the overall student experience at a global level. Further, the flexibility of the module demonstrated how curriculum obstacles could be overcome in different countries.

### **Implications for staff development and educators**

This international collaborative modular programme will continue to be developed and delivered for students. Ongoing evaluation of the module will continue with each delivery of the module. It is recommended for educators and staff developers that would utilize and implement the information gleaned from this pilot study, that they will utilize assessment criteria to further evaluate similar programmes. This will support the future development of the use of Wiki technology for broader applicability to all domains of education. The use of Wiki technology opens the doors for widening the educational experience for learners in all walks of life.

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