Breaking Borders with the VIP Project

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ABSTRACT

The Creative Waves 2007 - Visualising Issues in Pharmacy (VIP) project was the first fully online initiative designed to join pharmacy and graphic design students and teachers from around the world to raise public awareness of critical health issues identified as debilitating in Kenya, including HIV/AIDS, tuberculosis and malaria.

Using the Omnium Software online platform, the venture collectively linked together over 300 geographically dispersed students, academics, practitioners and special guests across five continents and 35 countries. The project ran over a 14-week period from March-July 2007 and was divided into two distinct phases, where Phase I (pharmacy phase: week 1-7) and Phase II (graphic design phase: week 7-14) overlapped for a week to encourage cross-disciplinary collaboration between the two educationally diverse groups.

This paper will discuss how through continuous discussions with special guests and mentors around the world, pharmacy participants, in particular, shared materials and resources both individually and collectively to produce indepth written reports for the design phase of the project. The final visual design outcomes from Phase II are currently in production to be implemented, however, the practical stage has been concluded with a high degree of socialisation, cross-cultural and cross-disciplinary interaction and appreciation of others situations.

Judging by participant feedback, the VIP project has signaled that the demand for new visions and approaches to learning and teaching is strong and that the technologies we now live with everyday can enable such interaction. Pharmacy participants specifically indicated the desire for more international online projects so that pharmacy could engage in a more active role locally and internationally in improving public health awareness.

Creative Waves 2007 - VIP project website: http://creativewaves.omnium.net.au/vip/outline/

INTRODUCTION

Goodenow (1992) noted: "Education is fundamentally a social and interpersonal process. Although individuals can and do learn many things through isolated observation of the world around them…for the most part what we term education occurs in the company of others."

Even as early as the 1930's, Dewey encouraged schools to be structured as collaborative learning communities. Back then, collaboration was limited due to a number of barriers and constraints but with electronic information and communication technology (ICT) increasingly being used by Institutes of Higher Education (IHEs), a whole new dimension of possibility is created where students direct what they need to learn through interaction between students, between staff and between staff and students (Huntington and Sudbury, 2005).

The Omnium Project, founded by co-author (Rick Bennett) in response to these global demands on education, paved the way to development of the Creative Waves projects; providing a framework for researching what Omnium term 'Online Creative Collaboration' (OCC). Creative Waves 1, hosted in 2005, was the world's largest online international student design project involving over 120 arts and design participants. In 2007, Creative Waves 2 was developed to cross the disciplinary barrier, culminating in the subsequent Creative Waves 2007 - Visualising Issues in Pharmacy (VIP) project. The VIP project was the first international online collaboration involving participants from the disciplines of pharmacy and graphic design collectively working towards a common goal. One of the main goals of the VIP project was to use online technology to increase public health awareness of health issues identified as debilitating amongst the people living in Winam; a rural community in the Kisumu district of Kenya. The health issues investigated were adherence to medicines, chronic disease, tuberculosis, sexually transmitted infections (including HIV/AIDS), malaria and immunisation.

In developing countries, the majority of the population live in rural areas, leaving those that reside in the rural areas without access to quality healthcare. Where traditionally information exchange in healthcare has been difficult to achieve, ICTs have increasingly been used to facilitate knowledge transfer and provide isolated communities with access to the latest health information and treatment (Digital Dividend, 2004). The aim of the VIP project was therefore to challenge a diverse body of students and educators in addressing these important global health issues and through communication with local Kenyan representatives produce detailed research reports and subsequent visual communication campaigns for implementation in the community.

Collectively, the VIP project linked together over 300 geographically dispersed academics, practitioners, students and local Kenyan representatives, representing five continents and 35 countries using software developed by the Omnium Project.

