Supporting Professional Development with
Learning through Action Projects

Research from Australia & Southeast Asia

Edited

by

Kevin Laws, Lesley Harbon & Christabel Wescombe

Developing Educational Professionals in Southeast Asia
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Contents

Introduction

In December 2010, eighteen people from four Southeast Asian countries and Australia, met in Sydney to workshop ways of re-forming the professional development of teacher educators and school teachers. Dissatisfied with the predominance of the on-off in-service model, the group planned and implemented models which would better serve the needs of education professionals. Although the groups had never met together previously, it was decided that the project should continue, and that the group would meet in a different country twice a year, every June and December.

The second meeting was held in June 2011 in the School of Education at Can Tho University, Vietnam, followed by a third meeting in December 2011 at the Faculty of Education, Suratthani Rajabhat University, Thailand. At the Suratthani meeting a monograph was launched, *'Teacher Professional Development in Southeast Asia: Perspectives from Indonesia, Laos, Thailand and Vietnam'*, with articles published by group members examining the various models of professional development which had been implemented since the group's tasks began.

It was decided that in the future the group would focus on the professional development of individuals and teams through providing advice and assistance in undertaking projects associated with the work of members. Some of the projects had an action research emphasis, while others took an action learning approach. All of these projects came under the general theme of 'learning through action in the workplace'. The meetings in 2012 were held in June 2012 in the Faculty of Education at the National University of Laos in Vientiane, Laos, and in December 2012 at Universitas Negeri Jakarta, Indonesia. Individual teachers and teacher educators reported on the progress of their projects. Reports on the developments within each project between 2011 and 2013 now form the content of this current monograph.

At each meeting in 2011 and 2012 other scholars were invited to become members of the original group, the majority of whom are teachers and teacher educators. It had become obvious that scholars outside teaching and teacher education, especially those who worked in higher education, were very anxious to participate in professional development activities. The new conceptualisation for the group focused on Developing Educational Professionals in Southeast Asia (DEPISA), and thus the new project came into being. In June 2013 a workshop and conference, attended by over 80 people, was held at Phranakhon Rajabhat University in Bangkok, Thailand. The group has broadened its membership to include those working in nursing and health related fields, as well as management sciences, the social sciences and humanities.

The present monograph contains papers presented or written during DEPISA conferences and workshops since December 2011. Papers cover a number of areas: some deconstruct action research cycles and link research outcomes to teacher learning; some case study the action learning that was undertaken in the particular context. Some discuss how DEPISA activities have enriched teaching and learning.

Indeed, the contents of each paper are varied, but importantly most represent our colleagues' own research output. For readers of this volume, we trust it will encourage the development of further ideas and suggestions about how you too might become involved in 'learning through action' projects, thus contributing to your own professional development.

We are very pleased with the professionalism and commitment of the authors and we acknowledge their efforts. It is essential that we also acknowledge the initial funding received from the Australian Government through an Australian Leadership Awards Fellowship grant, and from the University of Sydney International Development Fund grant, which provided the initial impetus to this project. Since that time the project has been largely self-funded, but it is necessary to acknowledge the support and encouragement provided by the host Faculties of Can Tho University, Suratthani Rajabhat University, Universitas Negeri Jakarta, the National University of Laos, and Phranakhon Rajabhat University without which it would have been impossible for meetings, conferences and workshops to have taken place.

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October, 2013.

Learning Through Action: A Process Approach to Professional Development

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The Developing Educational Professionals in Southeast Asia (DEPISA) Project began with an interest in the continuing professional development of classroom teachers and university teacher educators. Since that time university lecturers in Management Science, Nursing Education and Health have joined our group. It seems the issue of continuing professional development is a common one and one in which we can all share many thoughts and learn from each other.

One of the ways in encouraging and supporting continuing professional development is through the creation of 'communities of action'. This is a variation of what is also known as 'communities of practice' and 'professional learning communities'. DEPISA, with members from Australia, Indonesia, Laos, Thailand and Vietnam is an example of a community of action which is also a community of practice because all members are dedicated to improving the practice of teaching and learning in order to assist students achieve their goals and to enhance members' knowledge and contribute in positive ways to bettering society and our understanding of each other.

Within the DEPISA community of action two necessary conditions for the work of educational professionals have been identified:

- Those who practice teaching and research should know about it and understand it, and
- The processes involved in learning through action/action research/action learning provide some of the ways in which we can bring about improvements in student learning and the learning of educational professionals.

In this paper I wish to outline some different ways in which learning through action might be considered and identify a number of issues which I believe need to be addressed in order to improve our practices.

Firstly, I will focus on different terms which have been used to describe what it is we are trying to undertake.

Action research

This term is widely used, especially in educational and community settings (Dick, 1997). It is considered to be a cyclical process in which some specified actions are followed by reflection (e.g. MacIsaac, 1995). It is claimed that action learning can promote change in practice and greater understanding at the same time (Carr & Kemmis, 1986). Action research aims to produce knowledge about an issue which is related to something in the work situation through which a change in practice occurs. Through a cyclical process a teacher (researcher)

plans to address the issue, acts on the issue by using the plan, observes what occurs as a result of the action, and then reflects upon the observed results. Sometimes a person other than the teacher plans and then gets the teacher to put the plan into action which the researcher observes and reflects.

Action learning

The term action learning is more often applied to organisational settings, such as corporations and government bodies (Dick, 1997). Action learning is usually undertaken in a group. The group members come together at reasonably frequent intervals and share their thoughts and practices (i.e. their learning) with each other with the intention of improving their overall performance. The group may be a work team, a project team, or just an ad hoc group of individuals which are interested in improving their practice and learning from the process. A main idea behind action learning is that the learning is based upon actual experiences in the workplace.

In this process, unlike action research, there is not necessarily any emphasis upon a systematic introduction of a change in practice and reflection upon its effects. However, the term action learning de-emphasises the concerns created by the word 'research', and the approach which may be adopted provides more freedom than the steps in the action research cycle. However, this process may not be sufficiently rigorous to produce results that can be attributed to changed practices.

Learning through action

If we think of utilising the main features of action research and action learning, but call the process 'learning through action' maybe it is possible to overcome the shortcomings of both terms. I propose that learning through action should involve an ongoing process, similar to action research with reflection following the systematic implementation of a specific action, but include, wherever possible, collaboration with colleagues and a sharing of the learning that has been derived.

What might form the focus of a 'learning through action' project?

Any educational setting contains a complexity of issues which cannot necessarily be addressed by the implementation of formulaic solutions. Usually it is necessary to make a series of systematic changes and observe and reflect upon the impact of each of the changes in order to determine whether a particular change can be attributed to a particular result (effect).

Probably the most frequently identified issue in educational settings relate to teaching and student learning. For example, Charles Fadel (2012) asks what are the most important things for students to learn in the 21st Century and how might we assist them in their learning? He identifies the following knowledge, skills and 'character' as the important learnings for students:

- Knowledge
  - Selected on the basis of relevance to real world experience
  - Addressing important social and economic needs
  - Maintaining a balance between the conceptual and the practical
- Skills – the four C's
  - Creativity
  - Critical thinking
  - Communication
  - Collaboration
- Behaviours, attitudes and values
  - Morality-related
    - Integrity
    - Justice
    - Empathy
    - Ethics
  - Performance-related
    - Adaptability
    - Persistence
    - Resilience

(Fadel, 2012).

In considering how these learning can be facilitated we can consider the following elements:

- Teaching practices
- Learning strategies
- Organisation and administrative processes aimed at supporting teaching and learning

Each of these elements could form the focus of a learning through action project.

However, Alexander (2008, p. 48) broadens these elements by arguing that educators in their work engage with three distinct and related domains of ideas and values: What is taught, to whom and how, the institutional and legal context within which the learning and teaching takes place; and the larger societal context informed by social purposes and values. Each of these domains could also be the focus of a learning through action project.

In the first domain of learners, learning, teaching and curriculum the focus of a professional learning through action project could be on the characteristics, motivation, needs and differences of the learners, or it could focus on how learning was facilitated, achieved and assessed. In relation to teaching the emphasis could be upon planning, implementation or evaluation. Alternatively, ways of knowing, doing, creating, investigating and making sense (i.e. curriculum) could be the focus. Research evidence suggests that teaching practice can be improved by professional learning opportunities that are linked to an analysis of teaching and student learning and focused on learning specific curriculum content, organised around real issues of teaching practice, and connected with working with students (Villegas-Reimers, 2003).

However, as part of a professional learning project it is also possible to investigate the school or university as a formal institution and to consider its theories of use, espoused theories and theories in action (Argyris & Schon, 1978, 1996), or the microcultures and micropolitical behaviour within it. Further areas for investigation could focus on individual and community views on the nature and purpose of education, and learning and schooling. Such investigations might be seen as action learning. Both action research and action learning are part of learning through action.

Types of learning through action

As stated earlier learning through action may be undertaken as an individual, but is more likely to produce better results if it involves colleagues in the process. Because of the importance of reflection in the process individual learning through action may lead to the reinforcement of an inadequate appreciation of cause and effect results. The inclusion of colleagues in the process of learning through action has the benefits of producing a number of varying viewpoints about the results of the actions which were implemented, based upon a wider range of knowledge and experiences that the group members bring to the planning, action, observation and reflection phases.

Collaborative learning through action may occur in a department or faculty and involve two or more people. It may also involve people from other departments or faculties across the whole organisation. This may be demonstrated by learning through action involving university staff and school teachers or workers in outside organisations collaborating together of an issue of common concern. At times it may involve learning between different organisations and between different regions and countries.

Different paradigms for learning through action

A number of different paradigms of learning through action can be identified: positivist, interpretivist, and a praxis (or what Owen (2006) terms 'evaluative inquiry') approach. It is appropriate to use any one of these paradigms. Each is relevant, but different paradigms might be more appropriate to use to find answers to the issue which is the focus of the learning through action process. Different paradigms involve different data collection and analysis strategies. You should use the strategies with which you feel comfortable and which you think will provide useful information to resolve the issue you are investigating.

A positivist approach is more likely to utilise the collection of data which can be quantified and processed through statistical procedures. Such an approach may limit the type of investigations which can be undertaken, and often can cause those not confident in the use of statistical procedures to not wish to get involved. However, because we are involved in complex workplaces with complex human issues it is difficult to separate individual facts which may be producing the results that are observed.

An interpretivist approach usually involves the collection and analysis of qualitative data, and is sometimes considered to be very subjective. This does not have to be the case, especially if more than one person is involved in the learning through action process. Because the teacher is planning and acting in a 'real' situation, and usually one in which they are directly

involved, they are able to draw upon a range of data in making their observations which is often not available to outside researchers.

Those who advocate a praxis approach point out various short-comings of both of the other paradigms. This approach emphasises the importance of the practice/action aspect of the learning. It minimises the emphasis upon research, and thus puts the focus upon the actual practices. A praxis approach can help overcome the idea that learning through action is somehow additional to and separate from everyday work. Owen (2006) in his analysis of approaches to program evaluation wrote about evaluative inquiry. This is the type of inquiry which leads to making decisions based upon evidence, and thus can be seen as closely related to a study of practice.

Elements in the learning through action process

In this section I will attempt to provide some guidelines for undertaking the process of learning through action. You will notice that I have borrowed much from the ideas involved in action research and action learning, but I have attempted to provide some details which may assist you by giving you sufficient confidence to begin such a process.

<u>Identifying an issue</u>

The issues you select should arise from some aspect of the work you actually do every day. It is not a topic for pure research, but an issue which impacts upon you and your colleagues, possibly involving the teaching and learning process, but it may also relate to administrative or organisational activities. The issue you select should relate to something you are doing about which you have some concerns. This means you should select an issue upon which you can act. Learning through action should not be undertaken in regards to an issue over which you have little or no control. You must be able to implement some action which you think will result in an improvement in your practice and which will impact positively upon it. The results of the action through learning process may lead to an improvement in student learning, but it should also lead to you learning something as well.

Some useful principles to keep in mind when you are deciding upon an issue are:

- It is often useful to express the issue as a higher order question
- State the issue and question in common language and avoid jargon
- The question should be short and meaningful
- The issue should not already have an obvious answer
- The question should be something over which you can have some influence
- The question should be something of interest and worth the time you spend investigating it
- The question may arise from an issue that that is readily identifiable, or it may come from a feeling of discomfort or tension in the teaching and learning process

<u>Preparing for action</u>

This is a most important element in the process, but it is often neglected. Before actually collecting data from the group with whom you are working you should investigate what others have found out about the issue you wish to act upon. This most likely will involve a search of previous studies utilising databases and reputable journals reporting empirical studies. This step may suggest to you a number of different ways in which you can investigate the issue you have selected and lead you to adopt either a positivist, interpretivist or praxis approach.

<u>Gathering data</u>

When you have decided upon the new practice you wish to implement you should consider the following:

- What data are most appropriate to the issue and the question?
- Are the data easy to collect?
- Are there sources of data readily available?
- How structured and systematic will the collection of data be?

It is important to only select a single issue at a time and to implement only one new activity at a time. If you implement more than one new activity at a time it will not be possible to determine the impact and effect of each individual activity. It is best to select the one activity you think holds the greatest promise of success in the first instance and then determine the impact it has before trying other activities. Remember, that there are usually a number of ways to address an issue, and that there is not likely to be a single 'best' way of solving a problem. Think about searching for and implementing 'better' ways of addressing the complexities of your work.

In many instances there is much useful data readily available. For example, if students are required to take part in a standardised testing program at the school or national level, data generated through these tests may be appropriate to use to investigate some issues.

Many people who prefer to operate within a quantitative/positivist paradigm will want to use a pre-test/post-test approach and utilise the data collected to undertake a statistical analysis to determine whether there is a statistically significant difference between the old practice and the new practice. However, this is only one way of doing things. In reality there are many different ways in which data may be generated as indicated in the following list:

- Interviews
- Journals
- Diaries
- Field notes
- Photos, videos
- Questionnaires
- Anecdotal records
- Checklists

- Case studies
- Minutes of meetings
- Surveys
- Records, including test results
- Samples of student work

<u>Interpreting data</u>

The data you choose to collect and the way in which you interpret it will depend upon the research paradigm in which you choose to work.

Some data may be quantifiable, as in the case of test results, surveys and some data from questionnaires. Other data (e.g. opinions, attitudes, checklists) may be summarised in table form. If you use qualitative data collected through interviews, samples of student work, checklists, photos, anecdotal records, field notes, diaries or journals the first step in analysis is to analyse and identify major themes.

<u>Acting on evidence</u>

Once you have interpreted the data design a plan of action that will allow you to make a change and study the results of that change. Only alter one element at a time because if several changes are made at once it will be very difficult to determine which action is responsible for the outcome.

<u>Evaluating results</u>

How do we know whether the action we undertook actually produced the results we think the data indicated? This raises questions of cause and effect.

- o Did action X produce the result Y?
- o Were any other factors likely to have brought about this result?

The second question is particularly important because we are working in settings with many human beings and it is not possible to 'control' every element in the setting.

The important step of evaluating the effects of the changed practice should take place to determine whether an improvement has occurred. This is the step that is often called 'reflection' by action researchers. The important question to answer is:

Do the data provide supporting evidence that an improvement has occurred?

It is recommended that this step is best undertaken with colleagues because this can provide a range of opinions and interpretations, and this can overcome the problem of drawing false conclusions. A process similar to an After Action Review may assist you in this most important step. This process is summarised in the figure below:

The After Action Review Process

Think about the action and reflect on the following questions:

☐ What was supposed to happen?	☐ 25% of the time should be devoted to the first two questions
☐ What did actually happen?	
☐ Why were there differences?	
☐ What worked?	☐ 25% of the time should be devoted to these questions
☐ What didn't work?	
☐ Why?	
☐ What would you do differently next time?	☐ 50% of the time should be devoted to this question

(Department of the Army, 1993).

In reflecting upon the performance of actions implemented through a learning through action process we need to be able to answer the following questions:

- How can we determine credible evaluations of cause and effect?
- Can we be sure that a particular action actually brought about an improvement in performance?
- To what extent are the observed results due to the action we implemented rather than other factors?

Answers to these questions will provide us with some indications of the relationships between cause and effect. When we consider cause and effect we can infer causality by determining whether the assumptions behind why the changed activity are expected to work are sound and agreed upon by previous studies and the views of colleagues. We need also to ensure in the after action review that the actions required for the new activity were implemented as was originally planned, and that the chain of expected results occurred. We need to ascertain that other factors cannot be shown to have impacted to make a significant contribution to the results obtained.

Writing-up the results of a learning through action project

A common way of presenting the results is in a written report. Although oral presentations can be very effective, a written report can be stored and form part of an organisations' 'knowledge bank' which can be referred to in the future.

It is my view that it is not essential that a Learning Through Action Report should be structured in the same fashion as a more formal research report with sections such as:

- Introduction
- Review of the literature
- Methodology
- Results
- Discussion
- Conclusions and recommendations

I think a Learning Through Action Report can be structured using the steps outlined in previous sections as the major headings. In other words your report could be structured under these headings:

- Identifying the issue
  - The context
  - The relevance of the issue to your practice
- Preliminary reading and preparation
  - Which research paradigm is the most suitable for your investigation? Why do you think so?
  - How did you check existing databases and key journals? Which descriptors did you use in your searches?
- Gathering data
  - What sources of data were already in existence?
  - What strategies did you use in collecting new data?
- Interpreting data
  - What strategies and techniques did you use?
  - What did the data indicate?
  - How might you best display what you found out?
- Acting on the evidence from the data
  - What actions did you undertake based upon the data?
  - What practice did you change?
- Evaluating results of the actions
  - How successful were the actions in addressing the issue?
  - Can you identify cause and effect conclusions?
  - Would you change the approach you have been using based upon the results of your observations and reflections?
  - What will be the next steps you will take?

Concluding remarks

DEPISA will continue to be involved in the continuing professional development of those who work in schools, colleges and universities. It is hoped that many will implement a learning through action project in order to address a work-related issue which concerns them. Hopefully, the remarks in this paper will be of some assistance to them as they pursue the task of improving their practice. By attending future workshops it is also hoped that we will have a number of different models of how a learning through action project might be planned, acted upon, observed in action, reflected upon and reported so that it can be shared with

others. In that way those who conducted the learning through action project will have learned, but also those who have the opportunity to listen and read about their projects will have learned as well.

References

Alexander, R. (2008). *Essays on pedagogy*. London: Routledge.

Argyris, C., & Schon, D. (1978). *Organisational learning: A theory of action perspective*. Reading, MA: Addison Wesley.

Argyris, C., & Schon, D. (1996). *Organizational learning II: Theory, method and practice*. Reading, MA: Addison-Wesley.

Carr, W., & Kemmis, S. (1986). *Becoming critical*: *Education, knowledge and action research*. London: Falmer Press.

Department of the Army. (September, 1993). *A leader's guide to after action reviews*. Washington, DC: The Army. Training Circular 25-20. 30 September 1993. Available from, http://www.acq.osd.mil/dpap/ccap/cc/jcchb/Files/Topical/After_Action_Report/resources/tc25-20.pdf

Dick, B. (1997). *Action learning and action research*. Available from, http://www.aral.com.au/resources/actlearn.html

Dick, B., and Dalmau, T. (2000). *Argyris and Schon: Some elements of their models*. Available from, http://www.aral.com.au/resources/argyris2.html

Dick, B. (2002). *Action research: Action **and** research*. Available from, http://www.aral.com.au/resources/aandr.html

Fadel, C. (2012). What should students learn in the 21st century? *OECD Education Today*, 18 May, 2012. Available from, http://oecdeducationtoday.blogspot.fr/2012/05/what-should-students-learn-in21st.html

Ferrence, E. (2000). *Action research*. Brown University: Northeast and Islands Regional Education Laboratory. Available from, http://www.brown.edu/academics/education-alliance/sites/brown.edu.academics.education-alliance/files/publications/act_research.pdf

Mayne, J. (2008). *Contribution analysis: An approach to exploring cause and effect*. Institutional Learning and Change (ILAC) Brief 16, May 2008. Available from, http://ageconsearch.umn.edu/bitstream/52525/2/ILAC_Brief16_Contribution_Analysis.pdf

MacIsaac, D. (1995). *An introduction to action research*. Available from, http://www.phy.nau.edu/~danmac/actionrsch.html

Owen, J. (2006). *Program evaluation: Forms and approaches* (3rd ed.). Crows Nest: Allen & Unwin.

Villegas-Reimers, E. (2003*). Teacher professional development: An international review of the literature.* Paris: UNESCO, International Institute for Educational Planning. Available from, http://unesdoc.unesco.org/images/0013/001330/133010e.pdf

Three Cycles of an Action Research Project: A Case Study from Australia

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Abstract

Within the frame of the Developing Educational Professionals in Southeast Asia (DEPISA) workshops series since 2011, I have conducted an action research project on the issue of teaching small classes.

The preparation of foreign language teachers at The University of Sydney has involved me teaching one small enrolment class each year for 3 years. These pre-service language teachers are preparing to teach two foreign languages (most choose to teach one foreign language combined with, say, English, History, Mathematics and so on).

