# LEARNING AND TEACHING INVESTMENT FUND 2010-2011: FINAL PROJECT REPORT

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<th>Project title</th>
<th>BUILDING THE COMMUNITY (BTC) 2010: Developing an RMIT Melbourne - RIUV Vietnam, Multidisciplinary Teaching model on Design and Climate Change</th>
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<td>Strategic objective</td>
<td>To build on previous BTC workshops and introduce students to issues of design and climate change</td>
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EXECUTIVE SUMMARY

The live fieldwork component of the BTC project in Hoi An, Vietnam provides significant outcomes for the students, as it gave the students a chance to experience a 'live project' that replicates the challenges and complexity of professional projects. It has also allowed the students from different disciplines to each apply their own knowledge and skills to the focus issue of climate change and thus gain new perspectives. Specific outcomes for students have been.

- Development of specific professional skillsets wider than their own specific discipline. Skills developed in the group work included: project management, team work, group facilitation, data collection and analysis, professional presentation, fieldwork and research methods, interview skills.

- Development of cross cultural awareness through working in Vietnam and being exposed to a different culture, both in and out of the classroom

- Development of understanding of working in a professional multi-disciplinary context. This assisted the students to understand their own role in a large framework of professional practice and also consider the roles of the different stakeholders that they may interact with in their working lives.

- Development of the students understanding of Climate Change and the environmental issues facing both Vietnam and the world.
LIST OF OUTCOMES
This 4-year program to date has many significant outcomes for the students and staff involved. Specific outcomes for RMIT have been

- Development of innovative multi-disciplinary teaching and cross-campus integrated studio-based model, developed across the design, construction and multimedia disciplines at RMIT Melbourne and Vietnam campuses
- Development of two 12 credit point subjects between RMIT Melbourne and RIUV allowing for greater flexibility of enrolment
- Development of ‘global passport’ teaching model that uses design to assist communities in need and enable students ‘real world’ learning outcomes through immersion in community development projects and with the opportunity to see their design projects implemented.
- Dissemination across RMIT and the broader Australian university sectors of the ‘Building the Community’ teaching model
- Video documentaries on 2007-2010 staff/student experiences and reflections on project.
- Online NING virtual platform developed from curriculum courseware and audio-visual materials that can be made available in both hard and e-copies to future staff and students at the RMIT and RIUV.

DETAILED PROJECT DESCRIPTION

Vietnam is one of the five countries in the world likely to be most affected by climate change. The country is urbanizing rapidly, and its cities lie in a narrow coastal lowland zone that is already vulnerable to flooding and tropical storms. This project aimed to develop an innovative teaching platform around the urgent global agenda of climate change and how sustainable design and construction practices can mitigate its imminent effects in Vietnam.

The 12CP or 24CP integrated practice studio for RMIT Melbourne and Vietnam (RIUV) students will both be framed around:

1) Multi-disciplinary teaching modules on climate change science, climate change ethics and micro and macro design strategies to counter environmental change across Australia and Vietnam. These took place during a field work component based in/around Hoi An Vietnam, applying the conceptual learning’s of pre-departure readings to the problem-based task of developing a climate change adaptation strategy for the chosen site. The project was guided by ‘real world’ input from key stakeholders in the project, including the Vietnam Green Building Council, UNESCO and local government agencies in Vietnam (12 CP)

2) Refinement on climate change and Eco City strategies (12CP)

This studio built upon work that Charlesworth had already undertaken with the RMIT Global Cities Institute in 2008-2010 with researchers from the Vietnam Academy of Social Science and the Vietnam Green Building Council (VGBC) who were based at RMIT Melbourne researching climate change adaptation on AusAID Executive Leadership Scholarships. This exchange provided a forum for discussion on climate change adaptation planning with Dr Le Cuong (VGBC) and his colleagues to investigate impacts of extreme natural events (such as typhoons and flooding) and rising sea levels on low lying areas in urban and rural Vietnam. The extreme vulnerability of the Hoi An region was exemplified in the severe September 2010 floods. This sensitive coastal area is becoming subject to more frequent storm surge flooding and typhoons, which are threatening local livelihoods, recent coastal tourism developments and, significantly, the World Heritage listed centre of Hoi An.

The project also continued the strong collaboration between RMIT Melbourne and RIUV Vietnam students in the ‘Building the Community’ studios that have been conducted over the past three years in Hoi An (2007-2010). These previous teaching projects focussed on the design of individual buildings for NGO client groups and developed student’s skills in cross-cultural communication and consultation, sustainable technologies, and humanitarian design. This project differed from these pedagogically in three ways:

- the adoption of a “problem based” approach to learning for students;
- a focus on the regional scale, not that of individual buildings, which will de-emphasise the previous core focus on architectural design and, thus, provide for a deeper experience of multi-disciplinary learning; and
• the development and testing of an “integrated practice studio” approach to teaching and learning as a new pedagogical form.