METHODOLOGY

Designed, developed and convened by the authors, VIP was supported by the International Pharmaceutical Federation (FIP) and their student body, the International Pharmaceutical Students' Federation (IPSF); the International Council of Graphic Design Associations (ICOGRADA) and their student network, the Icograda Education Network (IEN); and Universitas 21- the Network for International Higher Education.

Conducted over a 14-week period from 28th March-1st July 2007, the project was divided into two distinct phases: Phase I (pharmacy) and Phase II (graphic design). Each phase was designed to be of seven weeks duration, overlapping for one week where the outcomes from the pharmacy phase (research reports) could be shared and discussed with graphic design participants. Hereafter the pharmacy participants were encouraged to log-in regularly to provide feedback on works submitted.

Through continuous discussions with special guests and mentors around the world, participants shared materials and resources both individually and collectively. Project co-ordinators and mentors offered constant online advice, guidance and support and ensured accuracy of materials presented. Most importantly, however, was the invaluable assistance provided by local Kenyan representatives who ensured that factually correct and culturally sensitive materials will be disseminated to the communities.

Participants

Initial invitations were sent to academic institutions worldwide and advertised through the abovementioned organisations. Students and mentors were directed to a promotional website (http://creativewaves.omnium.net.au/vip/outline/) where they self-selected to take part through online application.   Selected was based on qualities such as written English language proficiency, time able to dedicate to the project and enthusiasm to participate. For New Zealand and South African pharmacy students, the activity formed part of a compulsory elective module.

Ethical Review and Observational Consent

Ethical consent was provided by the University of Auckland Human Participants Ethics Committee (UAHPEC) and the University of New South Wales through the Omnium Project.

Participants were advised that by accepting the offer to participate in VIP, they were granting consent for observation. This included observation of online interactions between participants through chat, message boards and discussion forums.

Evaluation of Responses

A questionnaire using a five-point Likert scale and four open-ended questions provided qualitative and quantitative information. Initially piloted with ten Year Four Pharmacy students at the University of Auckland, it was released as a linked file from a Team Notice in week 7 of the project.   It also featured as a link from an email sent by a convenor (Nataly Martini) at the conclusion of Phase I.

Additional qualitative information was collected from reflective threads set up by the convenors in each pharmacy Team Talk and Feedback area and in the Discussion Forum at the beginning of weeks 7 and 14 respectively.   The threads allowed participants an opportunity to comment on the positive aspects of the VIP project, discuss the limitations of working online and make suggestions for future improvements.   Participants were notified of these forums in the Pharmacy and Design Team Notices and News areas.

Teams

In their online applications, prior to project commencement, pharmacy students were asked to rank, in order of preference, three health issues that they had a particular interest in. Keeping these selections in mind, students were assigned by convenor (NM) to working teams of five students each, where no student was in the same geographical location. In total 12 teams were created for the six assigned health issues (AHIs); two teams for each AHI. One University of Auckland team coordinator was assigned to each AHI, thereby making them responsible for the facilitation of two teams. The coordinators main role was to motivate, encourage and guide students to successfully complete weekly briefs by the proposed deadlines.

Pharmacy mentors were provided with an opportunity to select an area(/s) of expertise or interest or alternatively were asked to collectively engage in dialogue with all teams, either in individual Team Talk and Feedback areas or in the Discussion Forum.

Briefs

Each seven-week phase corresponded to seven detailed briefs relating to activities of socialising, gathering, identifying, distilling, abstracting, resolving and reflecting. Each brief

gave specific directives for students to follow with brief 6 (resolving stage) providing pharmacy students with a detailed outline of what their report should aim to cover.

To prepare for the tasks set out in the briefs, students were required to work individually at first and then collectively by posting and making use of links or resources provided on the interface. Through engagement in dialogue with fellow team members, mentors, coordinators, and special guests, students were expected to share written and visual information with each other in their Team Pin-Up Walls, Team Talk and Feedback and Team File-Sharing areas.