The issues I have perceived and experienced in teaching this small class, have been reported in presentations made at three DEPISA meetings where I have outlined the three action research cycles. Anecdotally, and also found within the scholarly literature (Wasley, 2002), we know that small classes may enhance student learning and development and thus impact on student success. However, that was not my own perception or experience, and the action research/action learning focus of DEPISA activities provided a suitable context in which I could explore the inherent notions.

This chapter reports on each of my action research cycles, outlining my assumptions at each stage, reporting on my observations, my reading of the related literature, and my planning and re-planning for subsequent cycles. It reports how I believe I have built my own skills and come to a new understanding of teaching small classes and my own practice as a result of following an action research.

Introduction

The preparation of foreign language teachers in the Faculty of Education and Social Work at The University of Sydney has involved me teaching one unit of study with a small enrolment each year for the past 3 years. The pre-service language teachers enrolled in this unit of study are preparing to become foreign language teachers and, unlike in similar courses in our Faculty and in other faculties where the trend has been to eliminate small classes, I have been permitted to offer this class since 2011 with a small enrolment. Students in this class are preparing to teach two foreign languages (most prepare to teach one foreign language combined with, say, an English, or History, or TESOL combination). I have been permitted to offer the small enrolment class as it is linked to later opportunities for students to become Heads of Department if they have undertaken their teacher training preparing to teach two foreign languages.

In 2009 there were 11 enrolled students, in 2010 there were 6 enrolled students, and in 2011 there were 4 enrolled students. The context is indeed a stressed higher education sector in Australia, with much cutting of small classes (Maxwell & Lopus, 1995). There has been a trend to increase class sizes in universities in order to create savings. However, cancelling small enrolment classes may translate into students pulling out due to a disenchantment with being 'just a number' and this can lead to a loss of resources for university departments.

The context and research problem

My fears were that this small class may not be permitted to continue and that I needed to concentrate my efforts to improve the teaching and learning experience to benefit all. At the same time I was also losing my own engagement with the teaching of this class. It was no longer exciting to teach this class – the dynamism and 'spark' seemed to have been lost with the loss of numbers of students to keep healthy discussions going. With my loss of engagement, I fear I was not engaging the students.

After some time considering what was occurring, I realised that my concern was not about wanting a reward, not about being under scrutiny or external evaluation (Performance Management), not about competition, but rather a fear of becoming 'stale' after having taught the unit for so long. I perceived the teaching of this smaller class to be much more difficult than teaching larger classes. I was concerned about the student experience.

In 2011, I listed my perceptions about teaching small classes, and concluded that small classes are more difficult to teach because:

- there is limited variety of student difference (and inherent difference of opinion, personal characteristics, speed/pace)

- students can be unwilling to speak out, or give their opinion readily, because they know they will all get their turn, just because there IS time for every voice to be heard

- there is abundance of time for discussion, but class discussions end quickly because there are only a few opinions to be heard

- there is 'nowhere to hide' for both students and teachers – the teacher and students are constantly in view and 'on display'

- the teacher gets to know students well individually, yet this sets up expectations on both sides

- it is easy to be lazy and only plan for 'small class discussions' knowing that class discussion is familiar and therefore comfortable.

A number of these perceptions and conclusions were quite confronting, and I realised I needed to take action. At the same time, the DEPISA group was moving towards a focus on action research/action learning, and this model of professionalism appeared to be one way I could focus on the issue and achieve a solution to the problem.

An 'action research-action learning' research design

Initially I consulted three sets of scholarly literature in order to plan my action research cycles: first, the literature on motivating the professors to teach; second, the literature about teaching small classes, and third, the action research method literature.

Deci and Ryan (1982) scoped the abundant literature on professors motivating their learners to learn, and concluded that very little work had been done focusing on motivating professors to teach. The literature that does exist is mostly about motivating the professors to take action to motivate students.

Wasley's (2002) research indicated that teaching small classes can be a positive experience for both teacher and students, and that small classes may enhance student learning and development, possibly impacting positively on student success.

Blatchford and Mortimore (1994, cited in Pedder, 2006, p. 217), noted inherent issues such as how small classes impact on:

- individualisation and individualism

- the quality of teaching

- curriculum coverage

- student attention

- teacher management of student behaviour

- morale, and

- student-to-student relations.

In fact, the literature demonstrated to me that teaching small classes could be beneficial for both teacher and students. I began to understand that I needed to monitor the various inherent related issues in order to manage my teaching and student learning in these small classes.

Action research appeared, even at the early stages, to be a suitable strategy for contributing to my continued professional development, as well as being a 'model' of practice for my pre-service teachers and their developing professionalism. I needed to take action to improve my teaching of these small classes and action research allowed me to 'frame' questions around the problem, and gave me a "reason" to investigate. If I had no such 'frame', my strategies to solve my perceived problem may have been less organised and purposeful.

Action research, the process of enquiry that is based on the practitioner's reflections and practices (Stringer, 2007), was, I considered, the most suitable way I could approach a solution to the perceived problem.

Action research is a 'practice-based' research (MacNiff, 2013) and is often described simply as series of cycles, whereby the practitioner (i) plans a research project through reading widely and examining issues, perceptions and assumptions, (ii) takes action, by making a small change in his/her practice, then (iii) observes change or otherwise, and finally (iv) reflects on results/meanings, and plans the next cycle, as per Figure 1 which shows an image of a simple action research cycle (see MacIsaac, 1995).
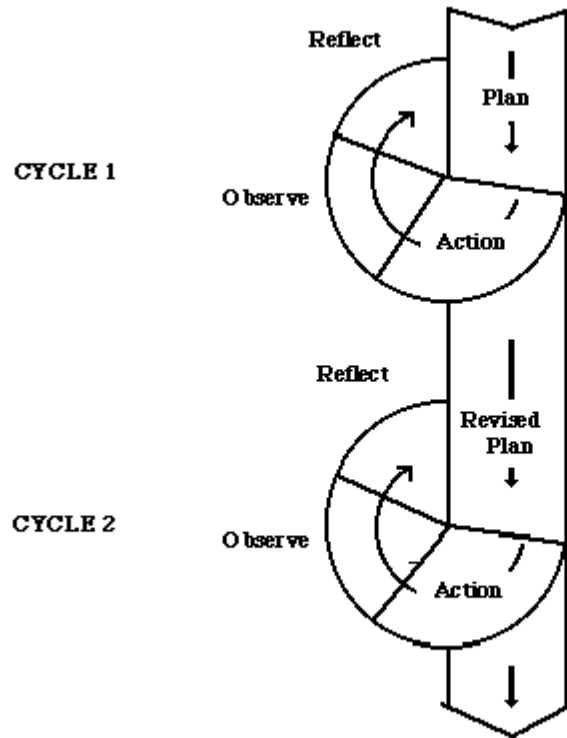
Figure 1: Simple action research cycle (MacIsaac, 1995).

My plan was to pursue a solution to my perceived problem through this action research approach as it fitted well with my teaching demands, and framed up the 'experimentation' I would normally be undertaking as I attempted to find better ways to teach this small class.

The research has eventuated as three different-but-related cycles, and the details of each cycle are outlined in the sections below.

Cycle 1

There were various steps taken in Cycle 1. After I had acknowledged a problem in my teaching of these small classes, I consulted a colleague for her opinions, read widely, and decided on making one small change in my way of interacting with the students. I could then observe and reflect and prepare for my second cycle. The details of those steps in Cycle 1 are as follows:

Acknowledgement of the 'problem'

In examining the issues, I realise I had fallen into the trap of just offering every class meeting in a small class discussion format. I feared that this was the 'lazy way out', and that I was becoming 'stale' and not delivering a quality learning experience for my students. I discussed my perceptions with a colleague, indicating that I didn't believe I was delivering the best

quality learning experience for students, and that I believed I needed to make the unit more 'dynamic'.

Wide reading, discussions with a colleague and making a change

After reading widely, and discussions with my colleague, I decided to make a change in my teaching: I would advise my students that I would make the learning experiences negotiable in that semester, in order to tap into their preferences for learning. I sent an initial email, welcoming the class to the unit, and advised them that there would be negotiation of the syllabus. At the first meeting with the class, I advised them of the mandated topics we would study, also offering them a discussion about the format of classes, and asking for suggestions on 'how' they preferred to learn, and options for the learning experiences.

Observations

My perceptions were that the class was not convinced that changing the format of some classes was necessary, and suspected that for them, as for me, there is 'comfort in the familiar' it is just easy to hold discussions! I observed that they seemed unable to suggest alternative learning experiences, and seemed happy enough with what I suggested. They didn't seem to want to voice an opinion. In the end, some changes were made to the planned learning experiences in the syllabus according to the feedback received in that first class.

Reflections

I reflected that having taken that first step to action, I was personally and professionally much happier with the increased efforts required to offer these new formats, as though I equated more efforts (in organisation and preparation) with better teaching. At the end of semester, the students provided their perceptions of the success of the unit of study, through the University's Unit Evaluation System. My highest scores were not 'I was motivated to learn' or 'staff were interested in feedback', which surprised me, as I had presumed that offering such negotiation of curriculum was an indication of my interest in their feedback. Clearly I still needed more action research cycles as I had some things to work on, such as the evaluation questions regarding the clarity of learning outcomes and effective communication.

Planning the next cycle

My next step was to plan Cycle 2 with the next cohort of students.

Cycle 2

My biggest realisation from Cycle 1 was that although it is a small group, students still don't necessarily understand all my communications and planning. I still have to ensure good communication lines with them to ensure they are following my curriculum.

There were various steps taken in Cycle 2. After I had re-conceptualised the problem in my teaching of these small classes and revisited my assumptions, I read more literature, and decided on making one further small change in relation to students' cooperative learning and positive interdependence. I could then observe and reflect and prepare for my third cycle. The details of those steps in Cycle 2 are as follows:

Re-conceptualisation of the problem, and revisiting assumptions

At the start of Cycle 2 I clearly needed to revisit my assumptions about small group learning and teaching small groups. I realised that I had assumed that because they are a small group, they would find it easy to find their identity as a group, and build social relationships, and that they would be supporting each other socially, emotionally and affectively. I had assumed

that they were not finding it easy to be a small group, that feelings of community and connection were not necessarily evident. I had also assumed they were not enjoying the small group learning as much as their learning in larger groups, or that they did not really know how to be a small group member, their learning to date being characterised by knowing how to be an individual learner, and how to be a participant in larger classes. Regarding myself, I realised that as their teacher, I perhaps needed to play a larger role in small groups who are attempting to find an identity and cohesion if compared to my role in working with larger groups of students.

I then observed how the students were interacting with each other in the small class. I observed:

- two girls arrive together = they must be friends 'on the outside'

- one girl knows when two others are about to arrive, as she gives me updates from her mobile phone texts as to their whereabouts = they must contact each other 'on the outside'

- that they are typical Gen-Y (Generation Y is considered to be the generation born from early-80s to end of 90s) -- always talking about Facebook, explicitly, and how social networking plays a role in their lives.

I subsequently presumed that this social networking is their preference, and that platforms such as Facebook shape their lives, personally and professionally, around long-distance, asynchronous, and many-to-many communications (Crosbie, 2002). Such networking opportunities promote interaction, negotiation of meaning, and scaffolding of their learning and participation. My realisation was that Gen Y knows how to balance the multiple realities of their busy personal and professional lives, and through ICT, multimedia and social networking platforms, they are quite proficient at time management and task orientation.

I acknowledged that as Gen Y, my pre-service language teachers are quite judgmental about the value of face-to-face classes. They are a generation who know how to complete tasks virtually. I realised I needed to make it worth their while to attend my small class. I realised I had to keep a focus on small group teaching for them, because of the fact that in schools as teachers, they may one day need to be working in a small group context just like this one.

Reading the scholarly literature

This time, my reading of the literature included reading about:

- collaborative learning and cooperative learning which have highlighted

    o the notion of positive interdependence (Johnson, Johnson & Holubec, 1998)

    o the notion of individual accountability to the group

    o group composition in group effectiveness (roles, size, homo/hetrogene)

    o the importance of understanding social presence (Tu & McIsaac, 2002), involving the need for the teacher to create opportunities for students to demonstrate emotional expression, open communication and group cohesion

    o happiness

- the importance of group tasks to build social interaction
- the alternative ways to communicate in groups, cf. telecommunications.

Changes made

I decided to work on cooperative learning strategies in an attempt at building positive interdependence. That step involved making a change to include in my pedagogy:

- I included more 'think, pair, share' in-class learning tasks

- I included more learning tasks that require collaboration inside and outside class.

That simple step helped me build the idea of individual accountability in the group members' understandings of what they must do to promote group cohesion. In planning for students to achieve positive interdependence, I hoped to impact on their learning goals, rewards, identities and the notion that students can be mutually supportive individuals working towards group goals.

I also factored in more e-collaborations, that is, non face-to-face learning options, that might build some small group cohesion.

Observations and Reflections

I perceived the students to be more engaged in tasks in our face-to-face lessons as I spoke more explicitly about group work. There was also quite an amount of activity through our e-communications.

I felt I was more aware of student learning and classroom processes than I had been in quite some time, and more cogniscent of the small group issues. I preferred the teacher I was becoming, being proactive about the perceived problem through the action research.

Planning the next cycle

My next step was to plan Cycle 3 with the next cohort of students.

Cycle 3

There were various steps taken in Cycle 3. After I had re-conceptualised the problem in my teaching of these small classes yet again, I read more literature, and made one final change to my pedagogy. I could then observe and reflect and conclude my research. The details of those steps in Cycle 3 are as follows:

Reading of more scholarly literature

My reading in preparation to teach the next small class the following semester was related to my teaching pedagogy. I felt, as a reaction to teaching the small class the previous semester, that varying my teaching strategies was possibly going to make a positive impact on the students' learning. Harfitt (2012) found that teachers don't necessarily change their teaching strategies when teaching large classes and then teaching small classes. In attempting to vary my teaching strategies I decided especially to include 'dialogic teaching' (Alexander, 2004, cited in Harfitt, 2012, p. 133). According to Alexander (2013), dialogic teaching is not merely more student talk, rather it requires these aspects of dialogue to be present: interactions, questions, answers, feedback, contributions, exchanges, discussion, argumentation, in contexts that support professional engagement. I needed to examine

whether I made changes to my pedagogy in teaching small classes, as this might be the cause for my feelings of 'mismatch'.

As a result of that reading, I acknowledged certain things: (i) that it is a different kind of classroom behaviour management that I need to display in teaching small classes (Harfitt, 2012, p. 133); (ii) that I need to come to terms with a 'professional discomfort' when teaching small classes (Harfitt, 2012, p. 133); and (iii) that I should admit an 'ego' or a 'conceit' about wanting to be a good teacher in small and large classes alike.

At this early stage in Cycle 3, I also had an opportunity to reflect and compare myself when I teach in a large class, to when I teach in a small class (as per Harfitt's 2012 study that compared teachers when teaching a large and a small class sizes). Upon reflection I found I did not change my pedagogy or teaching strategies when shifting from the large class to the small class.

Changes made

In the third cycle, then, I implemented changes in my own classroom pedagogy. I made sure that I simply ceased to be concerned about the possible problems of teaching a small class, and attempted to settle in to being the best and most professional/accomplished teacher that I could be. I also kept the changes that I had implemented in the previous two cycles.

Observations and Reflections

I observed that I was a much happier and composed teacher, knowing that I was 'on top of the issues', and that I knew the literature on teaching small classes, and that I had been proactive to take steps to make my teaching more dynamic, and that I had engaged these Gen Y students in their e-sphere.

Conclusion

Action research allowed me to undertake a professional renewal of my practice, and also allowed me to engage with the need to present a quality learning experience for my students. The model allowed small changes to be made, that did not unsettle either myself or the students too much. I believe that the students could perceive my attempts at making the learning experience better for them as well, and thus they reacted positively. In the end, I decided that I should just settle down and do my best. That the action research reverted to a focus on me and my pedagogy is a little surprising. I had expected that the action could be 'done to' the students, when really the solution in the end was having something 'done to' me.

Action research for quality teaching and learning, I found, can easily become part of a teacher's repertoire, and it can be monitored, tracked and evaluated as evidence of a teacher's professionalism. Hopefully this action research reported here can be shared and even replicated.

Post-script

In the current university context, I had presumed that small classes would no longer be allowed. Interestingly I had not guessed that numbers of candidates coming in to our degree program with two foreign languages would grow, and now I find that with bumper class sizes predicted in the next three to five years, small class size will no longer be an issue.

References

Alexander, R. (2013). *What is dialogic teaching*? from,
http://www.robinalexander.org.uk/index.php/dialogic-teaching/

Crosbie, V. (2002). *What is new media*? from, thttp://www.sociology.org.uk/as4mm3a.doc

Deci, E. L., & Ryan, R. M. (1982). Intrinsic motivation to teach: Possibilities and obstacles in
our colleges and universities. In J. Bess (Ed.). *New directions for teaching and learning:
Motivating professors to teach effectively* (pp. 27 – 35). San Francisco: Jossey Bass.

Harfitt, G. J. (2012). An examination of teachers' perceptions and practice when teaching
large and reduced-size classes: Do teachers really teach them in the same way? *Teaching and
Teacher Education,* 28, 132 – 140.

Johnson, R. T., Johnson, D.W., & Holubec, E. J. (1998). *Cooperation in the classroom*. Boston:
Allyn & Bacon.

MacIsaac, D. (1995). *An introduction to action research*, from,
http://www.phy.nau.edu/~danmac/actionrsch.html

Maxwell, N.L. & Lopus, J.S. (1995). A cost effectiveness analysis of large and small classes
in the university. *Educational Evaluation and Policy Analysis*, *17*(2), 167 – 178.

McNiff, J. (2013). *Action research: Principles and Practice*. (3rd Ed.). New York: Routledge.

Pedder, D. (2006). Are small classes better? Understanding relationships between class size,
classroom process and pupils' learning. *Oxford Review of Education*, *32*(2), 213 – 234.

Stringer, E. T (2007). *Action research in education*. (3rd Ed.). Thousand Oaks, CA: Sage.

Tu, C. & McIsaac, M. (2002). The relationship of social presence and interaction in online
classes. *The American Journal of Distance Education*, *16*(3), 131 – 150.

Wasley, P. A. (2002). Small classes. *Educational Leadership*, 2, 7 – 10.

Facilitating Professional Development Through Developing a Learning Community: Lessons Learned from the Case of Can Tho University and The University of Sydney

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Abstract

Facilitating professional development for teacher educators and school teachers through developing a learning community has been studied and shown to result in positive gains. There is a positive strong interaction between teacher educators' and school teachers' pedagogical knowledge and skills and the quality of education they provide for their students. In this paper, the theoretical background relating to professional development and characteristics of a learning community supporting professional development are presented and discussed. At the School of Education at Can Tho University, building a learning community so as to facilitate professional competence development has been done through international collaborative projects with the United States, The Netherlands, Australia and some universities in the Association of Southeast Asian Nations. The activities and results gained from a collaborative project between the Faculty of Education and Social Work at the University of Sydney and the School of Education at Can Tho University are used to demonstrate the usefulness of establishing a learning community with the aim of professional development for teacher educators and school teachers.

What is teacher professional development?

Teacher professional development is the process of enhancing teacher educators' and school teachers' pedagogical knowledge and skills for their professional growth. Professional development has been conducted in different forms, from participating in in-service teacher professional development programs for degrees or certificates to attending academic events such as workshops, conferences or training courses (Villegas-Reimers, 2003). A number of approaches have been used to develop teacher educators and school teachers' professionalism, including mentoring/coaching, explicit instruction or reflection on teaching and learning practices. In the field of education, lesson study, cooperation in planning, observing and evaluating lessons have become common approaches used in teacher professional development activities during the last decades. Innovative administrators and researchers into approaches for professional development have assumed that building a learning community will provide individuals and institutions with opportunities to facilitate professional development in education.

Why develop teacher professionalism?

Developing professional development foremost meets teacher educators and school teachers' needs for long-life learning since educating and training requires teachers to unceasingly enhance their pedagogical knowledge and skills to provide quality education. The needs for professional development arise from the awareness of professional ethics, the desire for sustainable professional growth, and the enhancement of education quality. Professional development will also assist providers of pre-service teacher education programs and schools in meeting the learning needs of society and the professional standards of teachers.

Professional development is of importance to teacher education providers and schools, helping them accomplish their social accountability and assuring their sustainable development. In the last half 20th century, the world has observed remarkable changes in human life, notably through the technological revolution and updated knowledge of how human beings learn, and the development of the notion of the learning community or organisational learning. According to Collinson et al. (2009) a knowledge society demands professionals with strong expertise, who can fulfill the increasingly high requirements for their careers and life-long learning endeavours. In education, the growth in information technologies and the demands for building a knowledge society require institutions to provide opportunities for teachers to equip themselves with skills of long-life learning and skills of applying pedagogical knowledge and practices to their work in a systematic and creative manner. Drucker (1993) stated that learning in a knowledge society is not only intended for adolescents but a long-life endeavour for humans in an ever-changing world. In other words, developing teacher educators and school teachers' professionalism is an indispensable part of all educational institutions.