The problem based learning (PBL) approach is rarely used in design, construction and multimedia courses (the three fields from which Melbourne and Vietnam students will come for this program) despite its obvious relevance to the development of relevant professional outcomes. However the architecture program at University of Newcastle in Australia uses PBL as a core method for teaching design. It is particularly suited to the Integrated Practice Studio model developed by Charlesworth in 2010 through the Building The Community program. With problem-based learning, design courses are delivered:

Using a mixture of problem-based learning, design studio tutoring and traditional teaching. Design studio courses use an innovative problem-based approach to learning in which a range of concerns (technical, ecological, historical and managerial) are integrated into the process of architectural design. In conjunction a range of courses support the development of essential skills and focused knowledge.

(http://www.newcastle.edu.au/program/10028.html)

The core themes for both the conceptual and fieldwork components of the program involved teaching by a range of RMIT and RIUV staff on:

• Social, political and economic issues that inform and limit/drive the adoption of sustainability practice and projects
• Climate change science and ecological systems
• Climate change impacts
• Climate change in developing countries
• Climate change ethics and justice
• Design strategies for mitigation (Building scale)
• Design strategies for adaptation (urban design-regional scale)
• Design strategies for multi media design

Sub themes to be explored include:

• globalisation
• opportunities for developing countries to bypass some of the more ‘harmful’ stages in the race to modernism
• new economic and job possibilities in sustainability industries
• bottom-up vs. top-down approaches
• perceptions of conspicuous consumption
• technological implications
• Implications of population growth and demographics Vietnam vs. the West)

PROJECT RATIONALE

(i) Improved student learning experiences, outcomes and employment opportunities

This project built on 2007, 2008 and 2010 ‘Building the Community’ design studios. Previous year’s projects led to the following reflections:

a. Evaluations of the 2007 and 2008 courses indicate that students gained enormously in their development of Work-Integrated Learning skills, cross-disciplinary understandings, problem-solving skills, professional ethics, and cross-cultural appreciations.

b. The fieldwork component of the studios in Hoi An was considered the most rewarding component of the 2007-2008 programs

c. Stage 1 and 2 students from 2007 and 2008 are now working with a not-for-profit organization LifeStart to raise funds to build a home for at risk-youth in Hoi An. In addition, two of these students volunteered to work with academic staff to develop the scoping brief for the Stage 3, 2010 project while two others are volunteers in the design of two Indigenous cultural centres in Arnhem Land.

d. Four Melbourne students from the BTC program in 2007/2009 have already gone on to undertake further training opportunities in the international development sector while others have used it as the basis of Honours/Masters final projects
(ii) Specific relevance of the program to Vietnamese (RIUV) students include:

- introduction to environmental and sustainability topics and their relationship to the larger issues of globalization, economics and politics. These are topics not addressed in their high-school or RMIT Vietnam education.
- exposure to new industries and potential industry and employment opportunities that relate to sustainable practices and their potential for growth in Vietnam
- reflect on the path to modernism being taken by Vietnam and alternatives to its present course that may incorporate sustainability practice
- recognition of smaller local practices that relate to sustainability already in use that are being threatened or replaced by larger top-down driven initiatives
- engagement in real primary research and field-work

(iii) Innovation

There were 3 key innovations in the teaching module of design and climate change:

1) Currently there are no elective or studio courses available in any university in Australia that brings together design (architecture, landscape architecture, interior design, multimedia design and industrial design) and property construction students through international studio-based programs. However, there is a huge demand from local and international design students wishing to get involved in volunteer projects abroad where they can actually see the results of their efforts and can genuinely contribute to helping communities in need. This was evidenced by more than 40 students applying for only 12 places in the 2010 Building the Community course.

2) Likewise and surprisingly, there are no specific courses focussed on the subject of design and climate change in any Australian architecture program. Given the strong demand by other academic disciplines (Business, IT, Health Sciences, Engineering and Urban Planning) on how to integrate new “green” thinking into their curricula, the proposed course on design and climate change it is a timely contribution to the built environment disciplines.

3) The 2010 BTC program developed specific modules (all now on the RMIT server) on; 1) Cross community consultation 2) Humanitarian Design 3) Sustainability Concepts that can be used for other RMIT courses and staff in future years. The 2010 course on design and climate change will be doing the same with the development of on-line modules for other RMIT academics and programs to develop future teaching modules on environmental change.

