AUSTRALIA VIETNAM
50TH ANNIVERSARY

Australian Government

Australia UNLIMITED

Vietnam National Alumni Conference 2013

Conference Record of Proceedings

14-15 December 2013, Hanoi, Vietnam

Influencing Health Sector Reform through International Cooperation in Research, Training and Professionalisation

Prof. Michael P Dunne
School of Public Health and Social Work, Queensland University of Technology
Brisbane, Australia

and

Co-Director, Institute for Community Health Research
Hue University of Medicine and Pharmacy
Hue, Vietnam
Email Contact: m.dunne@qut.edu.au

Abstract

Recent progress in, and future challenges for, health sector reform in Low and Middle Income Countries have been clearly described by The Lancet Commission (Frenk et al, 2010) and in the Bulletin of the WHO (see commentary by Zhao et al, 2013). There are many interesting models to guide international development efforts to achieve reform. One path is to improve teaching, research and inter-professional cooperation in medicine, nursing and allied public health services. Experience shows that sometimes, international collaboration creates enthusiastic activity but little practical benefit. Other times, the outcomes are both tangible and sustainable.

This presentation is essentially a case study that critically reflects on the development, achievements and future directions of one Australian university working with partners in Vietnam over more than a decade. The collaborators include Queensland University of Technology (QUT) and many Vietnamese Universities and Colleges of Medicine and Pharmacy, working alongside the Ministry of Health, provincial health authorities, major hospitals, institutes, NGOs and professional networks. The program has been financed by The Atlantic Philanthropies, Australia Awards postgraduate scholarships and Executive Awards, and some co-funding from QUT.

The main framework for collaboration will be outlined and the national reach of the work illustrated with examples. Within the broader health sector, our focus primarily has been on undergraduate training and postgraduate research in Public Health, Nursing, Biomedical Sciences and Nutrition. The work has contributed to development of soft infrastructure in universities, principally strengthening curriculum development and review processes, scientific peer review and ethical review procedures, and development of research and training centres in several sites. As recommended by The Lancet Commission, we have worked to advance competency-based curricula, particularly in Nursing and more recently in Clinical Nutrition, and to enhance inter-professional cooperation. To date, more than 60 Masters and PhD students have graduated or are currently completing their studies, mainly with the support of the Australian and Vietnam Governments. To date, all graduates have returned to work in Vietnam as academics, clinicians, and managerial staff in the Government and NGOs. Many hundreds of health sector staff have participated in short term training courses, face to face and online.

Over time, as basic needs for development have been met, the collaboration has changed to focus more on attainment of international standards in training, research, publication and professionalisation. The focus now is on sustainability. This talk concludes with a brief description of several initiatives that should carry the relationships forward through the next decade.

Frenk et al (2010) Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. The Lancet, 376: 1923-58.
Zhao et al (2013) Investing in human resources for health: the need for a paradigm shift. Bulletin of the World Health organization, 91: 799

Keywords: health sector reform, inter-professional cooperation, research in medicine, Vietnam.

Summary

Recent progress in, and future challenges for, health sector reform in Low and Middle Income Countries have been clearly described by The Lancet Commission (Frenk et al, 2010) and in the Bulletin of the WHO (see commentary by Zhao et al, 2013). There are many models to guide international development efforts to achieve reform. One path is to engage international partners to improve teaching, research and inter-professional cooperation in medicine, nursing and allied public health services.

Experience shows that sometimes, international collaboration creates enthusiastic activity but little practical benefit. Other programs can lead to outcomes that are both tangible and sustainable. This paper is mainly a case study that critically reflects on the development, achievements and future directions of one Australian university's cooperating with institutions in Viet Nam over more than a decade.

The partners include Queensland University of Technology (QUT) and Vietnamese Universities of Medicine and Pharmacy, working alongside the Ministry of Health, provincial health authorities, hospitals, NGOs and professional networks. The work described here was financed by The Atlantic Philanthropies, Australian and Viet Nam Government postgraduate scholarships, Endeavour Prime Minister's Asia-Australia Postgraduate and Executive Awards, and substantial co-funding from Queensland University of Technology (QUT).