The concept of a learning community

The term 'learning community' can be viewed from different perspectives. Some scholars assumed that an organisation should meet the needs of society to define a learning community. Senge (1990) states a learning community is an organisation which works towards improving its human resources to meet working requirements from society; building a learning community in an organisation sustains its continuous growth. According to other authors, a learning community can be defined as an organisation which can meet the individual needs for learning through collaborative programs with international counterparts. Yamit (2000) states that a learning community is an organisation which creates opportunities for people within and outside the organisation to develop their professionalism by learning from each other in order to fulfill their social responsibilities. This organisation should build and enhance international and national collaboration activities in such a way that its staff will have an opportunity to develop their professionalism so as to accomplish their important missions to their communities.

In this study, a 'learning community' is defined as an organisation which works towards improving its human resources, notably developing teacher educators and school teachers' professionalism in education, through collaborative programs with a view to learning from each other and enhancing pedagogical knowledge and skills.

Building a learning community

To build a learning community to facilitate teacher educators' and school teachers' professionalism Sugarman (2000) proposes a model of five main steps:

1. Develop a strategic plan for the organisation to fulfill its social accountability through implementing reforms to meet the needs of a changing society.
2. Inform the staff of targets to be achieved.
3. Build a collaborative, creative and flexible working environment.
4. Enhance its staff motivation and professional development through providing opportunities for them to advance their own aspirations to assume varied responsibilities.
5. Implement their work creatively with the collaboration of staff and related organisations.

These activities focus the leader's role in developing a vision for the future of the organisation which can be shared by all staff members, and on establishing the mission an organisation sets itself in order to facilitate its staff's professional development.

Another model by Chen (2005) presents an analysis of the activities an organisation must carry out to build a learning community. Chen's model is perceived to be in line with building a learning community in Schools/Faculties of Education to support teacher educators and school teachers in developing their professionalism. This model includes nine steps administrators and staff of the School/Faculty of Education should keep in mind:

1. Exploring strengths, weaknesses, opportunities and threats the organisation is experiencing, resulting in identifying the learning needs of that organisation.
2. Proposing solutions to existing issues.
3. Selecting measures and procedures to cope with issues.
4. Implementing potential measures, i.e. modifying its members' behaviour, enhancing their pedagogical knowledge and skills.
5. Sharing insights gained from implementing the measures and transferring knowledge to solve other issues.
6. Reinforcing an organisation's capacity of analysis to facilitate and support reflection on actions taken in which some lessons could be drawn leading to more appropriate decisions in the future.
7. Learning from one's own organisation and other organisations via establishing and expanding the relationship and creating a network with other organisations.
8. Contributing knowledge to the community via workshops, conferences or publications.
9. Documenting knowledge and skills learned from Step 1 to Step 8, which supports an organisation in developing its members' professional competence on a regular basis with high quality.

In their study, Glowacki-Dudka and Brown (2007) reported the results of developing teacher professionalism through building a learning community. They surveyed the benefits gained from participation in a university faculty learning community with one hundred and seventy

three teacher educators. The findings indicated that the participants identified five basic benefits from participating in a university faculty learning community including:

1. Developing better teaching strategies.
2. Networking with colleagues.
3. Understanding more about students and how they learn.
4. Fostering collegial friendships and developing personal friendships.
5. Receiving affirmation from colleagues and superiors.

The benefits from participating in a learning community were both professional and personal according to Glowacki-Dudka and Brown and this led to supporting Schools/Faculties of Education in fulfilling their missions in an ever-changing society.

Building a learning community and developing teacher professionalism in the School of Education at Can Tho University

In 2007, the Faculty of Education and Social Work at the University of Sydney in collaboration with the School of Education at Can Tho University carried out the Improving Pre-Service Teacher Education Program project in the School of Education at Can Tho University. This project was funded by the University of Sydney's fund to support international collaboration development, and the Australian Government through its Australian Leadership Awards Fellowship program. The project aimed to develop professionalism in education for teacher educators of the School of Education at Can Tho University and associated school teachers through building a learning community.

The main time spans and actions taken in this collaborative project illustrate the length of time and the on-going commitment of staff that is required to produce sustainable and successful project outcomes.

- *April 2008*: Two staff members from the Faculty of Education and Social Work at the University of Sydney paid a visit to, and worked in, the School of Education at Can Tho University. The purpose of this visit was to find out about teacher education programs, identify learning needs and discuss the content and methods used for the training course intended to be held at the University of Sydney in August 2008 for the School's members.

- *August 2008*: Fourteen teacher educators from the School of Education at Can Tho University participated in a two-week training course at the University of Sydney.

- *November 2008*: Two teacher educators from the Faculty of Education and Social Work at the University of Sydney returned to Can Tho University on an exchange visit and worked in the School of Education to evaluate the activities and results produced from the project and discussed future collaborative plans.

- *2009-2010*: Two administrators from the School of Education at Can Tho University came to the Faculty of Education and Social Work at the University of Sydney to learn about educational leadership and professional learning for undergraduate students of education.

- *Late 2010*: Two high school teachers in Can Tho City and two teacher educators from the School of Education at Can Tho University participated in a training course on 'Action Research' with twelve teacher educators and school teachers from universities and schools in Laos, Thailand and Indonesia.

- *2012 to the present*: Teacher educators from the School of Education at Can Tho University and some high school teachers in Can Tho City have participated in the Re-forming In-Service Teacher Professional Development and Action Research projects in some countries in Southeast Asia.

Building a learning community in the School of Education at Can Tho University

In this section of the paper, specific actions taken based on Chen's model (2005) to build a learning community aimed at facilitating teacher educator and school teacher participants' professional development are presented.

Based on Steps 1, 2, 3, and 4 to build a learning community, an exchange visit for some members of the University of Sydney to work in the School of Education at Can Tho University was organised. On this occasion, the School and the Faculty exchanged, explored, discussed and learned about the learning needs and issues in teacher education programs at the School of Education at Can Tho University. The needs for re-forming the teacher education programs towards quality assurance and quality teaching and learning via conducting research activities were identified. Based on these needs, some measures for action were proposed and selected through training courses for fourteen teacher educators, two administrators and two high school teachers at the University of Sydney.

In this collaboration, the two partners shared with and learned from each other, analysing actions taken and gaining knowledge and experience from each other. In addition, in this project, plans for sharing insights and transferring knowledge and experiences via conferences and workshops for administrators, teacher educators at Can Tho University and from other universities and colleges in the Mekong Delta were developed. The results gained from this project were presented at the Australian Teacher Education Association Conference in Albury, Australia in June 2009 and published in the conference proceedings. These activities demonstrated what had been done to build a learning community, and showed that this was consistent with Steps 5, 6, 7 and 8 in Chen's model: sharing, analysing, learning and contributing knowledge to the community.

Through these activities, knowledge and experiences on building a learning community to meet the needs for its members' professional development were documented (step 9 in Chen's model). According to one Australian participant, in this collaborative project, a learning community was built, involving participants from the Mekong Delta of Vietnam, Laos, Thailand and Indonesia, extending beyond any one nation's borders.

Results

Evaluation forms and journals from participants of the project revealed results of developing participants' professionalism in education. The coordinators of the project evaluated its preliminary effectiveness:

> ….So far the project has built a learning community to develop teacher educator and school teacher participants' professionalism, notably criteria for a high-quality teacher education program and professional teaching standards have been established. Knowledge and skills in using active teaching methods and evaluating teaching education programs via doing action research have been observed to change for better,…

One participant remarked:

> ….I have learned how to design an education and training program, in which the output is associated with quality assurance practice. I have also learned that a good education and training program should be based on norms and criteria to build and evaluate a program…

In addition to the main contents of training courses, participants learned how to use their knowledge and skills to organise workshops and conferences in which they would train others and share their insights with their colleagues:

> …..I have also learned how to organise workshops and conferences to share my knowledge with my colleagues in my department….

One member of the School of Education at Can Tho University shared:

> …I have learned how to collaborate with my colleagues and work in teams and I will encourage this working style in my department…

> …I have learned a lot from this project. I like the way how activities in the project have been managed to develop its participants' professionalism, from theories to practices…

One high school teacher expressed:

> …I have had a chance to learn how to collaborate with my colleagues and now I understand the reason why Australia has such a high quality general education…

In an evaluation form of the effectiveness of the collaborative project and building a learning community, one Australian participant wrote:

> …My colleagues must have learned that we have learned a lot from them, from their education and training system. In this project, two counterparts have benefited and learned from each other. I hope that I

can speak much more Vietnamese in order to express that we do respect them, Vietnamese colleagues…

Through participants' evaluation and sharing, it was found that the project resulted in positive gains in developing participants' professionalism via building a learning community.

Conclusion and recommendations

Building a learning community through activities in the collaborative project between the Faculty of Education and Social Work at the University of Sydney and the School of Education at Can Tho University resulted in positive gains in teacher professional development. In addition to results relating to professional expertise as mentioned earlier, in the era when all results gained from collaborative programs must be quantified, in this project, a learning community has been established on the basis of understanding, sharing and respecting each other as colleagues and friends (Villegas-Reimers, 2003).

To better improve teacher professional development, some recommendations on building a learning community in the Schools/Faculties of Education can be made. The members in a learning community should:

- regularly evaluate their organisations' activities, and propose measures and procedures to improve these activities;
- systematically implement improved measures and procedures via experiences gained from their own organisation and related organisations;
- document, share and transfer experiences to members in their organisation, and to those in national and international schools/faculties; and
- establish a close collaboration with schools in other teacher education programs (NIE, 2012).

References

Chen, G. (2005). An organizational learning model based on western and Chinese management thoughts and practices. *Management Decision*, *43*(4), 479-500.

Collinson, V., Kozina, E., Lin, Y-H., & Ling, L. (2009). Professional development for teachers: A world of change. *European Journal of Teacher Education*, *32*(1), 3-19.

Drucker, P. F. (1994). The age of social transformation. *The Atlantic Monthly,* 274(5), 53-80.

Glowacki-Dudka, M., & Brown, M. P. (2007). Professional development through faculty learning communities. *New Horizons in Adult Education and Human Resource Development*, *21*(1/2), 29-39.

National Institute of Education, Singapore. (2012). *A teacher education model for the 21st century*. Singapore: Nangyang Technical University.

Senge, P. (1990). *The fifth discipline. The art and practice of learning organisations*. London: Random House.

Sugarman, B. (2000). What is a learning organisation? In *A learning based approach to leading change.* MA: Lesley University and the Society for Organizational Learning. Available from, http://www.businessofgovernment.org/sites/default/files/SugarmanReport.pdf

Sydney University. World, International News and Events. (2008). AusAID ALAF Program Can Tho University Farewell. 25 September 2008.

Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature.* UNESCO, International Institute for Educational Planning. Available from, http://unesdoc.unesco.org/images/0013/001330/133010e.pdf

Yarnit, M. (2000). *Towns, cities and regions in the learning age: A survey of learning communities*. London: United Kingdom Department for Education and Employment.

Building a Centre for Professional Development for Teachers and Teacher Educators in Vietnam

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Abstract

Professional development for teachers is a key factor for enhancing educational quality. In order to support professional development for teachers and teacher educators in the Mekong Delta region of Vietnam the Centre for Professional Development was established at Can Tho University in 2009. In this paper we discuss the history of the development of the Centre, the people who are directly involved in the functioning of the Centre, and the philosophy underpinning the purposes of the Centre. We also discuss some examples of programs offered by the Centre and who attends these programs. The impact of the Centre will be shown through an analysis of one program which uses a combination of several models of professional development such as workshops and coaching for teachers in the Lab School, which belongs to the School of Education, Can Tho University. The impact of the Centre on teaching and learning in the Mekong Delta will be evident in the history of this program. Data were collected from class observations in the Lab School, and from teachers' interviews and meeting journals. Findings from this research show a successful model of professional development in the Vietnamese context.

Introduction

There have been a number of educational reforms in Vietnam, ranging from high school curriculum and textbook reforms to designing and implementing credit systems at the tertiary level. One of the key elements that contribute to the success of the reforms is teacher professional development. Villegas-Reimers (2003) claims that 'most educational reforms currently being designed and/or implemented include a component of teacher professional development as one of the key elements in the change process' (p. 13). Realising the important role of teachers in improving teaching and learning quality, the Vietnamese government has issued new rules and regulations on professional development activities for teachers which aim at improving teacher knowledge and teaching skills.

According to the Law of Education (2009), it is teachers' responsibility to: '…continue learning'. The Ministry's instructions include the four important missions for the 2012-2013 academic year: 'focusing on teacher professional development activities; focusing on improving the ability to educate the morality; reforming teaching methodology and assessment and evaluation system'. The Ministry also requires teachers 'to give students opportunity as well as train them to develop and practice their self-study skills and research skills; to promote their ability to think for themselves, to build a system of effective questions to help students apply the knowledge they have learned and create new knowledge'.

In addition the Vietnamese government requires that all teachers, in schools and in higher education institutions, undergo a program designed to enhance teachers' knowledge and professional skills to 'meet the educational requirements in the context of industrialization and modernization of the nation and the international integration' (MOET, 2007).

Teacher professional development in the Vietnamese context

According to Glatthorn (1995, p. 41) 'teacher development is the professional growth a teacher achieved as a result of gaining increased experience and examining his or her teaching systematically'. Ganser (2000) also believed that such formal experiences as mentoring, coaching, or attending workshops and professional meetings as well as informal experiences such as watching television documentaries related to academic disciplines, or reading professional publications, were professional development activities.

In Vietnam, teacher training workshops are the most common professional development activity. According to Craft (1996), workshops are 'training orientation as "one shot" programs, in which knowledge is usually transmitted by an outside expert'. Widdowson (1987) considered workshops 'would offer teachers new information on a particular aspect of their work. This was often the only type of training teachers would receive and was unrelated to the teachers' work' (Villegas-Reimers, 2003). Hayes (1997) also claimed that workshops 'do not achieve their aims of effecting a change in teacher behaviour'. Cochran-Smith and Lytle (1993) believed that 'in-service teacher education programs are typically organised to disseminate a knowledge base constructed almost exclusively by outside experts. This means that through their careers teachers are expected to learn about their profession not *by studying their own experiences* but by studying the findings of those who are not themselves school-based teachers' (Cochran-Smith and Lytle, 1993 as cited in Atay, 2006, p. 2).

Dam (2008) suggested the following procedure which might increase the effectiveness of workshops on teacher professional development: the organisation and contents of a workshop should be an on-going process, open to change according to participants as well as curricular needs and demands; the aims as well as expected outcomes of a workshop should be understood by the participants; an atmosphere of trust and openness within the group of participants is essential; awareness-raising and an obvious link with the teachers' own situation are powerful components; the participants must be actively involved in their own learning and the focus should be on learning rather than teaching; and the organisation of the space in which the workshop is conducted should resemble that of an autonomous classroom.

However, in order to ensure the sustainability of the effectiveness of the workshops they should be followed up by other forms of professional development such as coaching, peer support, mutual learning, and peer learning. Allard de Hoop (2006) defined coaching as a tool to help a person improve their professional capacity. Coaching is linked with the 'growing of an individual' both professionally and personally and is essentially related to specific areas of work performance and practice (Lord et al., 2008, p. iii).

It is against this backdrop that the Centre for Professional Development, within the School of Education (SOE) at Can Tho University (CTU), was established in August 2009. This Centre replaced the Pedagogical Consulting Service which was initially set up in 2001. The Centre is responsible for managing research projects and organising workshops/courses on teaching methodology and professional development and meets three important needs of the Mekong Delta Region.

- Firstly, there have been a growing number of students with non-education majors who want to work as teachers in secondary schools, vocational schools, colleges, or universities. In order to be qualified, they need to be trained in terms of teaching knowledge and skills, and certified.

- Secondly, the number of colleges and universities within the Mekong Delta is growing thus increasing the need for qualified teaching staff for the fifteen universities, eleven of which were established between 2003 and 2013.

- Thirdly, there has also been a need for teachers in the region to update and exchange their teaching experience, content knowledge, and educational research through workshops, seminars, and conferences.

The Centre is self-funding and operates with a small staff including a director in charge of all the activities of the Centre, and an accountant and administrative staff responsible for financial issues and class schedules. Only the accountant and administrative staff work full time. The Centre draws on qualified teachers from SOE and of other schools of CTU, who have completed national and international training courses. Another important teaching resource is foreign experts who work for SOE on collaborative projects. They are invited to conduct training workshops or seminars on educational topics for the teaching staff of SOE, CTU, other colleges and universities, and some high schools in the Mekong Delta.

All the Centre's activities aim to:

- Enhance the quality of teaching and learning in the Mekong Delta.

- Assist secondary school teachers and university/college lecturers in the region improve their research skills.

The Centre operates many of its programs based upon a participatory model which utilises the following:

- Identify learners' needs by consulting with high schools in the region and then meet with Provincial Departments of Education and Training (PDETs) to make final decisions on the training topics.

- Design the training program/syllabus.

- Conduct the workshops. Lectures, discussions, and group work/pair work are used in the workshops. The trainees also watch videos of a teacher teaching a lesson, and then discuss the video lesson. This helps them share their teaching experience, and then apply what they have learned from the video to practice and improve their teaching.

- Collect the trainees' feedback and evaluation on the trainer's lesson after each training session. The feedback is sent to the trainers immediately so that they can make any adjustments/changes in terms of the content and the methodology to improve the training quality.

The Centre offers three major programs based on the framework of the Ministry of Education and Training (MOET) or on the teacher training program of CTU.

- The first program is for students with non education majors such as those who majored in mathematics, computer science, physics, chemistry, biology, Vietnamese language and literature, geography, and English. These students come from different universities in the region. To be certified, the students have to complete different subjects (psychology, pedagogy, teaching methodology, testing and assessment, and

teaching practice) to be recognised as qualified teachers. It should be noted that the program is compatible with the program for students who majored in education.

- The second program is for the college/university lecturers and for the graduates who wish to teach in colleges/universities. This program is based on the Framework of the Professional Development Program for College/University Teachers issued by MOET. It includes different subjects such as: pedagogy; psychology; instructional theories; curriculum development; case study; project-based teaching and learning; evaluation and assessment; educational research methodology; and IT in education.

- The third program is for the people who teach courses on military defence, politics, health care, and police procedures. The content of these courses consist of military knowledge, drug prevention, and AIDS and HIV prevention. The learners of these courses are college/high school students, or workers from different companies/organisations. The program was designed to meet the needs of the trainers of these courses.

The Centre, together with SOE, also offers many other professional development activities in order to help improve teaching and learning quality in high schools and universities.

Assigned by MOET, the Centre, collaborating with SOE, offered training workshops on implementing new curriculum and new textbooks in high schools for hundreds of key teachers in many provinces in the Mekong Delta in 2006, 2007, and 2008. Each workshop ran for six days. However, according to Hayes (1997), such training workshops do not always result in teachers' behavioural changes in their teaching, and that is why the participatory approach outlined above has been adopted.

The Centre also offers tailored training courses to provincial Departments of Education and Training on the following topics: using IT in Education; English teaching methodology; designing multiple choice tests; and using effective questions in teaching.

Another activity provided by the Centre is offering workshops for college/university lecturers. The guest lecturers/speakers of these workshops are experts from foreign universities such as Michigan State University, The University of Sydney, and The University of Queensland. Some of the topics that have been offered include: techniques for teaching adults; problem-based learning; inquiry-based learning; blended learning; case study; curriculum design; and educational management.

The impact of the Centre's programs on teachers' professional development: A case study from the Lab School, Can Tho University

The following section will present and discuss the impact of one of the Centre's programs on secondary school teachers' professional development implemented in the Lab School, Can Tho University. The model of training workshops followed by coaching (classroom observations and giving feedback) was used in this program.

Context

The Lab School, CTU, was established in 2012. Its mission is to develop a model of high quality teaching and learning. The School Management Board requested the Centre to offer a professional development program to enhance teachers' ability to use active teaching methodologies. A training model was developed consisting of two parts: participatory

workshops on teaching methodology; and follow-up classroom observations. Five full-time secondary school teachers, with five to seven years experience, of chemistry, physics, biology, Vietnamese literature, and English were involved in the program.

The program followed the following steps:

- Teachers' expressed their learning needs at a meeting where they could discuss the topics for training. The following were identified: cooperative teaching; project-based learning; and progressive assessment.

- SOE lecturers, experts in pedagogy and teacher training, design the training program.

- Deliver workshops.

- Teachers were interviewed about the effectiveness of the workshops.

- Classroom observations and feedback on the lessons were made at least twice by each SOE trainer for each participating teacher.

- Teachers were interviewed about the effectiveness of classroom observations and about their plans for their professional development in the next semester.

Data were collected from: interviews with the teachers after the workshops; classroom observational notes; minutes of meetings after classes' visits; and interviews with the teachers about the impacts of the program on their professional development.