Lectures

In each of the first four weeks, and again in week six of Phase I, written lectures were provided for participants by special invited guests. These included an introductory lecture by the authors; a United Nations volunteer award winner discussing his achievements in Africa using online collaboration; a local Winam representative highlighting the plight of the abandoned and sick; an FIP representative examining partnerships in health; and a pharmacist examining ways to strengthen the pharmacy workforce.

Complimenting these lectures were additional supporting essays provided by mentors covering specific AHIs. These lectures were posted in 'Resources' and were accessible to all participants.

Online Chat

In week five of Phase I, a live 90 minute chat was organised with a special Kenyan guest, Eva Ombaka; a renowned expert on access to essential drugs and primary health care. Anyone unable to make this session could download a transcript made available in 'Resources'. Following this session, chat was made available to all participants through 'open chat', which was accessible to whoever was logged into the project. Specific 'team chats' allowed for synchronous discussions to take place between individual team members only.

Discussion Forums

One of the more important features of the in the project was the Discussion Forum. This area provided a space where participants could respond to specific questions, tasks, special guest lectures and post any problems experienced with the interface. This area was accessible to everyone involved in the VIP project and became an especially valuable avenue to direct information from the Kenyan representatives. This was also a space where cross-disciplinary communication between pharmacy and design participants could take place and where pharmacy students could clarify information presented in their research reports in response to questions from the designers.

Galleries

In keeping with the 'visualising' theme, 'Galleries' showcased the teams work in response to each brief. In Phase I, Gallery 1 and 2 collections comprised of web-based images found in response to 'General Visual Heath Campaigns for Health-Related Issues'. The Final Research Reports from the pharmacy phase were posted in Gallery 6 for open access to all VIP participants and visitors to the site.

This area was particularly important in Phase II, where the designers were able to exhibit their visual responses to the research reports.

RESULTS AND DISCUSSION

From the 60 pharmacy students that were accepted to take part in the VIP project, only 37 (61.7%) students were still involved by week six. At week four, high student drop-out rates prompted convenors and team coordinators to combine twin AHI groups into 'super-teams' in order to maximise outputs from the remaining students. Only 28 (46.7%) responses to the questionnaire were received.

Student Feedback:

What worked well and what participants got out of the project

All students responding to the questionnaire expressed that working with other students and teachers from different countries encouraged them to actively participate in the project. Many saw the VIP project as an opportunity to meet like-minded individuals and having contact with mentors and special guests with great set of skills and expertise to draw from, helped keep them motivated. One student from New Zealand explained: "The past few weeks have been intense and a truly rewarding experience…it's great to know that there are other Pharmacy students taking the step outside the ordinary curriculum and look at experiencing something different! Omnium was such an innovative way of focussing our energy - and you can imagine all of our 6 minds beavering away to a really solid piece of teamwork. I thought the expertise from mentors was invaluable…where else can you get this type of assistance?"

A strong theme emerging amongst students was the significance of teamwork, supported by this statement from a Kenyan student: "There are many challenges in the world that can only be surmounted when people work together. No single person amongst all in the project would have produced such a wonderful final report as we did together."

Several viewed VIP as a springboard for future collaborations. A student from Australia remarked: "What I have learnt about Africa, Kenya and Winam, I feel can be a stepping stone for further work!! I learnt that there is a whole other way of volunteering…I learnt that you really don't have to save the world in one go, and I understand now that the awareness of the issues that I am taking away IS a contribution in itself because I can use it later in other work."

Effectiveness of the online learning environment in promoting health awareness

Online interactions with people across the globe provided insight into how different countries handle various health issues. "This is very vital in having an insight of global health issues in our career as pharmacists" exclaimed a Kenyan student.