(iv) Strategic alignment

Collaboration between RMIT Melbourne and RIUV students between 2007-2011, provided a highly dynamic cultural learning experience for both groups which fully embraced the ‘global passport’ aspiration of RMIT teaching and learning programs. The project thus achieved the following the objectives:

- building links between the learning hubs of RMIT Melbourne and Vietnam through developing a robust platform for staff and student exchange between the 2 campuses;
- providing opportunities for RMIT Melbourne and RIUV students to enrol and study together in a common course that will be further developed online learning platforms for future projects around design and climate change
- developing curriculum innovation through the use of local examples (in Vietnam) as a context for ‘real world’ learning;
- enhancing creative use of informal learning environments through on-site immersion in a community based design project; and
- using a multi-disciplinary project-based learning model involving students from two RMIT campuses and two Colleges, to deliver a tangible ‘product’ for not for profit, government and industry client groups.

(v) University wide application

The 2010 ‘Building The Community’ teaching model represents an innovative teaching program that will potentially have a wide application across three RMIT Schools (Architecture and Design, Global Studies, Science and Planning, and Property, Construction and Project Management) and two RMIT campuses,
Melbourne and Vietnam. It also develops an important and much needed teaching platform on design and climate change.

(vi) Value for money

As evidenced through the 2007-2011 projects funded through the LTIF grant, this project to date has delivered a wide range of teaching, design and client outcomes for a modest budget. The reports and videos prepared on the 2007-2010 project have also been used extensively to promote innovative teaching and community-based learning within RMIT and to secure funds for the Hoi An housing project, on behalf of the project clients, the Lifestart and Kianh Foundations. The 2008 BTC project lead to the granting of further RMIT LTIF funding of $250,000 towards the implementation of the 2010 project (Construction of Dien Ban Orphanage project), which will be a significant milestone in the project between the two campuses.

PROJECT ACTIVITIES

The students participating in the 2010 Building the Community project began their background research in December 2010. The students from RMIT and RIUV were put into groups, which concentrated on getting a mix between the disciplines and experience. In these groups (across countries) the students prepared 3 min videos introducing themselves and responding to specific questions on Climate Change from the research papers. The students all met in Vietnam in February of 2011. Once in Vietnam they spent 10 days in Hoi An doing fieldwork, research and consultation with the community. The students were also given multi-disciplinary teaching modules on climate change science, climate change ethics and micro and macro design strategies to counter environmental change across Vietnam and the wider world. They were given the opportunity to interact with a number of academics and professionals including representatives from UN Habitat, Development Workshop France, BAU Architects and the Asia Institute of Technology. At the end of this time in Hoi An the students presented their Eco-City proposals to the Hoi An People’s committee for comment and contribution.

The students then travelled to the RIUV Saigon campus to refine their ideas and take on board the feedback from the people’s committee. After 4 days in Saigon the students presented their final Eco-City Proposals to a panel of industry representatives (including architects, planners, RMIT multimedia lecturers)

PROJECT OUTCOMES AND IMPACTS

This 4-year program to date has many significant outcomes for the students and staff involved. Specific outcomes for RMIT have been:

• Development of innovative multi-disciplinary teaching and cross-campus integrated studio-based model, developed across the design, construction and multimedia disciplines at RMIT Melbourne and Vietnam campuses

• Development of two 12 credit point subjects between RMIT Melbourne and RIUV allowing for greater flexibility of enrolment

  Part A: Intensive on-site workshops, fieldwork, analysis and production of final deliverables. Enrolments were offered to RMIT and RIUV students over the semester break.

  Part B: additional intensive classroom/workshops and directed-studies activities around key topics. This was offered to RMIT students over the regular academic semester as a General Elective.

• Development of ‘global passport’ teaching model that uses design to assist communities in need and enable students ‘real world’ learning outcomes through immersion in community development projects and with the opportunity to see their design projects implemented.

• Dissemination across RMIT and the broader Australian university sectors of the ‘Building the Community’ teaching model

• Video documentary on 2010-2011 staff/student experiences and reflections on project.

• Online platform developed from curriculum courseware and audio-visual materials that can be made available in both hard and e-copies to future staff and students at the RMIT and RIUV.

• Publication of 2010 studio design projects through ‘Building the Community: RMIT design students in Hoi An, Vietnam’ with RMIT Press.

The live fieldwork project provided significant outcomes for the students, as it gave the students a change to experience a ‘live project’ that replicates the challenges and complexity of professional projects. It has allowed the students from different disciplines to each apply their own knowledge and skills to the focus issue of climate change and thus gain new perspectives. Specific outcomes for students have been.
• Development of specific professional skillsets wider than their own specific discipline. Skills developed in the group work included: project management, team work, group facilitation, data collection and analysis, professional presentation, fieldwork and research methods, interview skills.

• Development of cross cultural awareness through working in Vietnam and being exposed to a different culture, both in and out of the classroom

• Development of understanding of working in a professional multi-disciplinary context. This assisted the students to understand their own role in a large framework of professional practice and also consider the roles of the different stakeholders that they may interact with in their working lives.

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