The main framework for collaboration is outlined and the national reach of the work is illustrated with examples. The primarily focus of this paper is on undergraduate training and postgraduate research in Public Health. The program has contributed to development of soft infrastructure in universities, principally strengthening curriculum development and review processes, scientific peer review and ethical review procedures, and development of a research and training institute.

As recommended by Frenk et al (2010), QUT has worked to advance competency-based curricula, particularly in Public Health, Nursing and more recently in Clinical Nutrition, and to enhance inter-professional cooperation. Postgraduate training is an essential part of this effort, and to date more than 60 Masters and PhD students have completed or are currently studying, mainly with the support of the Australian and Viet Nam Governments. So far, all graduates have returned to work in Viet Nam as academics, clinicians, and managerial staff in the Government and NGOs. Many hundreds of health sector staff have participated in short term training courses, face-to-face and online.

Over time, as basic needs for institutional development have been achieved, the collaboration has changed to focus more on attainment of international standards in training, research, publication and professionalisation. The aim now is to ensure sustainability. This paper concludes with a brief description of several initiatives that should carry the relationships forward through the next decade.

International cooperation for development of teaching and research in medicine, public health, nursing and allied fields is essential for improved global health care and disease prevention. Networks were formed first in Europe in the mid-19th Century with transnational efforts to control major epidemics, and in the USA in the early 1900s with the rise of international philanthropy in education and health care (e.g. the Rockefeller Foundation).

The nature of this work has changed along with profound educational reforms. The Lancet Commission on Education of Health Professionals (Frenk et al 2010) reflected on 100 years of change in approaches to training. Three generations of reform were identified

(1) Science-based curriculum, around 1900: This revolutionised health care by moving clinicians away from tradition-oriented methods and toward evidence-based practice. Frenk et al (2010) suggested that it contributed significantly to the doubling of life expectancy over the 20th century

(2) Problem-based learning in mid-20th century: This major shift emphasised learning by doing and integration of multidisciplinary evidence, and was part of the movement toward patient- focused care;

(3) System-based integration of educational and health care institutions

System-based change is needed for many reasons, not the least of which is to cope with the vast and rapidly expanding knowledge base in health sciences. Linkage of professional competencies to the evolving evidence requires very close relationships between training and health care services. Further, the remarkable rise in public access to information and higher expectations for quality health care require education and health care institutions and broader systems to be responsive to community needs and values.

The challenges ahead are substantial. Within this complexity, two primary foci for reform are to learning styles and institutional connectivity. There is wide consensus that we need to shift from fact memorisation to searching and synthesis of the health information; from seeking professional credentials to achieving core competencies for effective teamwork; from non-critical adoption of educational methods and fashions to creative adaptation of global resources. To improve institutional connectivity we need to reform universities, hospitals, institutes and primary health care services from isolated islands to harmonized systems; from a patchwork of institutions to collaborative networks; from having inward-looking priorities to outward-looking, open engagement with global educational content and technological innovations (Frenk et al, 2010)

The Australian Aid program has long sought to foster international connections between institutions. There are various ways in which partnerships are formed and many practical strategies have been applied to enhance and then sustain connectivity (Martinussen & Pedersen, 2003; Stephens, 2009). Techniques for cooperative work are changing with the ever-expanding global reach of new educational technologies (Olcott, 2012; Richter & McPherson, 2012). The funding sources that underpin global cooperation are also changing as a result of rapid economic development and evolving foreign aid priorities (European Commission, 2012).