The project "opened the eyes" of many participants to the health and social situation in a place where few might physically travel to. Pharmacy students enjoyed the chance to think more visually and creatively about problems using pictograms and visual concept mapping as examples on how to tackle low health literacy issues. Some students were able to put what they learnt in the VIP project into practice as explained by a student from the Czech Republic: "I learnt a lot about adherence itself, which had rather been only a term for me before …I was reading many of the materials on "How to improve adherence/and the role of a pharmacist" [while] being on duty in a pharmacy, so I could at the very time try some techniques and at least think of my responsibilities and passing the messages to the individual patients in the right way."

Twenty seven (96.4%) students agreed (n=8) or strongly agreed (n=19) that collaborating with international students and mentors in an online environment made them more aware of health-related issues outside their country of residence and 21 (75%) believed it made them

more aware of health issues within their home countries. Possibly the most encouraging was the strong response to whether international online courses could create an avenue for pharmacy at both international and national levels to improve public health, to which 17 students strongly agreed and 10 agreed.

Limitations and Challenges

The project failed to reach some of its objectives. Some students cited that information overload might have affected participant involvement, although 18 students completing the questionnaire believed the materials provided were insufficient. The voluntary status of the project led to inconsistent contribution from team members and in most cases the students being assessed were under pressure to keep discussions going. This became increasingly difficult when individual discussion threads became large and unmanageable. Time coordination was especially challenging with 13 (46.4%) students experiencing difficulty. Some participants felt that certain functions such as 'online chat' were introduced too late in the project for it to be of any real benefit and certain technical difficulties, including power failures and inconsistent Internet access in certain developing countries, impacted on their motivation to participate.

Despite these challenges, only one student claimed to be dissatisfied with their overall experiences of the project and felt it did not meet their expectations.

Key Messages:

- According to Palloff and Pratt (1999), collaboration in learning helps create an empowering and rich learning environment. The significance of teamwork and collaboration within and across disciplines was apparent in the VIP project and encouraged multi-directional dialogue among participants and mentors to promote sharing of ideas.
- In health, the VIP project could be used as an online learning platform to:
  – create social awareness of health issues in other countries
  – learn about different cultural perspectives and potential barriers to health aid
  – explore health professions around the world
  – consider different scientific and creative perspectives to healthcare
  – access international healthcare experts around the globe
  – provide an efficient and effective way of providing health resources
- The limitations and difficulties of online learning environments such as lack of consistent contribution should be considered in future projects to increase participation and limit project fatigue.

The VIP Project Outcomes

Following completion of Phase I, seven 'super-teams' produced detailed research reports covering all six assigned health issues. These reports were subsequently used by the design students culminating in three main design ideas. The design process extends beyond the scope of this paper, however, it is pertinent to mention that the final design outcomes included football shirts and shorts with a 'Stop HIV' message; a collection of educational malaria cards in the form of a board game; and various stickers with health messages for use in health centres, hospitals and public places.

A number of rich and valuable resources, links and lectures were supplied for the VIP project by mentors, coordinators and students, which hold great potential as future reference materials.

CONCLUDING REMARKS

Keats and Schmidt (2007) believe that the higher education environment is approaching a tipping point where developments in ICT are creating a new landscape for education. They describe the emergence of Web 3.0 as a "rich, cross-institutional, cross-cultural educational opportunity" where social networking and social benefits play a strong role and distinctions of space and time are blurred.

The VIP online project echoed these sentiments by supporting social construction of knowledge and breaking down barriers between students and teachers, educational institutions and disciplines. Although there was natural hesitation to what could be achieved, the practical stage of the VIP project concluded with a high degree of socialisation and cross-cultural interaction amongst participants and cross-disciplinary contact between Pharmacy and Design. Feedback from pharmacy participants, in particular, indicated a desire for more international online projects so that pharmacy could engage more actively in public health awareness. A Kenyan pharmacy student summed up her VIP project experience best when she said: "For me the project was an eye opener in that I was challenged to think of the welfare of my fellow countrymen after I saw the willingness of all the participants, many of whom am sure cannot locate Kenya on a map, take that keen interest in the welfare of Winam."

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