The impact of the program on the teachers' teaching skills and their belief in the benefits of using active teaching methodology and classroom observation, is presented in the following sections:

Group work

Different levels of group work activities were organised in most classes. At the beginning of each lesson, the teachers explained the lessons, and then asked questions about the lessons for students to discuss in groups. However, the teachers encountered some problems. Firstly, the groups were too large (eight to nine students in a group), as a result some students were not involved in the activities. Secondly, some questions for discussion were simple and easy, which did not trigger the students' interest in the discussion activities.

After the feedback sessions, the teachers improved their lesson plans. More effective and interesting activities were observed. For example, the students were assigned to do research on a topic related to the lesson. They had one week to do research and prepare their presentations. The students used mind-maps, figures, tables, and PowerPoint for their presentations. After their presentations, the other groups asked questions about their research, and they discussed the topic. With this way of teaching, the students became active learners who were able to build up the knowledge themselves and demonstrate their knowledge and skills. The teachers were a facilitator, a tutor, and an assessor. Through group work activities, the teachers were able to assess their students' cooperative skills, their ability to analyse and generalise the information useful for their research, their computer skills, and their communication skills.

Project-based learning

Two out of five teachers implemented project-based learning in their classrooms. One teacher handed out a list of topics such as 'how to make yoghurt,' or 'how to make a model pressure cooker.' Each student selected a topic. Those who chose the same topic were grouped together. During presentations about their work, the students had to use the theory of physics to explain the phenomena they had observed during the process of conducting their projects.

Another teacher asked her students to choose a historic place in Can Tho city, and design a brochure or a video clip about the place. Then they presented their products to the other groups. The students in both classes always received support, guidance, and feedback from their teachers. They were taught how to make and monitor their plans, how to search for the information they needed for their projects, and how to write their reports or design the brochure/video clip.

The students' presentations in both classes showed that they were more motivated to participate in such project-based learning activities. When asked what they thought about the learning activities, one group said that they had learned how to use their knowledge in real life and that they also had developed their computer skills. The other groups reported that their knowledge about physics, culture, history, and religion was improved through such experiential learning. Their communication and cooperation skills were also enhanced.

The teachers also reported that this was the first time they used project-based learning in their teaching. Their skills and knowledge about how to organise and manage group work activities, build student presentation rubrics, and work with students through their learning process have been improved.

However, three out of five teachers reported that project-based learning was not used in their classrooms. According to them, the topics in Grade 10 chemistry and biology were not suitable for this teaching methodology. They thought that this methodology was appropriate for more complex issues such as environment or ecological environment. One of the trainers from the School of Education suggested that the teachers could ask their students to work on simple projects. For example, as they taught the lesson about chemical elements (Grade 10), they could ask their students to research an element, create an advertisement, and complete an element fact sheet, or write a poem about the chemical elements to help them memorise the elements more easily. In brief, some teachers had an incorrect perception of project-based learning. More training and guidance in using project-based learning might be of help to the teachers.

Progressive assessment

In Vietnam, most teachers assess students' performance through tests, quizzes, and examinations. The oral test at the beginning of each lesson as a form of progressive assessment is also a common practice in many schools. In this test, the teacher calls a student to the front of the class and poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the lesson in order to gain good marks. It is said that this form of assessment is not effective because only one or two students are assessed at any one time. In addition, students are not involved in the process of assessment. Both teachers and students are not provided enough ongoing feedback on student learning to improve their teaching and learning.

Realising this problem, we focused on training the teachers on how to use progressive assessment effectively in the classroom. However, the results of the observations showed that

some teachers did not require their students to assess and evaluate their peers' performance or answers. Also, most questions did not require students' reasoning and critical thinking skills. The teachers did not often praise students when they had a good answer or did not give them bonus marks as a way to encourage their engagement in classroom activities. Moreover, when assessing students' presentations, three out of five teachers focused only on the content. No comments on students' verbal or non-verbal skills, such as eye contact, body language, and enthusiasm were found during the observations.

After the feedback sessions, the teachers improved their forms of assessment, using both teacher assessment and peer assessment. For example, after a group's presentation, the teachers asked the other groups to give their feedback and ask questions. One teacher had good questions such as 'what would you do if you were assigned this task?' In order to answer such questions, students have to imagine they are a different person, and explained what, how, and why they would do things differently. This helps them provide their friends with useful feedback and good assessment. Teachers E and C developed rubrics for group presentations. The rubric consisted of the following traits: content; presentation; cooperation; and interaction between the presenter and the listeners.

Teacher B, who taught biology, used the progressive assessment effectively. She observed students when they were doing group work activities in the classroom. When a group presented a good answer to a question, they received a bonus, which would be added to their final grades. The students were also asked to give their comments or feedback to their peers' answers. Teachers C and E also created portfolios to keep track of their students' progress in doing their projects. The students were required to submit their weekly reports about their progress. The teachers then gave feedback to the students about their work until their projects were accomplished.

Change in teacher beliefs in active teaching methodologies

After the training workshop in July 2012, we interviewed the teachers about their application of active teaching methodologies in their classrooms. Four out of five teachers said that they would use what they learned from the workshops in their teaching. One teacher said 'these methodologies motivate students' active learning'. One teacher explained 'using group work gets students engaged in the classroom activities, and helps them improve their communication skills. In addition, the teacher can assess the students' performance and participation through group work activities'.

However, one teacher believed that these methodologies could be used only at a certain level because:

1. The curriculum is long and heavy, but must be completed within a limited time.

2. Many students are not used to group work activities.

3. Teachers are not used to these new methodologies.

Another teacher added that these methodologies should not be used at present when the curriculum is heavily focused on preparing students for tests and exams which are provided by the Ministry of Education and Training.

The results showed that some teachers were not confident enough in using new methodologies or still focused on the 'teach to the tests' methodology, which concentrates on teaching their students to pass the tests rather than teaching the subject. However, after the classroom observations and feedback sessions, the teachers became more confident in

applying new methodologies in their classrooms. One teacher suggested an idea about how to use group work effectively without worrying that the lesson was not finished within the time given. She said 'if the lesson is short, we can give more time for the students to discuss. If the lesson is too long, we should focus on the main points of the lesson'.

When asked 'what are three changes you want to make in the coming academic year?' all the teachers said that they would use project-based learning across the curriculum. Four out of five teachers said they would use more progressive assessment on students' knowledge, and other skills such as presentation, communication, and cooperation skills. Three out of five said they would design learning activities appropriate to students' different levels. One teacher said he would create activities to help students enhance their creativity and other abilities such as art and computer skills. It could be seen that the teachers became more confident and motivated in applying active teaching methodologies, which might have a positive impact on student learning.

The teachers' beliefs in active teaching methodologies and classroom observations have changed thanks to the following reasons: the topics of the training workshops were selected based on the teachers' needs; a friendly working environment between the teachers and the trainers of the School of Education encouraged the teachers to share their ideas about their lessons and welcome others' constructive feedback; and the teachers also practised and used what they had learned from the workshops in their own classes.

Change in teacher beliefs about classroom observations

In the interview at the end of the academic year, the teachers were asked the question 'did you feel pressure when being observed? Why?'.

Four out of five teachers reported that they 'felt scared when being observed the first time by SOE's staff'. This was because they did not know how they would be evaluated. One teacher said that he thought he would have to use all the methodologies they had learned from the workshops when being observed. Another teacher stated that 'the aim of classroom observation focuses on evaluating and ranking teachers, and this causes teacher's pressure'. 'However, the focus of classroom observations in the SOE program was to help us develop our teaching skills and knowledge. The friendly working environment encouraged us to share our teaching experience and give each other constructive feedback.' When asked about the effects of classroom observations, all the teachers reported that classroom observation was useful. One teacher said 'your constructive feedback has improved my teaching skills'. One teacher added 'SOE trainers helped us to see our strength and weaknesses in specific areas such as organising group work or creating and using rubrics for students' presentations'.

The results showed that the teachers had a more positive attitude toward classroom observation, and a better understanding about its benefits.

Discussion

The results confirmed the success of the training program. Teachers' skills were improved. Their attitudes toward classroom observations also became more positive.

The program also met some of MOET's requirements, such as 'to improve their teaching ability, education capacity, and other capacities based on Teacher Qualification Standards' (Regulations about Professional Development for Pre-school, Secondary school and Continuing Education Teachers, issued on July 10, 2012 by MOET).

This program also fulfilled one of the missions of the academic year 2012-2013 assigned by MOET 'reform teaching methodology and assessment'. The topics for the training workshops (group work, continuous assessment, project-based learning, …) met MOET's requirements 'teachers should create opportunity for students to improve their self-study and research skills, and foster their independent thinking skills; design systems of effective questions suitable to students' levels in order to help them apply the knowledge they have learned in real life situations'.

The results of the classroom observations showed that students' creative and independent thinking skills developed through the process of carrying out such projects as making yoghurt, making a model of a pressure cooker, and making a video clip about a historic place in Can Tho. The fact that students applied their knowledge of physics to explain the principle of condensation and evaporation proved that they had a deeper understanding of content knowledge. In addition, students' planning and communication skills improved. The program, therefore, had a positive impact on the teaching and learning quality of the Lab School.

The school curriculum in Vietnam is heavy. Teachers have to ensure that they should complete the curriculum within the academic calendar. Therefore, most teachers are reluctant to apply new active teaching methodologies which usually require more time for learning activities. Also, the focus of classroom observations in most schools is to evaluate and rank teachers. This practice causes teachers' hesitation in opening their classes to observations. Therefore, changing teachers' beliefs about the benefits of using active teaching methodology and of classroom observations is a challenge. However, after the program, the teachers had a better understanding about methodology. According to them, students became more active and engaged in the learning process. A friendly atmosphere for sharing and discussing teaching experiences with SOE staff and colleagues also changed the teachers' perceptions and attitude towards classroom observations.

A limitation of this program is that the impact of teacher change in pedagogical knowledge and skills on student learning was not measured. The Centre's plan for the coming academic year 2013-2014 is to continue to support the teachers to improve their teaching skills, and hence, enhance the Lab School's teaching and learning quality.

Conclusion

Through a variety of professional development programs and models, workshops and seminars, the Centre has achieved its goal to 'enhance teaching and learning quality in the Mekong Delta'. The next mission is to help teachers improve their research skills. The Centre has planned on offering workshops and seminars on how to do research. Experts in this area will be invited to help teachers develop their research skills. The Centre will also improve the training and coaching programs for secondary schools teachers in the region. It could be concluded that the Centre has made a significant and valuable contribution to teacher professional development and the promotion of teaching and learning quality in the Mekong Delta.

References

Allard de Hoop. (2006, 2007). *Workshops on coaching at Cantho University, Vietnam*. Can Tho: Can Tho University.

Atay, D. (2006). Teachers' professional development: Partnership in research. *Teaching English as a Second or Foreign Language*, *10*(2). Also, http://www.tesl-ej.org/ej38/a8.pdf

Craft, A. (1996). *Continuing professional development.* London: Open University.

Dam, L. (2008). In-service teacher education for learner autonomy. *Independence*, 42, 25-26.

Ganser, T. (2000). An ambitious vision of professional development for teachers. *NASSP Bulletin, 84*(618) 6-12.

Glatthorn, A. (1995). Teacher development. In Anderson, L. (Eds.). *International encyclopedia of teaching and teacher education* (2nd ed.). London: Pergamon.

Glatthorn, A. (1995). Teacher development. In Schooler, C., & Schaei, W. (Eds.). *Cognitive functioning and social structure over the life course* (2nd ed.). London: Pergamon Press.

Joyce, B., & Showers, B. (1996). The evolution of peer coaching. *Educational Leadership*, *53*(6), 42-45. Also, http://pop.eggplant.org/pamphlets/pdf/joyce_showers_peer_coaching.pdf (5pp.).

Hayes, D. (1997). INSET, innovation and change: An introduction. In D. Hayes (Ed.). *In-service teacher development: International perspectives.* London: Prentice Hall.

Kellogg, W. K. (2004). *Logic model development guide*. Retrieved from http://www.epa.gov/evaluate/pdf/eval-guides/logic-model-development-guide.pdf

Lord, P., Atkinson, Mitchell H. (2008). *Mentoring and coaching for professionals: A study of the research evidence.* London: National Foundation for Education Research, Northern Office.

Luật giáo dục (2005). Retrieved from http://www.moet.gov.vn/?page=6.3&view=2741

Sparks, D., & Loucks-Horsley, S. (1989). *Five models of professional development*. Retrieved from http://www.ncrel.org/sdrs/areas/issues/educatrs/profdevl/pd2fimo.htm

Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. UNESCO: International Institute for Educational Planning. Retrieved from http://unesdoc.unesco.org/images/0013/001330/133010e.pdf

Widdowson, H. G. (1987). Against dogma: A reply to Michael Swan. *ELT Journal, 39*(3), 158-161.

Designing a Collaborative-Based Practicum within an English Language Teacher Education Curriculum

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Abstract

This small-scale research and development (R&D) project attempts to develop a collaborative-based instructional design (ID) for the Practicum at the English Language Education Study Program (ELE-SP), Universitas Negeri Jakarta (UNJ). As an effort to bridge theory and actual classroom teaching, the practicum is aimed at facilitating students to develop their pedagogic skills to teach in diverse EFL classroom settings. Data were collected through document reviews, peer reviews, and focus group discussions involving students, teaching team members, teacher educators, and stakeholders. Results demonstrated that a practicum program which stimulates collaborative learning would help students optimise their potential in developing their pedagogic skills as well as their learning autonomy in practice teaching in various EFL classrooms.

Introduction

'Changes in pedagogical practices, practices of pedagogical practices, are often influenced by changes in educational policies' (Scott, Stracker, & Katz, 2009, p. 3). This also applies to Indonesian teacher education. While working on teacher certification which is compulsory for more than 2.7 million teachers and prospective teachers, teacher education institutions (TEI) in Indonesia currently face another demand in implementing a new policy on teacher professional education (TPE). More than two hundred and sixty TEIs are challenged to develop an excellent TPE for S-1 (*Sarjana*/Bachelor) graduates from various fields of study, despite continuous controversy over their mastery of the subject matter to be taught. Unlike the existing policy that requires students to complete a minimum 144 credit hours of the S-1 program to obtain a teaching certificate, the new TPE program requires thirty six-credit-hour-intensive courses on pedagogic skills after their bachelor degree.

The new policy is aimed at finding solutions to the issue of upgrading a significant number of unqualified teachers. This is a burning issue in a country with a population of over 230 million, thousands of scattered islands, and a large number of multicultural societies, as TEIs are to ensure that (potential) teachers in all parts of Indonesia have an opportunity to go through this quality improvement scheme. Another important implication for TEIs is to reflect on their roles, not only in redesigning a long term TPE program, but also in improving the existing program which will still be running for the next few years. This has resulted in a pressing demand for TEIs to develop an excellent pre-service education program to prepare quality teachers and an effective in-service professional development program for teachers in schools, to improve their competence and academic qualifications.

Furthermore, the changes in TPE policies have an important impact on the ELE-SP in ensuring its quality to prepare a large number of English language teachers for various school settings in Jakarta and surrounding areas. An evaluation of the ELE-SP curriculum, however, revealed that a number of pedagogical courses only partially fulfilled student needs to teach in diverse levels of schooling. This may be considered as a criticism of teacher training which fails to address the appropriate use of instructional skills and fails to apply alternative strategies which may be best for students (Roberts, 1998).

One of the implications of the evaluation was the need to review and develop a more effective program for the practicum due to its vital role in bridging theoretical-based practice and real teaching, before students go to schools for field teaching experience (Mayuni, 2008). Hence, developing a research-based instructional model for the practicum is required to fill the current gap between competence obtained during college study and the demands of the teaching profession.

The project

In order to accomplish this purpose, a research project was undertaken to obtain data on the effectiveness of the implementation of the Practicum course and to develop an instructional design (ID) by addressing the following research questions:

1. How was the practicum course conducted at ELE-SP UNJ intended to provide students with pedagogic skills for teaching in diverse EFL classroom settings?
2. What were the needs of students and schools concerning the practicum?
3. How could an effective program for the practicum course be designed to meet the needs of students and schools?

The terms practicum, work experience, practice teaching, and microteaching are often used interchangeably. In this study, the Practicum refers to a four credit-hour compulsory course offered for the ELE-SP students in pre-service and in-service programs, after they have passed all subjects required, and before they go out to schools for field experience programs. The course was previously called Microteaching and Work Experience I. The aim of the course is to provide students with teaching practice in diverse EFL classroom settings, ranging from regular to international-based schools, and from private English language courses to non-formal training for drop-outs and adults. In-service students are not required to do the internship program after passing this course, as they are considered to have had experience teaching in actual classrooms.

The practicum was taught by a teaching team and the students were provided with a study guide (module). The course was divided into two main parts: review of theories on instructional skills (for the first half semester) and teaching practice (for the second half). The review covered topics of becoming a teacher, classroom management, planning, organizing, and implementing instruction, and reflection on the instruction. Teaching experience practice consisted of peer-teaching activities and was mainly conducted in regular classrooms, frequently without audio-visual support, where peers took turns acting as the teacher or students, and finally reflected on their performance.

Theoretical framework

In recent decades, the orientation of teacher education has moved from training to a combination of training and learning (Richards & Farrell, 2005). In today's TPE program, students are engaged in experimenting with alternative solutions for their classroom problems while they receive assistance from teacher educators. Richards and Farrell consider this approach as *from outsider to insider*, in which students learn by themselves, as well as from each other, and from the teacher educators through the processes of skill learning mastery, cognitive mastery, personal development, and reflective practice. The actual realisation of how well they can perform these four aspects is determined when they finally teach in front of a class.

Before students teach in actual classrooms, they need to go through a practice teaching program which is designed to foster the development of their teaching skills through systematic practice. Trott (1977) and Brown (as cited in McGarvey & Swallow, 1986) use the term microteaching for this activity to refer to a wide range of flexible and controlled, scaled-down teaching practices to suit local needs and conditions. Gebhard (2009) and Legutke & Ditfurth (2009) use the term practicum and consider it as a core component in teacher education to help teacher-learners not only to gain skills needed but also to develop their teaching competence. Despite the differences, the activity mainly involves lesson planning, classroom observation, supervised teaching practice, and reflection activities within a small group of students who will then take turns teaching and reflecting on their own practice.

Unlike during the 1970s to 1980s when this issue spread rapidly in TPE institutions across countries (McGarvey & Swallow, 1986), the practicum has received little attention recently in research and publication. From the available sources, some problematic notions are noted, particularly in dealing with the artificial nature of practice teaching. This is partly due to an unbalanced emphasis on how to use a particular skill in isolation, rather than on how and when to use skills in combination to achieve the actual complex teaching skills required (McGarvey & Swallow, 1986).

Prior research also reported that practice teaching which is heavily focused on practicing specific skills may lead to a lack of attention towards lesson planning and providing feedback for student learning experiences (Perrot, 1977). Another study also shows that there was no guarantee that in-service student teachers who passed a microteaching course, and were not required to do practice teaching, performed satisfactorily in their EFL classroom (Mayuni, 2007).

In spite of problematic issues in implementing the practicum, research shows that performance during practice teaching is found to be a good predictor of success in classroom teaching (McGarvy & Swallow, 1986). A number of experts like Allen, Ward, Davis and Smoot, Shea (as cited in Jones, 1978) stated that the practicum is 'more effective than traditional teacher training methods in bringing about specific behavioral skills in teacher trainees.' (p. 59). Allen and Ryan (as cited in Cohen & Manion, 1977) also state some advantages of conducting the practicum in a TPE program.

First, the act of teaching itself is real, although the situation is set up, so that students have hands-on experience. This mini practice may also help students handle the classroom more easily. Besides, by focusing on specific tasks, the practicum facilitates students to gradually develop particular teaching skills and provides them with immediate feedback either from their peers or their trainers. The challenge is how to develop and conduct an effective program for the practicum so that students have ample opportunities to apply required teaching skills and the knowledge they learn.

An alternative is to develop an instructional design based on the notions of collaborative learning (CL). This design is meant to provide students with ample opportunities to optimize their potential, learn from each other, and share responsibility throughout lesson preparation, teaching practice, observation, and reflection. Researchers believe that CL is 'as old as formal education,' effective for all school levels (Gunter et al., 1999: 264), and one of the best practices in education (Cohen, Brody, & Sapon-Shevin, 2004). This model promotes individual accountability in learning, positive interdependency, and social skills (Johnson & Johnson as cited in Scniedewind, 2004).

In the TPE context, CL and reflective learning are like a two sided coin which constitutes effective learning. As Bella (2004) states, CL is the foundation of a teacher's professional development process as represented by an educators' ability to be reflective in all aspects of their practice (p. 18). Richards and Farrell (2005) label it as collaborative and self-directed learning where positive interdependence is established through self development and teamwork to achieve collective goals to become teachers. Thus, promoting collaborative and reflective learning (CRL) through a systematic planning of instruction could help students learn more as they actively engage in an enjoyable learning process, create a sense of belonging, and know what they need to learn and how they learn it.