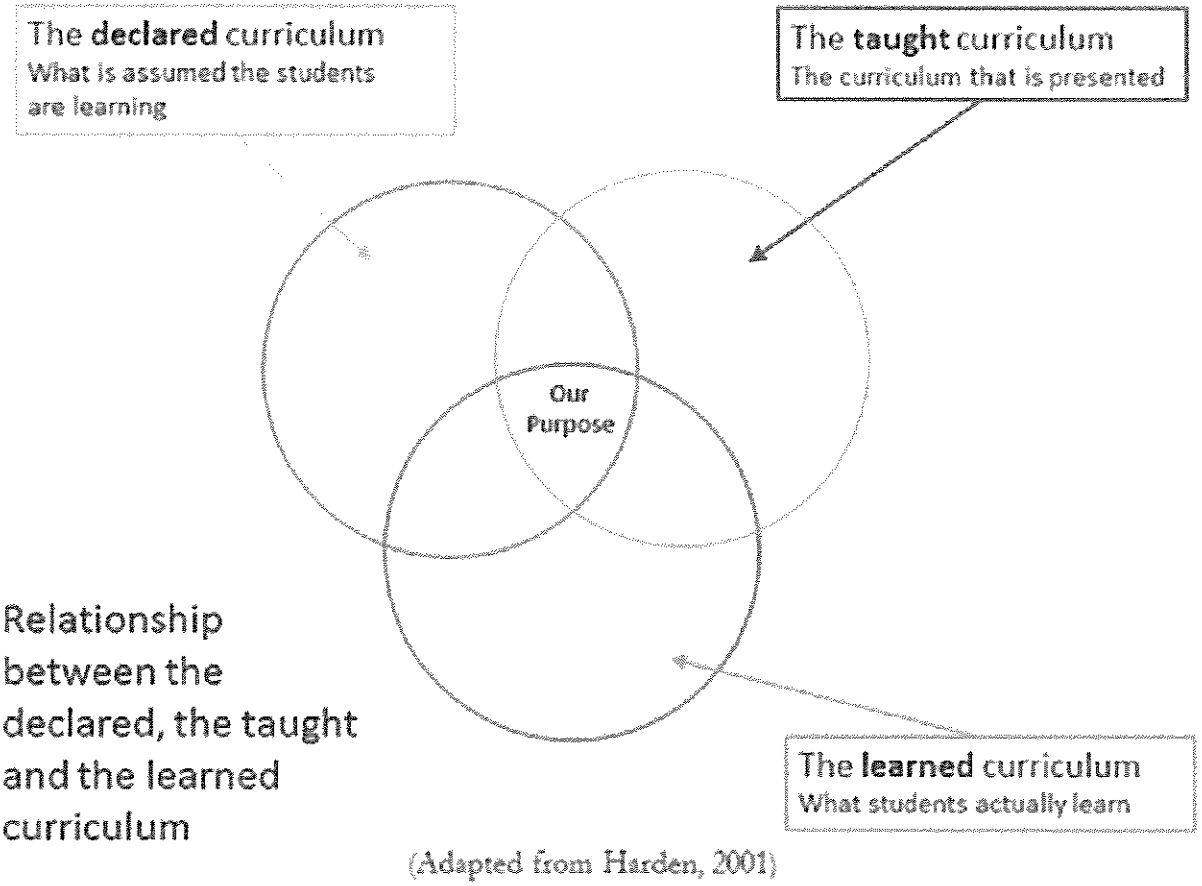
Global trends in development cooperation in higher education have been described comprehensively elsewhere (Boeren, 2012; Stephens, 2009). Within the specific context of Viet Nam, the purpose of the present paper is to describe and reflect upon collaboration between one Australian University (QUT) and universities in Viet Nam that teach in the fields of Medicine, Public Health and Nursing. It outlines the logic of the approach and the main outcomes.

Although this paper is based mainly on our experience in Public Health, it is suggested that the approach could be applied to other areas such as training and research in physical and social sciences.

The main purpose of the QUT-Vietnam Public Health program

In health professional training, there should be continuous reflection on what we are doing, and what tangible benefits are gained. Harden (1984, 2001, 2002, and 2013) has been one of the leading scholars in the field of curriculum reform. He argues for and describes strategies to enable continuous critical analysis of linkages between what we aim to teach, what we actually teach, and what students actually learn. As many academics and students know, often there is mis-match in these three elements, as illustrated in Figure 1. The guiding objective of the Vietnam Public Health institutional collaborative program was to expand the extent to which the three domains overlap, to achieve better learning outcome for students and thereby, improved health services.

Figure 1: Three domains of curriculum



Background of the QUT-Vietnam Public Health program

QUT's institutional collaborations in the health science field in Vietnam commenced in 2001 with a five-year program with the Hanoi School of Public Health. This work was funded by The Atlantic Philanthropies as part of their broader ambition to enhance capacity in the national Public Health workforce. The practical focus of the project was to assist HSPH to develop a high quality Bachelor of Public Health (BPH) degree. QUT had experience in developing a similar degree over the previous decade. The cooperation worked on four levels, including a) Curriculum sharing and refinement, b) Training in some specific teaching fields, such as biostatistics, health information management and health social sciences, c) Postgraduate training of junior academic staff through completion of Masters and PhDs, and d)
Development of university 'soft infrastructure' such as the Human Research Ethics Committee and advice on postgraduate training models.

This program had tangible outcomes, including major revision of some core textbooks (e.g. Biostatistics, Health Informatics and Health Psychology) and upgrading the skills of the HSPH teaching team by increasing the number of staff with postgraduate qualifications. Our work on development of research ethics Institutional Review Board (IRB) contributed to HSPH achieving international registration of the IRB with the US National Institutes for Health that enabled the university to meet ethics criteria of the Centre for Disease Control and other international agencies. Longer-term flow on benefits from that work included greater visibility for QUT in Vietnam that attracted Doctoral and Masters candidates from several Hanoi-based institutions who were supported by Australia Awards, the Rockefeller Foundation and the Vietnam Government.

Collaboration between five institutions

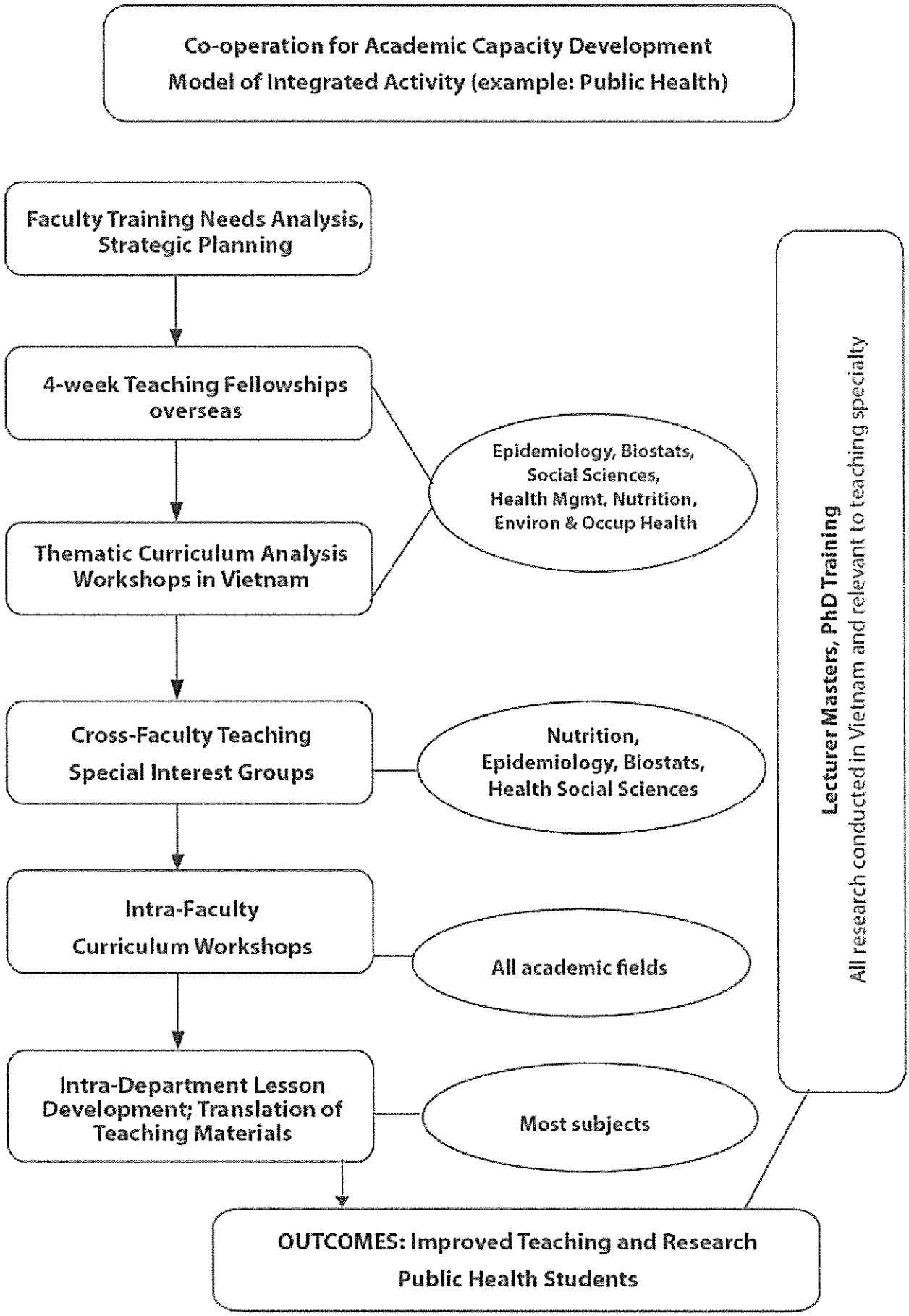
In 2005-6, the Atlantic Philanthropies (AP) sponsored QUT to develop a long-term project combining colleagues from Universities of Medicine and Pharmacy in Ho Chi Minh City, Can Tho and Hue to conduct training needs analyses and to prepare detailed Faculty strategic plans. During that time, we discussed the development needs of each faculty for human resources, existing curricula and infrastructure. Each faculty produced a five-year strategic plan that laid out their vision, mission, objectives and action plans. We then considered how QUT – itself a young university - could best contribute to achieving the strategic plans.