One of the most widely used and well-known procedures in instructional design (ID) is the ADDIE process: **A**nalysis, **D**esign, **D**evelopment, **I**mplementation, and **E**valuation (Gagne et al., 2005; Gustafson & Branch, 2007; Rothwell & Kazanas, 2008). Focusing on performance requirements in a dynamic, sequential, and multistage process (Rothwell & Kazanas, 2008: 59), this ID is worth applying in designing the practicum program as the nature and aims of the program are to reach the ultimate achievement of student performance through a gradual and dynamic process. As Spector (2004) notes, the ID can be developed either via a full range of planning, implementation, evaluation, and management activities or narrowly focused on analysis and planning activities.

Methodology

This study was carried out at the ELE-SP UNJ, Jakarta, during the 2009 and 2010 academic year. The small-scale research and development (R&D) project was designed and adapted from the Gall et al., (2003) R&D model, and the ADDIE instructional design (Gagne et al., 2005; Cennamo & Kalk, 2005; Gustafson & Branch, 2007; Rothwell & Kazanas, 2008) as shown in the following.

Research design

1. Analysis

- Course evaluation, students and school needs analysis
- Document reviews (syllabus, student evaluation questionnaire)
- Separate FGDs with students, teaching team, and stakeholders

2. Instructional design

- Learning outcomes, course objectives, topics, units, activities, and assessment

3. Model development

- Incorporated the new and the current ones

4. Model implementation

- Pilot testing
- Subject matter expert reviews

5a. Evaluation

- Focus on the product (study guide)

5b. Revision

- FGDs with teaching teams, TPT teacher educators, and stakeholders

6. Study Guide for Micro Teaching

The study was conducted using the five stages of ADDIE by employing multiple data and sources to present the entire context under study.

In the first stage, analysis, a program evaluation was conducted on the course implementation and a needs analysis through a document review and FGDs with five teaching team members and sixty two students who had passed the course and were doing field teaching experience and twenty three stakeholders. The evaluation was based on Stufflebeam's (as cited in Gall, et al., 2003) CIPP model (Context, Input, Process, and Product evaluation) to identify potential problems, determine the needs and the skills to be taught, and to lay the foundations for the ID development. The stakeholders included three school principals, five vice principals, three language course managers, a head of a learning community center, eight English language teachers of junior and senior high schools with ten to eighteen years teaching experience, and three English tutors from a community learning center.

The documents reviewed in the first stage were syllabus and study guides of the practicum, in order to collect data on the curriculum, and student evaluation questionnaires issued by the Quality Assurance Unit of the University to obtain data on the course implementation.

Two separate FGDs with the students and teaching team were conducted by focusing on:

1. The practicum curriculum and its implementation.
2. The teaching-learning process.
3. Student achievement.
4. Learning facilities.

Some additional questions were given to the students, to obtain information on their needs and expectations from the course, and to the team, to obtain their suggestions for the improvement of the course. An FGD with stakeholders was also carried out to gain information on their perceptions about the competencies of ELE-SP students participating in the internship program at their schools, and the standards of English teachers the schools needed. Furthermore, data from each independent source was described and analyzed on the basis of a topic oriented cycle (Mackey & Gass, 2005) and was crosschecked for confirmability and dependability.

In the next stages, designing the model and developing materials were carried out by incorporating relevant elements of the current program with the new one. Pilot testing was then conducted, the model implementation stage, in the Practicum course in the second semester of academic year of 2009/2010. As for a small scale R&D project, the model was examined and confirmed through expert reviews (Schriven, as cited in Gall, et al., 2003) by focusing on both the content of instruction and delivery methods to 'appraise instructional material on the basis of its credibility, accuracy, and effectiveness' (Rothwell & Kazanas, 2008: 298). Two subject matter experts with a postgraduate TESOL background and experts in material development were involved in evaluating the study guide. The revised version was then confirmed through FGDs by the teaching team, the developers of syllabus and study guides, TPE teacher educators, and by students taking the course prior to the implementation of the new model.

Results

Stage 1: *Analysis*

The analysis indicated some problems in course implementation, particularly in the curriculum, the teaching-learning process, materials, and facilities, despite the students' belief that the course helped them develop their pedagogic skills. Both the students and teaching team shared the same views on most of the emerging problems related to course implementation and considered the issues as an important priority to solve for quality improvement.

First, the course was not sufficiently focused on the practicum activity, as the first half semester was for the review of basic teaching skill theories and lesson planning and the second half was for peer-teaching. The teaching team argued that the review was required to strengthen the foundations of students' teaching skills before they practiced teaching, whereas, the students thought that this had already been covered in the previous relevant courses. Another problem related to the limited feedback on the students' performance, either from the team or from their peers, despite their engagement in non-teaching practice activities such as discussion and video viewing. Additionally, the students lacked experience practicing teaching in diverse school settings, especially in elementary schools, vocational high schools,

language courses, international-based-schools, and life skill training programs, since the course was highly concentrated towards junior and senior high school contexts.

Despite the lack of practice and feedback, it was interesting to note from the questionnaire document that the students had a positive view of the teaching team and the learning process. The course was considered to have run well with good teaching team performance (3.26 out of 4.00 as the maximum rate). From data confirmed through FGD, however, it was revealed that 'running-well' simply indicated the presence of students and the teaching team, and active student participation in discussion. It emerged from the FGD that as the questionnaire was generically designed for all courses, students were not motivated to comment critically on the course content, activities, facilities, teaching materials, and other matters.

Unfamiliarity with a school environment and a lack of learning facilities were among other problematic issues in the practicum class raised in the student FGD. Many students had a hard time adjusting in the first few weeks of the internship program, particularly in relation to understanding school policies, planning lessons, managing a classroom, and dealing with disruptive student behaviors. They also thought that they lacked updated resources and a lab facility. This consequently minimized their involvement in group work and reflection activities as they were unable to optimally review, self-monitor, and reflect on their performance. Crosschecking through FGDs, we discovered that the teaching team considered these issues as serious and would continue urging policy makers to provide better learning facilities.

From the FGDs with the teaching team, students, and stakeholders, we came across a greater demand to develop a more effective practicum program that facilitates and allows the students to experience practice teaching for various levels of schooling. As its name suggests, teaching practice (and all its core elements) needs to be the priority. The participants suggested that the focus of the first half semester should be on peer-teaching activities to allow students to gradually practice basic teaching skills which enhance high-level thinking (such as explaining, instructing, questioning, giving feedback, etc.). The second half of the semester would then focus on the practicum with real students either conducted in schools or in a microteaching lab.

The three parties also shared the same views on the importance of class observation prior to the teaching practice. Students need to visit at least three different school settings so that they are able to engage in school life and anticipate, and prepare for classroom realities, especially in relation to school policy and how teachers manage a classroom and develop and implement their lesson plans. Many stakeholders mentioned that students seemed psychologically unprepared to stand in front of a class although they sounded academically good. Students thought that they were unready partly because they were not confident operating sophisticated learning facilities (especially at international-based-schools), and were unfamiliar with English materials specifically for vocational and international classes, since the priority focus of the course was on secondary level (senior and junior high) schools.

Furthermore, both students and the teaching team considered using a microteaching lab with small groups of students as an essential factor for the students' better achievement. Hence, it

is a crucial requirement to give students ample opportunities to observe, practice and reflect on their performance. In order to promote students' active involvement and collaboration throughout the teaching practice process, a small class is also necessary to foster experiential learning and to obtain intensive feedback from the lecturer and their peers. They further suggested a regular team teaching meeting to solve any emerging problems related to course implementation, content redundancy, lesson planning, curriculum, and material development for various EFL classrooms.

Stage 2 and 3: *Instructional Design and Development*

After the initial stage of analysis the study guide was designed to include determining learning goals, skills, course objectives, instructional units, time allotments, and unit sequences. Learning activities were then developed by incorporating the notions of collaborative and reflective learning throughout the learning process as summarised in the following table.

Table 1. Instructional design for the practicum course

Course	The Practicum		
Credits	4 (32 sessions)		
Course description	This course is intended to foster practical applications of basic teaching skills in various EFL classroom settings through collaborative-reflective learning. Topics addressed in the course cover the whole process of teaching practice as reflected in each activity.		
Learning goals	At the end of the course, students are able demonstrate teaching skills in different levels of schooling based on a lesson plan and required conditions.		
Materials	Study guide (module) Related references		
Session	**Topic**	**Objectives**	**Activity**
1	Introduction	• Recognise the concept, syllabus, and the program plan of the course	Discussion on: • Course outline & class policy
Session	**Topic**	**Objectives**	**Activity**
2 – 3	Teaching skills, classroom management, and classroom language	• Review on theories and practice of basic teaching skills and classroom management • Practice classroom language	• Video viewing • Class discussion and practice

Session	Topic	Objectives	Activity
4- 5	Workshop 1: Collaborative and reflective learning	• Understand teamwork and shared responsibility • Demonstrate collaboration • Properly plan group work	• Group formation (a group of 4) • Class video viewing on collaborative learning Reflective learning • Program planning
6-7	Classroom observation in 3 different school settings	• Analyse school & class culture and policy • Analyse curriculum & lesson plan of English lesson • Identify teacher skills • Identify best practices & potential problems in teaching-learning process • Compare school profiles	Each group visits 3 different schools of the following settings: • Elementary school (*SD*) • Junior High school (*SMP*) • Senior High school (*SMA*) • Vocational High school (*SMK)* • International Standard-Based School (*SD, SMP, SMA/SMK*) • English Language Course/ELC • *Paket B and Paket* C program
8 – 9	Workshop 2: Group report on school observation	• Present report on school profiles • Identify lesson learnt and best practices • Conduct brainstorming for problem solving alternatives	• Group presentation • Discussion • Implication for lesson planning and teaching practice
10 - 11	Workshop 3: Lesson planning	• Prepare lesson plans for 8 different school settings • Produce complete plans	• Group work Each team completes at least 3 plans • Class discussion: revision
12	Workshop 4: Peer teaching in action	• Understand the concept of The Practicum • Identify teaching skills in video segments • Learn best practice: modeling	• Video viewing • Modeling • Discussion & Implementing direct and inquiry concepts • Reflection

Session	Topic	Objectives	Activity
13 – 17	Peer teaching Peer coaching Peer observation	• Perform small scale teaching • Observe peers teaching • Provide coaching • Reflect on teaching practice	• Simultaneous activities * - Practice – coach – observe - Implementing direct, inquiry, and collaborative concepts • Reflection
18 – 19	Workshop 5: Lesson planning	• Prepare lesson plans for 8 different school settings • Produce comprehensive lesson plans	• Group work Each team completes at least 3 plans • Class discussion for revision
20 - 21	Microteaching For *regular SD and SMP*	• Perform teaching • Observe peers teaching • Provide coaching • Reflect on teaching practice	• Simultaneous activities ** - Practice – coach – observe - Implementing direct, inquiry, and collaborative concepts • Reflection
22	Class reflection		• Sharing best practice
23 – 24	Microteaching for *ELC, Paket B and C ***	• Perform teaching • Observe peers teaching • Provide coaching • Reflect on teaching practice	• Simultaneous activities ** - Practice – Coach – Observe - Implementing direct, inquiry, and collaborative concepts • Reflection
25	Class reflection		• Sharing best practice
26 – 27	Microteaching for *SMK and SMA***	• Perform teaching • Observe peers teaching • Provide coaching • Reflect on teaching practice	• Simultaneous activities ** - Practice – coach – observe - Implementing direct, inquiry, and collaborative concepts • Reflection
28	Class reflection		• Sharing best practice

Session	Topic	Objectives	Activity
29 – 30	Microteaching for *ISB schools***	• Perform teaching • Observe peers teaching • Provide coaching • Reflect on teaching practice	• Simultaneous activities ** Practice – coach – observe; Implement direct, inquiry, and collaborative concepts • Reflection
31	Class reflection		• Sharing best practice
32	Review	• Comprehend the concept of The practicum • Recognise school environments • Complete learning tasks • Perform the practicum in actual classrooms	• Review • Reflection

* at microteaching lab

** at the microteaching with real students or in actual classrooms

While designing the study guide, sites for classroom observation and practice teaching were prepared so that the program could commence on a semester scheduled basis. A number of new collaborations were established in Jakarta with preschools, elementary and vocational schools, English language institutions, and community learning centers (*Sanggar Kegiatan Belajar*/SKB where English is taught for adults); and also in the surrounding areas of Bogor, Depok, Tangerang, and Bekasi (Jabodetabek). As well, on-going partnerships were maintained with mainly public secondary schools. Although it was rather hard to balance the number of international, very good, and regular schools to vary the students' experience practising in different school locations, the ELE-SP gradually made progress in terms of the total number of new collaborating schools through intensive communication with alumni and with the students doing the internship program.

Furthermore, a series of CRL activities was developed by, firstly, introducing a workshop for team building to develop students' collaborative skills as well as to facilitate students' planning of group work. Realising that workshops are a key component to build effective teamwork, the team also designed workshops for school observation reporting, lesson planning, and reflection on practice teaching, peer-observation, and co-teaching activities. Each individual was expected to actively get involved in the workshops so that students had an opportunity to enhance collaboration, share vision, commitment and responsibility. By creating such a mutual learning environment it was expected that the students learn from each other, develop learning autonomy, and finally improve their teaching performance.

Before starting their teaching practice, students visited a number of schools and reported their observations in the classroom. This is valuable for the students to internalise the teaching-

learning process in real contexts involving diverse EFL classrooms, as well as to learn how to establish effective communication with schools for their future careers. Wilson's (1978) research findings revealed that '… pre-service teachers who participate in the practicum before going to the field are better prepared for the potential problems if they are combined with field-based experience.' (p. 85).

Another activity developed for the students was a series of teaching practices, preceded by modeling through video recordings. Students in small groups took turns teaching and/or co-teaching and observing, based on individual roles and responsibilities (Villa, Thousand, & Nevin, 2004). These activities were conducted simultaneously and collaboratively to monitor and reflect on each others' performance. Besides practice teaching, each student in a team played two roles simultaneously, as an observer to monitor one's progress as well as a critical peer to give constructive feedback to solve problems that emerge during teaching. It was found that student awareness of an appropriate use of teaching skills also grew as they critically observed and responded to their peers' performance.

Understanding that the role of reflection is the essence of teacher professional education (Dewey as cited in Roberts, 1998), reflection was promoted as a very important part of the practicum activities to help students find solutions to their own problems. In the study guide, students were provided with literature–based reflective steps and activities to encourage them to reflect, as well as to collaborate, throughout teaching-learning activities.

For the second half of the program microteaching was conducted at a lab with real learners and in diverse school settings, particularly to provide students with experience teaching in actual classrooms, and to view and reflect on their own performances through video. A study by Wilson (1988) found that 'pre-service teachers who participated in microteaching before going to the field were better prepared for potential problems if microteaching was combined with field-based experience.' (p. 85). Graves (2009) also stated, to make sense of practice, students need to engage in the whole process of practice so that they have opportunities to observe teaching, to prepare for teaching, to teach, to reflect on their teaching, and to analyse and learn from it. Thus, by developing collaborative-reflective learning throughout the practice teaching process, it is expected that students could freely perform an auto-critique and share experiences, ideas and solutions to teaching related problems.

Stage 4 and 5: *Piloting and evaluation*

Having completed the design, the model was piloted in the Practicum Course in the second semester of the academic year, reviewed by the experts and confirmed through an FGD with the course teaching team and ELE-SP teacher educators. The results are summarised as follows:

- Firstly, the study guide in general equipped the students with opportunities and challenges to develop their pedagogic skills. From an instructional core point of view, the study guide would basically meet student needs as they were provided with various experiences that enabled them to gradually develop their teaching skills. Building collaborative teamwork from the commencement of course sessions would help students develop their teaching skills if the motivation and productivity of the

team were well-maintained throughout the course.

- Secondly, the effectiveness of school visits would be evident if students had ample opportunities to access both academic and nonacademic activities, interpret classroom realities, learn, and reflect on them in lesson planning and actual practice teaching. Hence, the choice and number of schools/institutions visited should be realistic and proportional, and greatly depended on the quality of the partnership established between the ELE-SP and related parties.

- Thirdly, a clearer explanation was needed on the implementation of peer-coaching and peer-observation as elements of integrated activities in practice teaching (either in peer-teaching or microteaching) before the students started the activity. This would help students understand and develop their multiple roles during the activity as they needed to simultaneously become observers and coaches for their peers' practice teaching.

- Fourthly, time management for peer-teaching, microteaching, and reflection activities needs to be well-defined and well-implemented so that students could manage and complete the series of teaching practice effectively.

Conclusion and future prospects

This study focused on the ID development of the current practicum course by promoting collaborative learning throughout course activities. A challenge for the teaching team was how to conduct the course effectively and establish partnerships with schools so that students could successfully practice teaching in diverse EFL classroom settings.

In implementing the design, teacher educators were required to be good role models (both in pedagogic and English language skills) to provide their students with hands-on experience of teaching practice. In addition, through collaboration the teaching team needed to create an enjoyable and constructive learning atmosphere to enable students to achieve a high level of awareness in applying their teaching skills. If the students enjoy the learning, they will enjoy practicing to teach, and this will help them cope with potential problems in their first real teaching experience at schools.

Another implication is the need to provide students with greater access to learning facilities including experimental school classrooms where they can become familiar with school environments and conduct the practicum activity. More efforts are required, however, to expand win-win collaboration with potential site institutions. Many of them, mostly leading public schools, are less than responsive due to the anxiety of disturbing their tight schedules preparing students for the national examination.

As a small-scale study, the product of ID was narrowly focused on the study guide through a series of analysis and planning activities, rather than on the full range of planning, implementation, and evaluation activities. Due to time limitations for the research project, the study guide was evaluated on the basis of its clarity via subject matter expert reviews, and confirmed through FGDs with teacher educators and stakeholders. Hence, further study needs to be conducted to obtain information on the effectiveness of its implementation by confirmation by students.

For the new TPE scheme as planned by the government, the study guide could be adapted, based on student needs, credit–hour and time allotments, and the nature of the program. Nevertheless, classroom observation and group reporting may not be included since the units have been covered in SSP workshops during the first semester.

Concerning the diversity of student backgrounds and needs (undergraduates in various disciplines), more time could be allocated for the practicum with an extensive use of English. In addition, although practice teaching at different school settings would be advantageous for students, the TPE priority is for secondary education, as it seems there is no ELE-SP in Indonesia that specialises in TEFL for specific levels and educational settings. A follow up study on how effectively the program can be implemented in the practicum course is also required.

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References

Bella, N. (2004). *Reflective analysis of student work.* Thousand, Oaks, California: Corwin Press.

Cohen, L., & Manion, L. (1977). *A guide to teaching practice.* London: Methuen & Company, Ltd.

Danielson, C. (1996). *Enhancing professional practice. A framework for teaching.* Alexandria, Virginia: Association for Supervision and Curriculum Development.

Farrel, T. (2009). The novice teacher experience. In A. Burns & J.C. Richards (Eds.), *Second language teacher education* (pp. 182-189). New York: Cambridge University Press.

Finkbeiner, C. (2004). Cooperation and collaboration in a foreign language teacher training program. In E. G. Cohen, C. M. Broody, & M. Sapon-Shevin (Eds.). *Teaching cooperative learning: The challenge for teacher education.* New York: State University of New York.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Pearson Education, Inc.

Gebhard, J. G. (2009). The Practicum. In A. Burns & J.C. Richards (Eds.), *Second language teacher education* (pp. 250-258). New York: Cambridge University Press.

Graves, K. (2009). The curriculum of second language teacher education. In A. Burns & J.

C. Richards (Eds.), *Second language teacher education* (pp.15-124). New York: Cambridge University Press.

Gunter, M. A., Estes, T. H., & Schwab, J. (1999). *Instruction: A models approach* (3rd ed.). Needam Heights, MA: Allen & Bacon.

Gustafson, & Branch. (2007). What is instructional design? In R. A. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (pp.10-16). New Jersey: Pearson Education.

Jones, J., Jenkin, M., & Lord, S. (2006). *Developing effective teacher performance.* Thousand Oaks: Paul Chapman Publishing.

Jones, P. E. (1978). A Survey of the practicum in secondary teacher education programs of NCATE accredited colleges and universities. Virginia: University of Virginia. (Dissertation).

Johnston, B. (2009). Collaborative teacher development. In A. Burns & J. C. Richards (Eds.), *Second language teacher education* (pp. 241-249). New York: Cambridge University Press.

Kessler, C. (Ed.). (1992). *Cooperative language learning: A Teacher's resource book.* Englewood Cliff, NJ: Prentice Hall Regents.

Legutke, M. K., & Ditfurth, M. S. (2009). School-based experience. In A. Burns & J. C. Richards (Eds.), *Second language teacher education* (pp. 209-217). New York: Cambridge University Press.

Mackey, A., & Gass, S. M. (2005). *Second language research: Methodology and design.* Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

McGarvy, B. & Swallow, D. (1986). *The practicum in teacher education and teaching.* Beckenham, Kent: Croom Helm.

Mayuni, I. (2007). *Peningkatan mutu guru bahasa Inggris melalui pendidikan dalam jabatan.* Bandung: Lubuk Agung.

Mayuni, I. (2008). Implementasi kurikulum program studi pendidikan bahasa Inggris. Jakarta: Universitas Negeri Jakarta. (Unpublished research report).