Project management: Four important joint management decisions guided the project from commencement. First, a national partner with advanced expertise in Public Health training especially for Bachelor degree students was engaged (Hanoi School of Public Health). Second, we decided it was most efficient administratively for QUT to be the main financial base and to work in parallel with each separate faculty, rather than to spend time and resources establishing a new office or entity for QUT in Vietnam. Therefore, we set up a joint management committee, but worked with separate annual institutional contracts.

Third, we decided to build upon existing teaching resources rather than to write entirely new textbooks. This enabled us to respect the Vietnam Government's training course frameworks and mandated curricula, yet to deepen and broaden content and improve the ways it was taught.
Our fourth decision was to share all QUT curricula, including books, subject guides, lesson plans, lecture notes, presentations and assessment materials. This follows the philosophy of 'open courseware' that is becoming prominent in leading universities worldwide (Olcott, 2012).

The program operational framework is shown in Figure 2. Further discussion can be found in the English-language Hue University Journal of Medicine and Pharmacy (see Dunne, 2012)

Figure 2: QUT-Vietnam Public Health Program Framework



The Project Framework and Procedures: Strengths and Limitations

The strategic planning exercise in 2005-6 highlighted development needs at each level of academic activity. There were shortages of staff at Masters and PhD level and consequently, few staff who could contribute actively to curriculum revision and innovation in teaching methods. Generally, the curricula and materials were quite old and/or (in many cases) adapted from lessons for medical students with minimal population health context. Most of the curricula lacked evidence derived from relevant Vietnamese research. Many staff carried heavy responsibility for teaching but were unsupported by good, recent reference books. Although national academic networks had been operational for some years (supported principally by the Netherlands Government), some academics – particularly those at the start of their teaching careers - were working in relative isolation without the benefit of regular contact with mentors or peers in other universities in the same field with whom they could share ideas and resources. In several faculties few staff were skilled in English and therefore could not access internet resources easily. Together, these conditions depleted the impetus needed for serious curriculum mapping and revision following the methods recommended internationally (see Harden, 2001; Harden and Laidlaw, 2013).

The project framework in Figure 2 was designed to address each of these concerns, and to do so in an integrated way.

Thematic teaching fellowships and workshops: Curriculum review in each field was first stimulated by teaching fellowships in Brisbane. Staff selected by Deans were invited for one month to work closely with QUT mentors. It was agreed that, as much as possible, the selected fellows should be junior to mid-level lecturers. Groups covered all main teaching areas of Public Health. The fellowship activities included small group consultations with QUT lecturers, immersion in large group and small group classroom learning sessions, and guided exploration of the QUT online resources with open access to those resources and the university library..