Moore, K. D. (2005). *Effective instructional strategy: From theory to practice.* Thousand Oaks, California: Sage Publication.

Perrot, E. (1977). *The practicum in higher education: Research, development and practice.* Surrey: Society for Research into Higher Education Ltd.

Richards, J. C., & Farrel, T. (2005). *Professional development for language teachers: Strategies for teacher learning.* Cambridge: Cambridge Language Education.

Richards, J. C., & Lockhart, C. (1994). *Reflective teaching in second language classrooms.* Cambridge: Cambridge University Press.

Roberts, J. (1998). *Language teacher education.* New York: Arnold.

Rothwell, W. J., & Kazanas, H. C. (2008). *Mastering the instructional design process: A systematic approach (*4th ed.). San Francisco: Pfeiffer.

Scott, J. C., Stracker, D. Y., Katz, L. (2009). Cross-currents in language policies and pedagogical practices. In J. C. Scott, D. Y. Stracker, and L. Katz. *Affirming students' right to their own language. Bridging language policies and pedagogical practices.* New York: Routledge

Shambaugh, N., & Magliaro, S. M. (2006). *Instructional design: A systematic approach for reflective practice.* Boston: Pearson Education, Inc.

Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). NJ: John Wiley & Sons, Inc.

Spector, J. M. (2004). Multiple uses of information and communication technology in education. In M. Seel and S. Dijkstra (Eds.). *Curriculum, plans, and processes in instructional design: International perspectives.* Mahwah, N.J: Lawrence Erlbaum Associates Inc, Publishers.

Tomlinson, B. (Ed.) (2003). *Developing materials for language teaching.* London: Continum.

Trott, A. J. (Ed.) (1977). *Selected the practicum papers.* London: Kogan Page.

Universitas Negeri Jakarta. (2009b). *Kurikulum Program Studi Pendidikan Bahasa Inggris.* Jakarta: Universitas Negeri Jakarta.

Villa, R. A., Thousand, J. S., & Nevin, A. I. (2004). *A guide to co-teaching: Practical tips for facilitating student learning.* London: Sage Publication, Ltd.

Wilson, C. A. (1988). The effects of the practicum and early field-based experience on the attitudes of elementary pre-service teachers toward teaching science using activity-based method. University of Toledo. (Dissertation).

Teacher Professional Development and School Based Management Theory: An Experience from South Thailand

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Abstract

This article describes the proposed application of School Based Management Theory (SBMT) in Teacher Professional Development (TPD) in Nakhon Si Thammarat Province, South Thailand. TPD models in the past were a two to three day training course that was not necessarily compatible with a teacher's needs or school context and was conducted away from the school and classroom setting. SBMT is considered because teachers can undertake their self development at their own school using various type of learning resources during their working time. The application of SBMT aims to develop a teacher's knowledge, experience, and attitudes towards their career and self development. SMBT is based on needs and school context. School based TPD can be initiated by using a project process or a model process in the school context. Positive changes in a teacher's classroom practice, professional attitude and their learners' learning achievements are expected outcomes. The efficient and effective practice of School based TPD will be affected by the teacher, principal and other stakeholders' understanding and willingness to engage in good planning, to provide adequate time and learning resources and by good collaboration both inside and outside school. Stakeholders should take note of their roles in school based teacher professional development.

Introduction

Teaching is a profession in which teachers have to undertake self development all the time. Rapid changes in social context, information and communication technology, and in other fields have occurred in recent decades and teachers have to keep up with these changes so that they can apply educational theory and innovation to practice. The ultimate goal in education management and the teaching profession is to develop students' capacity and quality. In the past, teacher professional development generally used short course training. This method has some benefits such as teachers could gain some new theories and technology within a few days, they would feel relaxed in different atmospheres, and meet new people. But on the other side teachers have to leave school for two to seven days leaving students behind especially in the rural area. Often training topics were not compatible with teachers' needs, problems and contexts. This weakness is important because they had difficulties in putting the theory into practice.

Faced with this situation educators and the involved department tried to find innovations in teacher professional development (TDP) including distance training via ICT, field research, supervision practice, and coaching and mentoring. For the teacher, they can do self development by furthering their study, or by doing self study by attending various courses, demonstrations, and sharing activities.

Teacher Professional Development is defined as activities that develop an individual's knowledge, skills, expertise and other characteristics of a teacher. OECD (1998) said that TPD can serve a number of objectives as follows:

- To update individuals' knowledge of a subject in light of recent advances in the area.

- To update individuals' skills, attitudes and approaches in light of the development of new teaching techniques and objectives, new circumstances and new educational research.

- To enable individuals to apply changes made to curricula or other aspects of teaching practice.

- To enable schools to develop and apply new strategies concerning the curriculum and other aspects of teaching practice.

- To exchange information and expertise among teachers and others, e.g. academics, industrialists.

- To help weaker teachers become more effective.

However, there is an innovation known as school based management theory that focuses on teacher's self development in their own school with their colleagues and principal. School based management is the systematic decentralisation to the school level of authority and responsibility to make decisions on significant matters related to school operations within a centrally determined framework of goals, policies, curriculum, standards and accountability (Caldwell, 2005). School based management has at least six main principles that can be said to change the school. These are:

1. Decentralisation
2. Self-management
3. Stakeholders' participation
4. Supportive leadership
5. Whole-school approach
6. Accountability

The Project

How can these principles of school based management be used to facilitate teacher professional development?

The teachers can do self-development inside the school during their working time. The training topics are more likely to be compatible to the school context and teacher's needs and interests. Teachers will participate in planning and practicing improvement. A systems approach will be employed in the process. In Thailand, the Office of Education Council (2010) initiated an umbrella research project for every part of Thailand to apply SBMT to teacher development.

The project was initiated as a two year research project aimed at researching and developing the school based teacher and principal development model in small schools (with less than three hundred students) around the country. Nine universities were invited to participate in this project. Each university had to select four to five small schools in their area. The Faculty of Education, Nakhon Si Thammarat Rajabhat University selected five target schools. In the first year, the model was developed, then applied in the target schools to determine the impact on teachers, principals, students and other stakeholders. The objectives of the study

were to study the school context and identify problems and needs, to synthesise related literature, to develop a model for developing teachers and principals based on school based management theory, and to implement the developed models in a real situation.

School based management was proposed as a transformational school strategy. It was selected because the school management model focuses on the school context and needs, and decision-making authority is decentralised to the school level. Although SBM focused initially on decentralising the authority and responsibility to the school level Caldwell (2005; 9) stated that in developing countries (e.g. Indonesia) SBM could be applied as a strategy to conducting professional development programs for teachers on new approaches to curriculum and teaching. For this approach to be successful the school mission has to be clear and come from all member's participation and understanding. The school leadership must be supportive and facilitative. Systematic effective evaluation must be undertaken to ensure the school quality.

School based teacher professional development has the following objectives:

- To develop school teachers and principals based on their problems and context.

- To systematically undertake the process of teacher development.

- To initiate a professional learning community of practice in schools and with outside networks.

Methodology

A Research and Development research method composed of four main phases was adopted.

1. The pre-research phase that drew the research framework, specified target schools, and also created understanding between the research team and stakeholders, as well as an awareness of context for the study.
2. Research goal and objectives stating phase. Related information, literature, and needs assessment were stated in relation to research goals and objectives.
3. Model developing phase was done in each target school and evaluated by the educators from the university and stakeholders. This produced a revised model.
4. Model implementation phase. Each target school implemented their model to develop teachers' teaching competencies and attitudes towards self-development and other chosen topics. Then the trained teachers were followed up and data collected for the conclusion.

Data collection and analysis

In this study various research tools were used to collect data. There were satisfaction survey forms, model qualification evaluation forms, self evaluation forms, group meetings, content analysis, and sharing activities. The data collection was done both at the project level and school level. Most collected data were analysed utilising descriptive statistics.

Findings

Observations about context and needs assessment of the target schools found that each of the schools had different characteristics such as location, student numbers and students' thinking

skills scores. The views of the local communities concerning the importance of education varied. School teachers and principals identified different development topics.

The results of the model development phase found that each target school had their own model that was compatible with internal and external factors. Most of the models focused on thinking skill improvement by applying a Project Approach. There was a school focused on integrating ICT in their teaching and learning activities.

The developed models of each target school were composed of seven elements:

1. Rationale.
2. Model's objectives – stated what was intended to happen to the target group or the people involved.
3. Model's strategies - specified the innovative methods that would assist target groups to meet the model's objectives.
4. Model's procedures - specified the procedure for teacher development in each school.
5. The stakeholders' roles - explained what the people involved have to do to support teacher development to meet objectives.
6. Model implementation - illustrated how the model could be used in practice.
7. Key success factors - specified the factors that the implementer should use to determine whether the objectives were met, such as, a teacher's attitude towards the model, selected issues for developing teachers, and the model for developing processes.

It was found that all schools reviewed provided the planned activities. There were teacher development activities, supervision and monitoring, and resources support. The implemented activities could be divided into two levels: project level and school level. At the project level, there were specialists, text and resources support, teacher and principal development, and monitoring and sharing activities. At the school level, the activities were similar to the project level in Table 1.

Table 1. Model implementation activities

Project level activities	School level activities
1. Planning step (plan) • Model and school plan reviewing • Academic, and other support planning	1. Planning step (plan) • Model and school plan reviewing • Developing and constructing success indicators, learning achievement tests, skill and attitude self evaluation forms
2. Model implementation (do) • Academic support • Teacher development activities: specialist support • Resources support • School practice mentoring	2. Model implementation (do) • Based line data collecting • Providing teacher development activities • Teachers use knowledge gained in classroom • Supervising various activities

3. Data collection and analysis (check)	3. Data collection and analysis (check)
• Data collection by observing, focus group with teacher, principal and students • Data collection by using the constructed tools and activities • Data analysis by using descriptive statistic and content analysis	• Collect data by using constructed tools • Data analysis by using descriptive statistic, content analysis and t-test
4. Conclusion, report and revise (act)	4. Conclusion, report and revise (act)
• Conclusion • Report writing • Planning for the next project	• Conclusion • Report writing • Planning for the next project

School teachers and principals agreed that it was a useful project. The developed model could be practiced in the real situation and it impacted positively upon the stakeholders. School teachers and principals had learned more about teaching innovation and better teaching skills. Positive attitudes toward the chosen topic were more evident than before the study. Students' learning achievement was higher than before, and as well, they had more thinking skills, participation, and were more interested in learning.

Lessons learned

There are at least three lesson learned from applying SBMT in teacher professional development. There are related to: 1) the school based teacher professional development process (as in Table 2); 2) the key success factors; and 3) the stakeholder's roles.

School based TPD process

School based TPD processes can be either formal or informal. The formal type focuses on systematically practising data collection and reporting on both the school project model and the research project model. The informal type focuses on problem solving as a school project. It can begin with a small interested group. The process can be initiated from outside, by, for example, a superintendent, a teacher education institution, or by an insider such as a senior teacher or principal, as outlined in Table 2.

Table 2. School based teacher professional development process

Formal type	Informal type
Generating ideas facilitated by an outsider.	Focus on small group talking/brain storming inside school.
Problem stating and needs assessment • Focus on general context of study and teaching/learning situation • Identify problem and topic which teacher and principal would like to improve	Problem and topic stating • The group specifies the problem and topic they would like to improve

TPD planning as a project or a model	TPD planning
Project elements: • history/rationale • objectives • developed topics • method/procedure/time • learning resources • budget • expected outcome • key success factors *Model's elements*: • rationale • objectives • strategies • procedure/activities • stakeholder's role • application • key success factors	• who • what • how • where
Plan practising/model implementation • Data collection and instrument construction • Organise the planned activities • Monitor and follow TPD progress • Data collection after TPD	Plan practising • TPD practises activities • Monitors • Shares
Data collection • Knowledge and experience sharing • Data collection using the constructed tools • Data analysis	
Conclusion, report and expand TPD • Conclusion • TPD result • Report results • Expand the results to other interest groups	Conclusion • Report • Expand the TPD to other interest groups

Key success factors

There are at least five key success factors in teacher profession development based on school based management. These are as follows:

1. *The attribution factor*. The involved people should have positive thoughts and attitudes towards teacher professional development. The benefit of the development should be obvious, especially in terms of the student's progress.
2. *The academic factor*. Teachers, principals and other stakeholders should have related knowledge of the developed topic and process, so they can carry on the planning activities more effectively and efficiently.
3. *The management factor*. To have a successful teacher professional development project, efficient management is needed and includes understanding, assignment, resources support, facilitating, monitoring, sharing and evaluating. The important factor is the provision of adequate time. All parties should manage the time for participating together in developing activities, otherwise the project will not go through to the end or meet the goal smoothly.
4. *The personal skills*. The involved people should have the following skills in order to succeed with self development. These are team work, communication skills, thinking skills, and self learning skills etc.
5. *The professional skills*. Teachers and university staff should have: teacher professional skills in instructional design; teaching skills; teaching materials; production skills; evaluation skills; and research skills in order to follow the planned activities.

Stakeholders' roles

In school based teacher and principal development, stakeholders should play different roles as follows.

The Principal

- Academic leader -- give advice on developing the topic, developing processes, and supervising the teacher's practice.
- Change agent -- show readiness to change by considering new rather than old paradigms or practices.
- Administrator -- be involved in planning, assigning, resources supporting, facilitating the teacher's practice, and monitoring developments.
- Learner role -- do self development in relevant topics so that she/he can give advice, facilitate support, and evaluate the project result.
- Evaluator -- evaluate progress every now and then to solve problems, improving the plan, before and after, the implementation.
- Co-operator -- co-operate with teachers, educators, and other agency personnel to secure their support.

School teachers

According to school based management theory, the school teacher has to participate in the teacher development process. They should play the following roles:

- Self and professional development -- he teacher should be aware of the importance and necessity of self and professional development because they are an indicator of

professional potential and competency. Teachers should learn about innovation that can be applied from various sources without any command from the administration.

- Planner -- due to teachers' workloads, self development has to done after school or after housework. Teachers should have a suitable schedule for their self development to gain the best benefit.
- Group member -- because everyone has to participate in the development process, some have enough knowledge and experience to be the group leader or key person for TPD. The others can take the role of group member and ensure good cooperation within the group, complete assignments, share information and ideas to assist the project's goals, and respond to results.
- Mentor and evaluator – to ensure the progress and success of self development and improvement in teaching quality.

Superintendent

- Inspirer – as an outsider they can easily identify a school's strength and weakness. They can also help to identify problems and give advice to schools.
- Academic advisor -- as the specialist in the field of curriculum and instruction, and measurement and research, they can give relevant advice to teachers for teacher self development.
- Supervisor -- supervision is the main work of superintendents, as well they provide academic support. They should monitor teacher professional development according to the supervision plan. They can cheer up the teacher in TPD.
- Supporter -- supports the acquisition of needed resources in order to promote more efficient TPD.
- Evaluator -- evaluates teacher and principal development in order to draw a conclusion and report to the relevant department.

Parent/community

Parents and the community are the school's clients. They often participate in school activities. They should play the following roles:

- Helper in TPD.
- Academic support -- some parents are specialists or experts and can assist a school in various ways, e.g. by supporting students' learning.

School committee

The school committee sets the school policy and monitors the school operation. They should play the following roles:

- Approve the TPD plan.
- Support the school, its academic resources, and learning centre for the students and teachers' development.
- Monitor TPD progress according to the approved plan.
- Evaluate TPD projects.

Tertiary institution

If the academic institution has a close relationship with the school the TPD is more likely to be successful.

- Inspiration -- the tertiary institution has a body of knowledge and keeps up-to-date in education innovation and can inspire school development.
- Academic support -- 1) provide academic services like short course training during vacation and brochures and booklets; 2) give training in schools; 3) co-research a project together as this is another way of developing school teachers and principals.
- Monitoring – needs agreement between the school and the tertiary institution, and needs to be part of the plan's implementation process.
- Sharing activities -- tertiary institutions can play this role when there are more than two schools involved in a project. Sharing activities can promote the self development and motivation of the school teacher and principal as they share lessons and experiences, providing good practice for teacher profession development.
- Project evaluation – the tertiary institution should take part in project evaluation so that information can be used for developing the next plan.

Discussion and conclusion

From the experience of applying SBMT to teacher professional development, it has been shown that this theory could be practiced in the real context, although the main characteristic is focusing on decentralising the authority from a centralised department to school management level. Other SMBT characteristics for successful TPD include stakeholder's participation, development based on teacher needs and school context, as well as real situation practice. The important things are stakeholder's awareness of the necessity for development; their understanding of development topics and processes; their strong resolution; their personal and professional skills and their commitment to proper roles.

References

Caldwell, B. I. (2005). *School based management*. Paris: Stedi Média.

Cheng, Yin Cheong. (1996). *School effectiveness and school based management: A mechanism for development.* Washington, D.C.: The Falmer Press.

Khammanee, Tisana. (2004). *School administrator's strategies and experiences in whole school reform.* Bangkok: Pakornsilp Printing.

Kimpee, Pan (1997). The development of non formal education learning network for community self development**.** Faculty of Education, Chulalongkorn University. (Doctoral Dissertation).

Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, *19*(2), 149-170.

OECD. (2009). *Creating effective teaching and learning environment: First results from TALIS* . Retrieved from, www.oecd.org/edu/school/43044074.pdf

Office of National Education Council. (1999). *A study of school's administration and management based on school-based management***.** Bangkok: Teacher Council Press.

Office of National Education Council. (2004). *Guidelines for school based professional development.* Bangkok: Chulalongkorn University Press.

Sangnapaboworn, Varaiporn. (2007). Teaching and learning quality development in small size school. (Unpublished).

Satitpakeekul, Apinporn, et al. (2012). Research and development of school teacher and principal development model based on school based management in small school phase I: a case study of Nakhon Si Thammarat Province. Nakhon Si Thammarat: Faculty of Education, nakhon Si Thammarat Rajabhat University. (Unpublished).

Satitpakeekul, Apinporn, et al. (2013). Research and development of school teacher and principal development model based on school based management in small school phase II: A case study of Nakhon Si Thammarat Province. Nakhon Si Thammarat: Faculty of Education, Nakhon Si Thammarat Rajabhat University. (Unpublished).

Siribanpitak, Preut. (2006). Research report paper: Teacher's qualification and efficiency**.** (Unpublished).

Wiratchai, Nongluk. (1996). *Reforming process for students' quality development***.** Bangkok: VTC Communication.

Building a Learning Team to Enhance the Professional Capacity of Teacher Educators: An Example from the School of Education, Can Tho University, Vietnam

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Abstract

A range of studies on action learning undertaken by Revans (1982), Senge (1990), Dilworth (1995), and Marquardt and Carter (1998) confirmed that teamwork could benefit teachers in many aspects. However, in most of the universities of Vietnam, teachers of related subjects have worked in isolation. A group of four teacher educators in the Didactics of Biology and the Didactics of Literature and Vietnamese Linguistics in the School of Education, Can Tho University made a decision to begin working in a team and to research the effects of action learning on the professional development of a group of colleagues working as a team. This study reports on: how building a learning team enhanced teaching methodologies for team members; the impact of building a learning team on the skills of giving and receiving feedback; and how research skills were learnt from building a learning team. Group meeting reports, class observations and individuals' diaries provided data for this study. As a result of learning through action it was found that the group made considerable advances in their professional learning and this has impacted upon the quality of teaching provided. The lessons learned from this study provide an effective model for use in Vietnamese higher education institutions and possibly elsewhere in the ASEAN region.

Issue

Professional development is the development of a person in his or her professional life which can be done both individually and collaboratively (Darling-Hammond and McLaughlin, 1995). According to Clement and Vandenberghe (2000), professional development can be successful only when there are meaningful interactions among teachers themselves as well as between teachers, administrators, and other community members. However, in Vietnam, learning through action and through working with colleagues is still undervalued due to ignorance of the benefits of reflective daily practices and mutual support. The question remains as to whether building a learning team among the teaching staff has an impact on their professional development. This paper presents a research study which aims to find out the answer to this question.

Background/context

There are ten different departments in our School of Education (SOE), Can Tho University (CTU) such as Physics, Biology, and Vietnamese linguistics and literature. In each department there is a group of lecturers who teach didactics and teaching methodology. These lecturers have few opportunities to share their teaching knowledge and experience and to learn from each other. Realising the importance of learning through action, four lecturers from the departments of Biology, and Vietnamese linguistics and literature conducted collaborative research on the effects of action learning and team work on teacher development, although one lecturer withdrew in May 2013.

Research aims

The research aimed to answer the following questions:

1. How does a learning team enhance teachers' pedagogical knowledge and skills?

2. What is the impact of team work on teachers' skills of giving and receiving feedback?

3. How are teachers' research skills improved through team activities?

Literature review

Learning team strategy

Team learning, also called organisational learning, learning community, or professional learning community, is considered one strategy to develop lecturers' professional capacity through what the lecturers teach and learn from their teaching activities. A learning organisation must be able to integrate work with learning and remember that 'only through continuously reflecting on our activities can we become a learning organisation' (Senge, 1990, cited in Marquardt, 2001, p. 1). Senge (1990, p. 10) defines team learning as 'the process of aligning and developing the capacity of a team to create the results its members truly desire. It builds on the discipline of developing a shared vision. It also builds on personal mastery, for talent teams are made up of talented individuals'.