Two core activities facilitated by academic staff at QUT were a) For the Teaching Fellows to systematically compare and contrast curriculum structure and lecture content between the collaborating faculties and QUT, and b) to draft the objectives and program for subsequent training workshops in Vietnam to which all academics in each area were invited. The workshops provided the opportunity for in-depth critique of curriculum content to develop practical action plans for curriculum revision within each department. Formal and informal feedback on these fellowships and workshops was in general very positive

Special Interest Groups: At the conclusion of each thematic workshop, cross-faculty Special Interest Groups (SIGS) were established. The main objective of these SIGS was to sustain the work done during the teaching fellowships and curriculum workshops through a) SIG meetings to work on finer details of subject content and share teaching ideas and materials across universities, and b) To utilise the network for joint research or other professional activities that should directly or indirectly enhance teaching.

The SIG strategy had mixed success. The most productive SIGs were those in Nutrition and Epidemiology. The Nutrition SIG brought together the faculties with colleagues in national and regional nutrition centres. One excellent outcome was that, within a 3-year period, the Nutrition group with additional collaborators designed then introduced a new professional degree in Clinical Nutrition. This has been approved by the Ministry of Education and Training and the Ministry of Health, leading to the first intake of students in 2013 at Hanoi Medical University, and plans to implement a similar program in HCMC in 2015. Within the next five years, this new profession in Vietnam will provide much needed services in hospitals and health clinics for people suffering severe nutritional disorders and chronic disease-related malnutrition.

Critical reflection on the SIG concept: The SIG idea was not new. Before introducing the strategy we researched the history, objectives and operation of SIGs that exist under the aegis of national or regional Public Health Associations in Australia and Britain. Many SIGS started from a small base and eventually flowered into large active professional groups and sometimes into national associations (e.g. the Australasian Epidemiology Association).

Although we had success in Vietnam with the Nutrition SIG (see comment above) and the Epidemiology SIG generated several cooperative research projects, the strategy as a whole did not lead to sustainable outcomes. A possible flaw in the SIG concept was that the primary focus was on teaching and critical analysis of the inter-university comparability of curriculum. This is the heavy, rudimentary work of academics. Most well functioning SIGs internationally have a broader focus on research and personal professional development that may lead to richer shared experience.

Intra-department curriculum activities:
Most departments in each faculty became actively engaged in updating textbooks, lesson plans, handouts, assessment and other core teaching materials. Nearly all elements of the curriculum were influenced by this project. Improvement of teaching materials is central to what we hoped to achieve; that is, for the quality of training in the classroom to improve. Independent mid-term and final evaluations and informal feedback from lecturers indicated that the quality of teaching in many fields was enhanced. However, we did not assess the teaching outcomes quantitatively, as the systems for student evaluation of teaching performance were not comparable over time (or non-existent in some faculties or departments). Indeed, the first classes of BPH students only commenced near the end of the project in one faculty (Can Tho) so it was impossible to evaluate improvement in teaching. Further, if change was occurring, it would have been difficult to disentangle effects of this project from concurrent project-specific work with other groups (e.g. The Netherlands projects) or through government inspired strategies for teaching improvement. Nevertheless, retrospect quantitative assessment could have been attempted, and is recommended for further work of this nature.

Postgraduate training of teaching staff

At the outset it was recognised that institutional capacity development and postgraduate training of teaching staff are inseparable. In total from the four institutions, 17 academic staff were supported to complete Master of Public Health or PhDs. A positive outcome for the longer-term development of these faculties is that half of the MPH students have, by early 2014, progressed to PhD study at Australian and other international universities. Within the next three years, the total number of doctoral level staff teaching in each faculty will increase significantly.

It is important to emphasise that all PhD and most MPH students in the QUT project completed their research work in Vietnam. This included engagement with diverse parts of the health sector, from hospital Health Information Departments, to tertiary hospital Emergency Departments to commune health centres in many provinces. The work has extended from a Maternal and Child Health Clinic nutrition project, to health education in high schools to studies of the negative health impacts on workers in small metal smelting enterprises. The graduates are now publishing their work internationally or nationally and are integrating their research into teaching.