Wenger (2006) utilises 'communities of practice' to define a learning team and clarifies it as 'groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly'. 'Organisational learning is the deliberate use of individual, group and system learning to embed new thinking and practices that continuously renew and transform the organisation in ways that support shared aims' (Collinson & Cook, 2007, cited in Laws, 2013). Senge focuses on team learning for developing the team's capacity, while Wenger (1997) focuses on the interaction between members of the team. Collinson & Cook, however, considers the individual, group and systemic actions to embed new thinking and practices.

Hord (1997) identifies five characteristics of a learning team: supportive and shared leadership; shared values and vision; collective learning and the application of that learning; shared practice; and supportive conditions for the maintenance of the learning community.

Bolam et al., (2005) and Stoll (2010) also mention the characteristic of 'shared values and vision' while introducing other characteristics such as 'reflective professional inquiry', or 'collaboration focus on learning as group as well as individual'. Thomas (2010) adds more: openness; network; partnerships; inclusive membership; and mutual trust, respect, and support. These characteristics are essential in creating sustainability in any learning team.

Laws (2013) also agrees on the core assumptions of organisational learning: individual; group; organisation; inquiry; behavioural and cognitive changes; shared understanding among members; and embedding new knowledge and practices into work routines. However, Laws emphasises levels of learning in an organisation and its objective towards 'changes of behaviour and cognition'. Laws identifies the mode of professional capacity development by a learning organisation to be 'embedding new knowledge and practices into work routines'. The three researchers in this study emphasised the nature of members of a learning organisation who share common vision, passion, and aims.

Learning through action

Action learning is a process in which 'a group of people come together, more or less regularly, to help each other learn from their experiences' (Dick, 1997). According to Marquardt (2001, p. 1), 'action learning is both a dynamic process and powerful program. It involves a small group solving real problems, while at the same time focusing on what they are learning and how their learning can benefit each group member, the group itself, and the organisation as a whole' . The definition by Marquardt on action learning is more inclusive than Dick's since it mentions the factors related to process, structure (small group), characteristics (focusing on learning) and benefit. Laws (2012) considers action learning is usually undertaken in a group. The core feature is that group members come together at reasonably frequent intervals and share their thoughts and practices (i.e. their learning) with each other with the intention of improving their overall performance.

Marquardt (1999, 2004) states that action learning involves six components:

- a problem, project, or challenge of importance to the group;

- a group of four-eight members, ideally from diverse backgrounds and/or parts of the organisation;

- a process that emphasises questions and reflection;

- the power to take action on strategies developed;

- a commitment to learning at the individual, team and organisational level; and

- an action learning coach who focuses on and ensures that time and energy are devoted to capturing learning and improving the skill levels of the group.

These characteristics, according to Laws (2012), allow that 'throughout the action, and following the action, reflection and evaluation upon what is happening should occur'. Laws sees great significance in three key activities of action learning, 'action', 'reflection', and 'evaluation'.

It has been proved that action learning plays an important role in developing a person's profession. Action learning is 'the DNA of a learning organisation' (Dilworth, 1995, cited in Marquardt, 2011, p. 1). Marquardt and Carter (1998) conclude 'perhaps no tool is more effective in building a learning organization than action learning'. Learning through action is a means of professional development for teachers which eventually leads to improve student learning. Laws (2012) also views learning through action as one way of 'providing encouragement and support for continuing professional development'. The notions and wording may differ, yet these researchers agree on the effects of action learning on the organisation and individual.

Our research aimed to further clarify the impact of the learning team and learning through action on teacher educators' professional development in our School of Education.

Implementation

This research was conducted in the School of Education at Can Tho University in Vietnam between September 2012 and August 2013.

The process was as follows:

1. The researchers discussed challenges of the group members.

2. The members observed each other's teaching activities. After each teaching observation, the members met to discuss strengths and areas for improvement, and resulting problems.

3. The members continued their teaching activities, taking the feedback into consideration. Improvements were added. Class observations and feedback were then continued as agreed and scheduled.

Data collection and analysis

Data collected were mainly qualitative in nature and analysed utilising a praxis paradigm.

Data collection

Twenty-eight classroom observations, meetings and teaching diaries of the members comprised the data. During the class observations, each member noted the sequence of activities and provided comments on: teaching methods; knowledge content; the teacher's behaviour; and students' engagement in class activities. After each observation, the researchers met to discuss their colleague's strengths and areas for improvement. These meetings were audio-recorded and documented.

These meetings focused on three discussions:

1. On the observed teaching activities.

2. On professional capacity development theories.

3. On the research approach of the group.

Each member noted their ideas and lessons learnt from the classroom observations and group meetings. These notes were considered their diaries.

Data analysis

The data were quantitatively analysed to measure the progress, in terms of teaching skills and feedback-related skills, of each member. These were discussed after each classroom observation and observation notes were taken into consideration. The researchers analysed their own opinions and lessons learnt from the learning through action process using meeting minutes as well as diaries.

Research questions

Research question: **1. How does a learning team enhance teachers' pedagogical knowledge and skills?**

Classroom observation is obligatory in schools in Vietnam, with the exception of colleges and universities. As a result, it is rare to see higher education academics observe their colleagues. The researchers consider observing each other's classroom activities essential to their professional development. This can be seen in the following diagram.
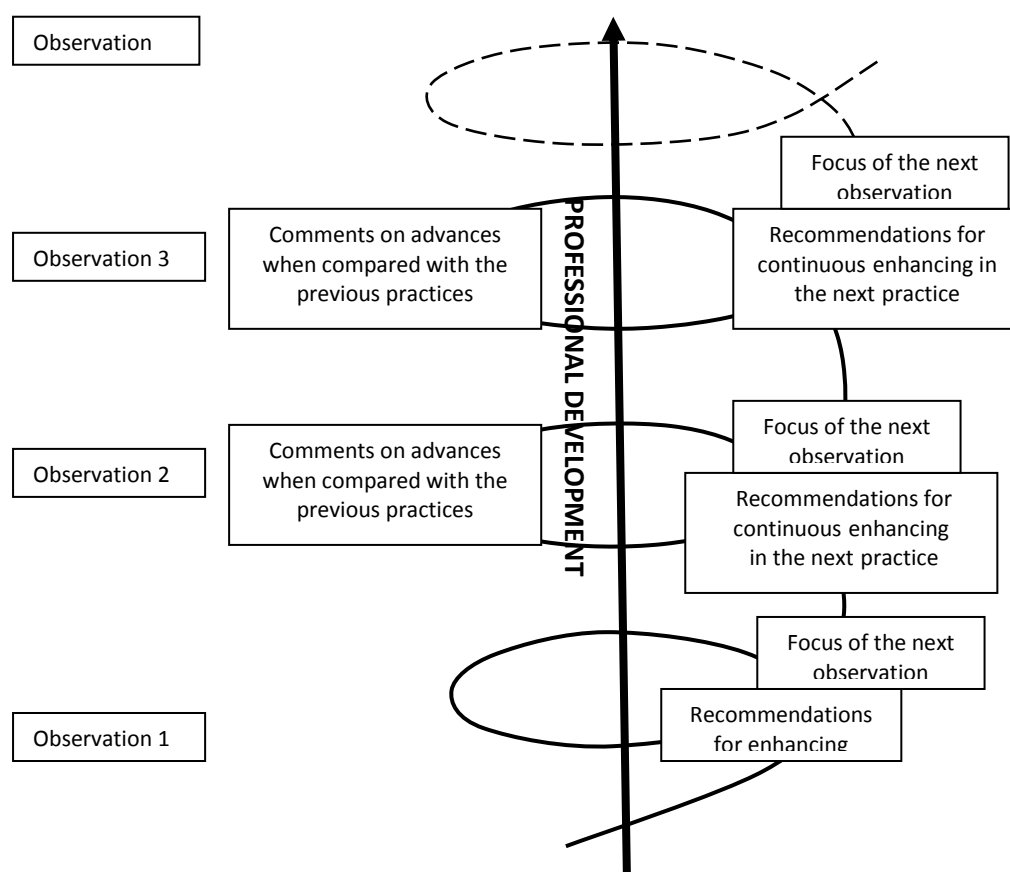

Diagram 1. Effects of a learning team on professional development

The person being observed benefits from the feedback and notes of the observers as long as there is a feeling of trust and sharing among all members. They identify their strengths and areas for improvement to prepare for later teaching activities.

This is seen in the teaching activities of Teacher D. On March 8 2013, Teacher D asked students to develop questions for high school pupils on a concept in a Grade 10 textbook. The students were confused, for Teacher D did not review the question building approaches. In other words, Teacher D did not apply the procedural knowledge in teaching strategies. In addition, Teacher D used few high-level critical thinking questions, and the teaching was not clearly structured.

After receiving feedback, Teacher D made modifications for the next class, using a clear and logical teaching structure, applying a review of previous knowledge, practice by the students, presentations by the students, and comments by the teacher. Teacher D also raised a few questions requiring the students to reason and prove, such as 'why?', 'clarify your opinion'. This example demonstrated the positive role of classroom observation and a learning team in professional development among lecturers, through Teacher D's willingness to receive feedback and make changes to improve teaching activities.

On the effectiveness of classroom observation Teacher D commented:

> It is hard to find out my weakness on my own, yet when I work in group and apply classroom observations and attend meetings for discussions and feedbacks I can identify my strengths and areas for improvements and learn quite a few experiences from the others. This will help me make progress more quickly.

> (Minutes of the meeting on March 3 2013).

Feedback from colleagues helps lecturers reflect on their teaching activities. The suggestion by Teacher B to elicit current knowledge among students motivated Teacher C to consider new teaching approaches for literature.

Teacher C reflected:

> Literature discusses matters in life: love, friendship, family ... of which the students have some understanding. So I should pay more attention to eliciting the life experience among the students in order to help them understand the text.

> (Diary by Teacher C on March 8 2013).

On the other hand, observing other members' teaching activities provided opportunities for the observers to learn things from colleagues. In the teaching period on March 8 2013, Teacher C helped the students understand the effect of using questions by asking them to discuss a lesson in a Grade 10 textbook based on questions designed by Teacher C.

When the students finished discussion, Teacher C asked:

> If we apply these questions to teach Grade 10 pupils, what will be the impact?

> What do you learn from designing questions for teaching?

Teacher D expressed:

> I have learnt a very new way of teaching: allowing students to play the role of pupils in discussing questions related to a lesson in a school textbook so that they can experience the effect of using questions in teaching and learning before these students analyse and evaluate these questions based on a teacher's view.
>
> (Minutes of the meeting on March 8 2013).

The meetings included discussion on issues and challenges related to teaching. In the eighth meeting (15/3/2013), Teacher D raised the following issue:

> I asked my students to design the questions to teach the pupils that concept, but my students did not even realise the nature of that concept.

Teacher B suggested:

> We should ask the students to identify the objective of the lesson before allowing them to design questions and they should present their questions on posters so that different groups can give them feedback.

Teacher A suggested:

> There should be a modelling for ways to design questions, and hand-outs about steps to formulate a concept should be delivered to the students so that the students have a strong foundation for design of questions for the lesson.

Teacher C shared:

> It is advisable to design a question checklist to help them to evaluate their own questions.

These discussions reflect mutual trust, desire to learn, and willingness to share knowledge among group members.

The above examples show the observers can improve themselves when considering and analysing the strengths and weaknesses of their colleagues.

Research question: **2. What is the impact of team work on teachers' skills of giving and receiving feedback?**

In the early classes in the observation and feedback process, the skills to give and receive feedback by some members were not well developed. For example, one member wanted to mention all the weaknesses of the person being observed. This caused discomfort to that person. Sometimes members did not readily accept negative feedback and criticism. As such, in the meeting to discuss Teacher D's teaching there was disagreement on how to instruct students designing questions. While teacher D introduced a six step building conceptual knowledge procedure to students, teachers C and D recommended it should be a five step procedure.

Teacher D did not agree and explained:

> I want to highlight the role of step 1 as a transition of idea among the contents in the lesson. Initially, the teacher has to identify the position of the concept in the lesson.

Teacher B responded:

> You would like me to give you feedback, but I find it difficult since you usually reject my opinions.

This comment reflected the negative impression Teacher B had of Teacher D and implied that D did not respect B. In the mean time, D was not open-minded to welcome feedback from the observers. This conflict highlighted to the group the need to improve their skills in giving and receiving feedback. As a result, the group agreed to learn more about feedback skills.

After discussing giving feedback theory by the University of Toronto, the members understood that they should not bring up too many criticisms at one time but focus on one or two main points, agreeing that learning is a process. Feedback should be supportive, using compliments such as 'the way you organised the outdoor class is very good', 'I learnt from the way you teach your students about the question design process', or 'that you allow the students to evaluate themselves helps improve their high level critical thinking capacity'. The tone and wording should be soft and friendly. These attributes help exchange ideas, not impose ideas. Therefore the members used words and phrases such as 'should', 'if I were you I would', 'would the result be better if we had done like this?'

In addition to direct feedback, the members provided indirect feedback by sharing their own teaching experiences.

> I applied ... in my teaching' or 'I would like to share my experience that is ....

Such ways to give feedback show respect, allow active and constructive attitudes, and have no sign of preaching or imposing. Therefore, members who receive feedback feel no pressure and can identify strengths and weaknesses with ease. Due to constructive and supportive feedback, the observee's behaviours might change positively.

In the first session Teacher D often expressed anger when the students could not find the answers or provided wrong answers. This teacher said 'wrong, sit down. You're lazy'. After receiving feedback, the attitude of D toward the students in the class on April 11 2013 changed.

When commenting on the students' performance, Teacher D used softer words:

> Yes, it's acceptable but not very good.

The knowledge on giving and receiving feedback is shared among teachers when giving feedback, and is transferred to the students as well. In the class, *Designing a module to teach environment education* (on February 16 2013), Teacher B allowed groups of students to design the module, yet did not allow them to evaluate their performance or comment on other

groups' performances. This teacher let the groups present their presentations and then he commented on them. These comments focused more on weaknesses. After receiving feedback from members, in the next teaching period (on April 27 2013), B asked the groups to do self-evaluation and cross-evaluation using that form. The teacher allowed other groups to comment on the performances and learn from their experience. The teacher reminded the students to mention strengths first and to avoid saying 'you must do this'. The students were reminded to say 'is it better to ...', or 'if I had been in that situation' or 'if I were you, I would'.

It is clear that Teacher B applied the knowledge from the discussion on feedback to the classroom context. This is shown not only by the way the teacher commented on the students but by the transfer of this skill to the students. When commenting on other groups' performances, the students knew to mention strengths first and used comfortable words, such as 'I think the students will enjoy your teaching'; 'your teaching style is very friendly', and 'your questions are clear, and you look very handsome!'. Another student said 'I like your creative idea very much, but it is better to discuss further exploitation of forests'.

During the nine month process, the group members not only learnt how to teach better and how to give and receive feedback, but also how to do a scientific research project and write a scientific report that meets international criteria.

***Research question:* 3. How are teachers' research skills improved through learning team activities?**

Before this research, the youngest member in the group had not done any research. Two members had experience of a few research projects, and the last member had research experience and had written many articles in Vietnamese and two articles in English (together with other authors). What the members learnt from this project about research skills was very meaningful.

Firstly, the members learnt how to identify the research topic.

The research topic and related questions had been discussed many times in the group and adjustments and adaptations were made. In the beginning the research topic was 'Using blended learning to enhance learners' autonomy'. However, we realised this topic did not help us study the impact of learning on the members of the group. Therefore, the research topic was changed to 'Building a learning team to enhance the professional capacity of teacher educators: An example from the School of Education, Can Tho University'.

The research objective of the group was altered from enhancing learners' autonomy to focus on teachers. In the first meeting, the research objective was general since we aimed to find 'solutions to enhance learners' autonomy'. After discussing theories on learning through action, the research questions were focused on 'enhancing teaching skills of the members' and 'enhancing research capacity of the members'. When conflict between Teacher D and Teacher B occurred, the members understood clearly the significance of giving and receiving feedback skills for both teachers and students. Therefore, these skills were added to the research objective.

Through four meetings, the research topic and objective were clarified. The members learnt how to identify research topics. It was good evidence for learning through action to show that learning is a process.

Secondly, the members learnt theories to give theoretical background to the group's research.

Our research is based on the praxis paradigm. During implementation, when there was a demand for a theory to serve the research and teaching, we assigned each other to look for materials to share, and discussed these materials in group meetings. The selection of which theory would be the background for this research was not made immediately, but was identified through the research process and modified to meet the research objective. During nine months we read and discussed a wide range of materials related to the research topic such as learning community, learning through action, reflection, feedback on teaching, and how to write research papers that meet international standards. The activities to select, share, read, and discuss such materials show multiple levels of learning: individual; group; and organisational levels (Laws, 2013).

The discussions not only brought about immediate impact on the establishment of a theoretical background for the research but also had a long-term effect on the members' professional capacity development. The members understood the theories and could apply this knowledge in their teaching activities.

Thirdly, the members learned to analyse qualitative data.

Instead of using a questionnaire as initially intended, the group came up with other forms of data: minutes of meetings; minutes of classroom observations; and teaching diaries. The group shifted from quantitative data analysis (based on questionnaires), to qualitative data analysis (based on minutes of meetings, classroom observations, and diaries) because the latter was more suitable to the research topic. Among the three members, only one had applied qualitative methods before. Therefore, what the members learnt from this data analysis method had significance for their future research activities.

In the diary on July 7 2013, Teacher C reviewed the activities and concluded:

> Conducting scientific research that meets international standards is a real challenge to me, especially the part related to qualitative data analysis. I learnt how to deal with the data. Now I feel more self-confident, and I will apply this experience to coming research activities.

The process of learning in a team and learning through action enabled the members to improve not only their teaching capacity but also their research capacity.

Discussion

The research finds that learning through action helps teachers who teach the same or closely-related subjects to enhance their teaching skills, feedback skills, and research skills. The members also learnt new knowledge on the science of education and how to collaborate with each other.

To transform and develop the professional capacity among the members due to the impact of having a learning team, the group strictly followed the backbone principles of a learning team proposed by Senge (1990, p. 10) in building and organising activities. These principles agree that 'the discipline of team learning involves mastering the practices of dialogue and discussion. In dialogue, there is the free and creative exploration of complex and subtle issues, a deep listening to one another and suspension of one's own views'.

Graham (2007) considers conversation, contention, and commitment as three key factors leading to the development of a professional learning community. Graham also stated that the quality of the conversations that occur in the professional learning community is dependent upon the development of supportive structures. The characteristics such as 'dialogue, conversation, contention and commitment' proposed by Senge (1990) and Graham (2007) were reflected in the research process of the group. In group meetings the members discussed and exchanged ideas on each member's teaching methods and styles, teaching theories, professional capacity, development theories, and research activities. Those discussions took place in a democratic and informal manner among the diverse group.

To create changes in awareness and attitudes that lead to changes in behaviour, the group focused on two impacts:

1. The impact from group members due to comments and recommendations (external impact).

2. The impact from the member's reflection (internal impact).

The group selected classroom observation as a means to see teaching in progress since such observation has a positive effect on professional capacity development. The process of observation and lessons learnt by group members reflect a learning process that takes place through practice. It is different from the theoretical learning in workshops, and shows the mode for professional capacity development within a learning organisation. It is 'embedding new knowledge and practices into work routines' (Laws, 2013).

Feedback skills are enhanced. Before the other members provided feedback on a member, the group always gave this member the chance for self-evaluation. This time is for reflection on action, as stated by Schon (1983, p. 26) 'we reflect on action, thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome'. The impact of the group and members' reflections were coordinated to help each member develop their professional capacity.

Research skills are as important as other above-mentioned skills to a teaching career yet they have not received adequate attention in Vietnam. In the initial period of this research, the members had little experience in doing research that meets international requirements. As a result of the whole research process, from identification of the research topic through to the final report writing, the member learnt from trial and error the best way to proceed. When a member raised questions on an issue, the whole group reflected on what they had done and questioned whether something needed improvement. This process is evidence of reflection by the group as described by Boud, Keogh and Walker (1985) as 'recapture their experience,

think about it, mull it over and evaluate it'. This feature shows the third characteristic of learning through action suggested by Marquardt (1999, 2004) as 'a process that emphasizes questions and reflection'.

Learning teams should understand the characteristics of professional development proposed by Villegas-Reimers (2003, p. 8-14) 'it is based on constructivism', 'a long-term process', 'a process that takes place within a particular context', 'a collaborative process', and 'a teacher is conceived of a reflective practitioner'. As such, the research has a methodological significance in providing a model for the current organisation of expertise, and for the demands of professional capacity development among teachers not only in Vietnam, but also elsewhere.

The initial findings reflect the benefits of building a learning team to enhance the professional capacity of teacher educators. However, our research only measures changes in professional capacity among teachers. Another important issue to investigate is to evaluate how these changes in teacher knowledge and practices impact on students' learning. The intention of the group is to evaluate the impact of learning through action within a group of teachers on their learners as direct beneficiaries.