Long-term outcomes from this work and relevance to Australian Government programs in Vietnam

In addition to the direct outcomes form the project that focused on curriculum and improvement of competencies for public health practice, there have been several important sequelae that contribute to broader connectivity, openness and academic quality improvement. These include:

National and international collaborations for community health research: One excellent development following a decade of work in Vietnam was a decision by QUT's Vice-Chancellor to provide funds for 3 years (2011-2013) to support a collaborative 'Centre for Community Health Research' in Hue College of Medicine and Pharmacy. The centre has been successful, and we obtained further support from Atlantic Philanthropies and QUT through to 2016. In February 2014, the Centre was upgraded to become an autonomous university research institute.

The Institute for Community Health Research (ICHR) will be instrumental in achieving sustainability. The researchers in Hue engage with national colleagues through several networks developed in the earlier project, particularly in mental health, health social sciences, epidemiology and biostatistics. Since 2012, five PhD projects and one Postdoctoral fellowship have enabled intensive collaboration between ICHR and Hanoi Medical University, HCMC UMP, the Ministry of Education and Training, the Research and Training Centre for Community Development in Hanoi, the School of Psychology at QUT, the University of Tasmania, Khon Kaen University in Thailand and the World Health Organization, among others.

The Hue ICHR should raise the international profile of Hue UMP in Southeast Asia through linkages with the Sub-Mekong Regional Public Health Network. Hue will host the annual conference in 2015 and is engaged in collaborative research and training with several regional network members.

Australian student experiences in Vietnam: The national network provides supportive environments for QUT undergraduate students to gain experience in international health. In the past 7 years, 65 QUT Bachelor of Health Science students have had their practical placements in Ha Noi, Hue, HCMC, and Can Tho. Apart from direct benefits to their understanding of global health, the regular 3 to 4 week placements contribute to internationalisation of partner institutions. Our student experiences are integrated within award courses at QUT. The model applied here has been supported for the past four years by the Federal Department of Education and is consistent with the New Colombo Plan short-term mobility program.

Contribution to postgraduate training of the future Public Health workforce in Vietnam: This ten-year engagement in capacity building for Public Health faculties has created a reasonably strong profile for this Australian university. It has enabled us to work closely with the Australia and Vietnam Government scholarship programs. To date, 60 MPH and PhD students have graduated or are currently enrolled. They come from 14 different institutions throughout the country, such as Hanoi School of Public Health, Hanoi Medical University, the National Institute of Hygiene and Epidemiology, the National Institute of Nutrition, Hue University of Medicine and Pharmacy, the Khanh Hoa provincial health department, Nha Trang University, the HCMC Institute of Hygiene and Public Health, Can Tho UMP, Family Health International and other NGOs. Graduates have now been promoted to mid-level and senior positions in these institutions and are directly influencing the quality of training and research.

Conclusion

The challenges outlined in the Lancet Commission report (2010), particularly regarding reform of educational and health care institutions and systems, remain daunting.

That report and similar analyses of the need for better trained and internationally informed health professionals (e.g. Zhao et al, 2013) also point to many opportunities for institutions to make a real and sustainable difference to health services in our region. It is hoped that the framework discussed here and the overview of subsequent activities and practical outcomes is useful for others in international education and global health who want to influence learning styles and system connectivity in the future.

Acknowledgements:

The author wishes to thank many colleagues who contributed to this work, including A/Prof Vo Van Thang and Prof Cao Ngoc Thanh in Hue; A/Prof Truong Phi Hung, A/Prof Nguyen Do Nguyen and Prof Do Van Dung in HCMC; Prof Pham Van Linh and A/Prof Pham Thi Tam in Can Tho; and A/Prof Nguyen Thanh Huong and Prof Le Vu Anh in Hanoi. We are grateful for the support of The Atlantic Philanthropies and especially thank Dr Le Nhan Phuong and Dr Nguyen Trong Hau for their imaginative leadership. In QUT, I express my gratitude to Vice-Chancellor Professor Peter Coaldrake, former Deputy Vice-Chancellor Professor Ken Bowman, Head of the School of Public Health and Social Work Professor MaryLou Fleming and 30 academic colleagues at QUT who contributed to this program at various times. Finally I express my sincere gratitude to our long-serving administrative managers Ms Jill Nalder in Brisbane and Ms Nguyen Thu Thuy in Hue for their wonderful support.