Conclusions

Professional capacity development is a long-term process and a collaborative process (Villegas-Reimers, 2003). The work done by the group of lecturers over a period of nine months helped each member improve their teaching and research skills.

The group activities reflect the characteristics of a professional learning community as stated by Stoll (2010, p. 226-227): shared values and vision; collective responsibility; reflective professional inquiry; collaboration; and promotion of group, as well as individual learning. Lessons learned from this research study are:

1. Structure and organise the divisions of expertise in an interdisciplinary way instead of the current isolated way. For example, there would be a division for theories and teaching methodologies for social sciences, for natural sciences, and for languages.

2. Encourage the establishment of learning teams which include teachers of different age groups and teaching experiences, to help all teachers share knowledge and learn from each other.

References

Australia. Northern Territory. Department of Education and Training. *Building professional learning communities in the NT*. Retrieved from, http://www.education.nt.gov.au/__data/assets/pdf_file/0015/4218/part1_research.pdf

Australia. Education and Training Committee, Parliament of Victoria. (2009). *Final report: Inquiry into effective strategies for teacher professional learning*. Retrieved from, http://www.parliament.vic.gov.au/images/stories/committees/etc/PL_Report/fullreport.pdf

Bolam, R., et al. (2005). *Creating and sustaining effective professional learning communities*. Bristol: University of Bristol. (*Research report*, 637).

Clement, M., & Vandenberghe, R. (2000). Teachers' professional development: A solitary or collegial (ad) venture. *Teaching and Teacher Education*, *16*(1), 81-101

Collinson, V., & Cook, T. F. (2007). *Organizational learning: Improving learning, teaching, and leading in school systems*. [SAGE Publications, Inc]. doi: http://dx.doi.org/10.4135/9781452225890

Darling-Hammond, L., & McLaughlin, M. W. Policies that support professional development in an era of reform. *Phi Delta Kappan*, 1995, *76*(8), 597-604.

Dick, B. (1997). *Action learning and action research.* Retrieved from, http://www.aral.com.au/resources/actlearn.html

Fadel, C. (2012). *What should students learn in the 21st Century?* Retrieved from, http://oecdeducationtoday.blogspot.fr/2012/05/what-should-students-learn-in-21st.html

Graham, P. (2007). *The role of conversation, contention and commitment in a professional learning community.* Retrieved from, http://cnx.org/content/m14270/latest/

Hattie, J., Timperley, H. (2007). *The power of feedback.* Retrieved from, http://education.qld.gov.au/staff/development/performance/resources/readings/power-feedback.pdf

Hord, S.M. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin: Southwest Educational Development Laboratory. (ED 410659).

Laws, K. (2012). *Teachers' learning through action for quality education*. DEPISA, 4th Action Teaching and Action Learning for Quality Education. Jakarta, December 5th, 2012.

Laws, K. (2012). *Building a professional learning community*. DEPISA, 5th Biannual Conference. Bangkok, June 13th, 2013.

Marquardt, M. J. (2001). *Action learning: The cornerstone for building a learning organization*. In Fuhrungsstarke oder Charisma. Frankfurt: Peter Lang Press. Retrieved from, http://www.wial.org/publications/WIALauthored/ALorgLearning.pdf

Marquardt, M., & Waddill, D. (2004). *The power of learning in action learning: A conceptual analysis of how the five schools of adult learning theories are incorporated within the practice of action learning.* Retrieved from, http://www.wial.org/publications/WIALauthored/ALadultLearning.pdf

Poertner, S., & Miller K, M. (1996). *The art of giving and receiving feedback*. Virginia: Coastal Training Technologies Corp.

Reflection, learning and education. Retrieved from, http://infed.org/mobi/reflection-learning-and-   education/

Schon, D. (1983). *Reflection lessons learned.* Retrieved from,
    http://www.uiowa.edu/~c07w120/reflection.doc

Senge, P. M. (1990). *The fifth discipline*. Retrieved from,
    http://www.vedpuriswar.org/book_review/the_fifth_discipline.PDF

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning
    communities: A review of the literature*. Journal of Educational Change*, *7*(4), 221–258.

Thomas, S. M. (2010). Evaluating schools as learning communities. In *International
    Encyclopedia of Education.* New York: Elsevier, 539-547.

University of Toronto. Centre for Teaching Support and Innovation. *Teaching assistants'
    training program (TATP): Feedback on teaching*. Retrieved from,
    http://www.teaching.utoronto.ca/Assets/Teaching+Digital+Assets/CTSI+1/CTSI+Digital
    +Assets/PDFs/Microteaching+Feedback+Tips.pdf

Villegas-Reimers, E (2003). *Teacher professional development: An international review of
    the literature*. UNESCO: International Institute for Educational Planning. Retrieved
    from, http://unesdoc.unesco.org/images/0013/001330/133010e.pdf

Planning a Teacher's Professional Development Project: An Action Learning Approach

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Abstract

Within the Blended Learning (BL) Project, funded by AusAID (Australian Agency for International Development) and coordinated by the World Bank Vietnam, a professional development program to strengthen teachers' capacity in designing and implementing BL courses in the Mekong Delta River region was developed and implemented over the course of one year. This paper presents how the Learning through Action framework has guided the process of planning, and as a result led to significant modifications of the project. Recommendations for future teachers' professional development projects are then discussed.

Vietnam Blended Learning Project 2012: An overview

In 2001, AusAID and the World Bank launched the 'Virtual Colombo Plan' with its goal to use the opportunities presented by Information and Communication Technologies (ICT) to improve education and access to knowledge in twelve developing Asia-Pacific countries. In 2012, with four other institutions, the School of Education (SoE), Can Tho University (CTU) won the grant to implement the Blended Learning Project for the Mekong Delta River Region with the following goals:

- Strengthen teachers' capacity in designing, facilitating and evaluating BL courses in local institutions in the Mekong Delta River Area.

- Increase and sustain literacy-media competence of the Mekong Delta teaching staff and disseminate the acquired knowledge and skills to wider beneficiaries.

- Improve the professional network within the Mekong Delta Region through sharing experiences and lessons.

The School of Education (SoE) – Can Tho University is considered the premier faculty in the Mekong Delta Region with a mission to train quality teachers. As part of its core mission, the School is responsible for:

1. Training primary school and secondary school teachers, and researchers in educational sciences and school subjects.

2. Conducting research in the field of education which entails investigating informal and formal learning, safeguarding the excellent pedagogical skills of the teaching staff and promoting the use of new teaching methods and technologies.

3. Providing professional development opportunities for in-service teachers of various

organisations and institutions.

The Blended Learning Project of SoE 2012 targeted a variety of participants: teachers from high schools, colleges and universities as well as leaders from Provincial Departments of Education and leaders of colleges in the region.

With the funds allocated for the Blended Learning Project, the project team members could invite experts from the Learning and Media Unit (DML), Catholic University of Leuven, Belgium as the trainers and project partner. Together with the project partner, SoE developed a proposal, stating the aims, phases, contents, significance, and impact of the project and submitted this to the World Bank Vietnam for their approval and modifications. However, actual contents and steps as well as specific activities of the project were open to a certain degree of flexibility due to the nature of the local contexts and the demands of the participants. Therefore, SoE and DML were open to changes regarding contents and activities as outlined in the proposal and were happy to negotiate with one another to best achieve the aims of the project. The project consisted of three phases described in Table 1.

Table 1. Blended learning project phases and activities

Phases	Activity
Planning and input phase.	SoE identified international experts in Blended Learning to work as partners/trainers for the project.
	Project partner (DML) developed the proposed contents for the project.
	SoE recruited project participants.
	SoE Project Team analysed the learning situations and needs of participating institutions and schools (infrastructures, learners, teachers, personal goals, pedagogical goals, and what needs to be changed).
	Based on the analysis, tailor-made input training was designed according to institutions' and schools' needs and their available resources.
	DML and SoE worked together to design the learning environment for the development of the input training (structural specification, pedagogical, technological specification, roles of ICT, and content specification).
	DML experts conducted workshops for participants in SoE, CTU, Vietnam. Contents were designed based on needs analysis conducted earlier.
Implementation phase.	Participants implemented their proposed blended learning initiatives at their own institutions and schools, either in the form of workshops/coaching for their colleagues or applying the ICTs tools directly in their class.

	On-line facilitation and support of MLU experts and SoE project team: e.g. mails, blogs, web conferences.
Experience sharing.	Video conference sharing experience, difficulties and solutions between project participants and Belgian experts. (*Blended Learning in the Mekong Delta River Region – Pathways and Solutions*).

In this article the focus is on how action learning guided the planning phase of the project. This phase was chosen for analysis as important changes were made which left significant impacts on the project thanks to the adoption of Learning through Action approach. The study used a praxis approach as it focuses on the practical aspect of how the planning phase changed the project program as well as the contents of the professional development training.

Planning phase: An action learning approach

Action learning simply means learning from action or experience, and then suggesting a course of action as a result of the learning. To illustrate this, Zuber-Skerritt (1993, p. 45) clarified:

> Action learning, in brief, is learning from concrete experience and critical reflection on that experience, through group discussion, trial and error, discovery and learning from one another.

In this sense, learning through action involves the whole process of identifying an issue, gathering data, interpreting data on the issue, acting on evidence gained and reflecting on actions taken. This process is believed to produce learning (Dick, 1997). In an action learning process, groups of people or stakeholders work on real issues and have shared responsibility to find solutions which may require changes which will impact on the whole organisation.

Initially the experts from DML suggested a planned program for the workshops. In order to determine whether all elements of this program were appropriate, a needs analysis was conducted.

Identify the issue: Teachers' needs and the design of Teacher Professional Development (TPD) Programs

It is now widely recognised that the use of ICT has become an essential element in classrooms 'affording new and transformative models of development that extend the nature and reach of teacher learning wherever it takes place' (Leach, 2005). In a developing country like Vietnam, ICT skills training and the development of ICT infrastructure are critical to the industrialisation and modernisation of the country. The Ministry of Education and Training (MOET) of Vietnam has introduced policies to support the use of ICT in schools and higher education institutions (MOET, 2008; Peeraer & Van Petegem, 2011b). However, according to Peeraer, Tran and Tran (2010), the technology plans addressing pedagogical change in institutions in Vietnam seem to be abstract and therefore trigger no action. As a result, skills training and improving access to ICT use and practice for teacher educators needs to be

provided in order to improve the learning process towards independent and active learning and teaching (Peerear and Van Petegem, 2012).

Teachers' professional development (TPD) programs

Research on TPD, in general, during the last decades, has left teacher educators and leaders confused with regard to the choice of model for TPD. Depending on context, size, resources, each school is completely different from others and even within a single setting TPD might work differently (Guskey, 1997). In particular, most of the criticism about TDP falls on projects not meeting the needs of teachers, which leads to the irrelevant content or input of the program (von Glasersfeld, 1991; Cochran-Smith and Lytle, 1993; Guskey, 2000). As Villegas Reimers (2003, p.63) states:

> In most parts of the world, the majority of in-service programs are too short, too unrelated to the needs of teachers, and too ineffective to upgrade teaching knowledge.

Professional development for teacher educators has been identified as an important strategic action for the capacity building of educational institutions (Lim et al., 2001). Only well-designed programs can help meet the demands of current educators who want to learn to use ICT effectively for their teaching practice (Jung, 2005). The emphasis in TPD on ICT needs to shift from the technology and skill training to showing how ICT can be used in a way that improves learning, or how ICT can be used as an effective teaching tool (UNESCO, 2004; Peerear and Van Petegem, 2011b).

To avoid the issue of focusing on irrelevant needs of teachers, the Blended Learning Project of SoE investigated and determined the needs of teachers in the local contexts and these were taken into account at the beginning of the project.

As the participants of the project are teachers from different schools, colleges and organisations, it is essential to:

- Provide needed information about each institution's ICT capacity, participants' ICT competence, professional use, and barriers to the use of ICT.

- Analyse the participants' needs for a workshop on blended learning and ICT use.

As a result, the overall issue which needs to be addressed at this stage of the project is:

What aspects of the proposed project need to be modified to meet the needs and contexts of the recruited participants?

Gathering data

Invitation letters were sent to institutions in the Mekong Delta River Region, Vietnam to recruit participants. Interested institutions contacted the School of Education to send their teachers to participate in the workshop. Thirty-four participants were recruited for the project based on the recommendations of their institutions or organisations. All of the participants were then contacted and they were asked to fill in the needs analysis questionnaire as the first

requirement of the project. The completed questionnaires were returned by email to the project team members.

Questionnaires were used to obtain information from the participants. The Blended Learning Needs Analysis Questionnaire was adjusted from the Project Needs Analysis Questionnaire provided by the World Bank Vietnam. The questionnaire was grouped into categories: school ICT facilities; school strategies to develop ICT; teachers' ICT competence; professional use of ICT; barriers to the use of ICT; and learning needs. However, the three last categories of the questionnaire were redesigned in a more open-ended approach, leaving respondents to fill in further information that is not provided in the available options.

The participants were from different educational institutions, twenty percent are university lecturers and twenty seven percent are teaching at vocational and technical training colleges. The others were from high schools and the Department of Education at provincial level in six different cities in the Mekong Delta River region, Vietnam (Can Tho, Hau Giang, Vinh Long, An Giang, Soc Trang, and Tra Vinh). The participants varied in their areas and fields of expertise. Nearly half of the participants (forty three percent) are currently teaching technology and ICT. Teachers teaching Sciences account for thirty three percent and the others are teaching foreign languages, arts and humanities.

Interpreting data

School ICT facilities

The participants reported the following facilities available in their institutions.

Table 2. ICT resources at participants' institution

ICT Resource	Availability (%)
Internet	100.0
Printers	100.0
Projectors	100.0
Computer labs for learners	80.0
Software applications (movie makers, mp3 cut, language software, authoring tools)	73.3
Camera/video camera	66.7
Technical support department	60.0
Interactive board	60.0

Learning Management System (Moodle, Dokeos, Blackboard)	23.3

In general, most institutions are well equipped with basic ICT resources (desktops, laptops for teachers, email accounts, computers for learners). Interactive boards and cameras/video cameras are not so popular. Technical support is also not adequately available at the participating institutions. Among the listed ICT resources, it is clear that the Learning Management System (LMS) are not widely available. Only twenty three percent of the participants reported that their schools have access to LMS. As such, if training on LMS is to be conducted as was proposed initially, only some institutions would have the opportunity to implement them in practice. On the other hand, as software applications were available for teachers and computers were available for students, it was suggested that training on the use of popular educational or audio-visual software should be provided for learners.

Table 3. ICT Professional development training of project participants

ICT Professional development training	Participants taking courses (%)
Using basic computers	67
Teaching with PowerPoint	67
Using internet, email	61
Using database (Access)	53
Integrating technology into curriculum	47
Using software applications in the classroom (authoring tools, movie maker)	33
Using the Learning Management System (Doekeos, Moodle, Blackboard)	27

From Table 3, it can be concluded that the participants of the workshops have undertaken a variety of ICT professional development courses previously. However, these courses focused on the basis use of ICT (using basic computers, PowerPoint, internet). Courses that require a higher level of ICT and are related to the integration of ICT in the classroom constitute a smaller percentage compared to other basic computer courses (Using LMS, twenty seven percent; using software applications, thirty three percent; integrating technology into the curriculum; forty seven percent). In addition, it might be argued that ICT professional development programs are catering for the technical aspects of ICT, whereas the principles of

applying ICT in educational contexts or classrooms (or the HOW of ICT) are neglected. This suggested an area for the development of workshop contents for later in the project.

Table 4. School strategies to develop ICT for staff

School strategies towards ICT development	strongly agree	agree	disagree	strongly disagree
My school has a clear sense of direction in how to use ICT to enhance the learning of the learners.	53.3	40.0	6.7	0
My school encourages the use of ICT by all teachers and puts support strategies in place for everyone.	60.0	26.7	13.3	0
The use of ICT is encouraged in the teaching and learning and appropriate support is provided.	60.0	33.3	6.7	0
Teachers at my school are encouraged and supported in participating in professional learning opportunities.	40.0	46.7	13.3	0
Sufficient ICT resources are available to meet the ICT requirements of teachers and learners.	6.7	60.0	33.3	0

Participants indicated that their institutions had a clear understanding of the benefits of ICT and had strategies to encourage and support teachers to use ICT in their teaching practice. The reported data also shows that more than eighty percent of the participants agree that their schools are supportive and encourage them to take part in ICT professional learning opportunities.

Table 5. Participants' ICT competence

Response (%)	good	fair	average	not capable
Word processing	66.7	33.3	0.0	0.0
Presentation tools (PowerPoint)	60.0	40.0	0.0	0.0
Internet browsing	60.0	40.0	0.0	0.0

Database	40.0	13.3	40.0	0.0
Spreadsheets	46.7	33.3	20.0	0.0
Visual/Multimedia applications	26.7	40.0	33.3	0.0
Educational Software	26.7	40.0	33.3	0.0

As reported the participants were teachers from different subject areas, varying from humanities to computers and languages. As a result, their ICT competence varied significantly, which is clearly illustrated in the above table. However, most participants are quite competent in using Word, PowerPoint and the internet. On the other hand, the participants varied in their ability to use databases and spreadsheets, visual applications and educational software. This indicates the need to further upgrade teachers' competence on more complicated aspects of ICT.

The teacher's professional use of ICT varied from basic to complicated as shown in Table 6 below. The most frequent uses were to create materials for learners, access research for teaching practice, administer the curriculum or lessons plans, and communicate with colleagues. Teachers also use ICT on a regular basis for motivating students and making lessons more interesting (more than seventy percent reported to use often).

Table 6. Participants' professional use of ICT

Professional use (%)	very often	often	some times	never
1. Creating materials for learners (lessons, exercises, quizzes).	46.7	40.0	13.3	0.0
2. Accessing research and practice for teaching.	40.0	53.3	6.7	0.0
3. Designing curriculum, lesson plans.	13.3	53.3	26.7	6.7
4. Communicating with colleagues/other professionals.	33.3	46.7	20.0	0.0
5. Communicating with learners or/and learners' parents.	6.7	26.7	66.7	0.0
6. Assisting learners (designing forums, posting information, tips…)	40.0	26.7	20.0	13.3
7. Online professional learning.	13.3	73.3	13.3	0.0

8. Making the lessons motivating and interesting to learners.	20.0	73.3	6.7	0.0

Table 7. Participants' barriers to the use of ICT

Barriers	Percent (%)
Lack of technical support when needed	73
Lack of time due to school work	53
Limited understanding on how to integrate ICT into teaching	40
Limited competence on how to use computers and ICT applications	26.7
Lack of software or websites that support teaching	26.7

As shown from Table 7, the lack of technical support and time to apply ICT are the dominant barriers that prevent teachers from using ICT. Knowledge on how to integrate ICT into teaching, limited ICT competence and lack of software and websites to support learning were also considered barriers. As a result, if the project could improve teachers' understanding and implementation of how to integrate ICT in their classroom practice, this would help school teachers overcome one challenge to the use of ICT and could contribute to make up for the lack of technical support, as they become more independent in their use of ICT in the classroom.

Table 8. Participants' learning needs

Learning needs	Percentage (%)
Using software to assist quality teaching.	86.6
Sharing teaching experience/materials through the use of ICT.	80.0
Using Internet to join the teaching and learning forums.	74.0
Designing lessons and learning activities through Internet and software applications.	73.0
Developing learners' autonomy and collaborative learning by integrating ICTs into the classroom.	66.7
Managing and using ICT applications in teaching practice.	66.7
Developing website to share learning activities and	60.0

interact with learners.	
Searching information and researching professional development activities through the use of ICT.	60.0
Establishing Virtual Learning Environment (Moodle, Dokeos, Blackboard, WebCT).	60.0
Using Virtual Learning Environment effectively in classroom practice (Moodle, Dokeos, Blackboard, WebCT).	60.0
Applying the principles of ICT into classroom practice.	40.0

Table 8 shows the learning needs that the participants want to be trained in during at the forthcoming workshop. Using software to assist learning ranked first (86.6%). The participants also wanted to explore opportunities to share learning/teaching materials online, join online forums, and take advantage of the internet to make lessons stimulate learners' autonomy and collaborative learning. More advanced ICT skills (developing websites, establishing and using LMS) were also requested by the teachers. Applying principles of ICT to teaching; however, had little support from the participants, compared to other needs.

Acting on evidence

Two actions took place when the data were interpreted. First, a needs analysis report was written to synthesise the participants' insights on their current available resources and institutional support as well as their actual needs for the blended learning project. A summary of recommendations for the Input Workshop Program was then presented to the World Bank and to the leaders of SoE, because some changes were required to the initial project proposal and workshop program contents, as outlined by the Belgian experts. Four recommendations were proposed in the needs analysis report.

1. There is a need to have a session on blended learning and blended learning instructional design as indicated from data on ICT competence and ICT school resources. The participants do not seem to be very advanced in using ICT in the classroom and therefore can be confused when learning how to combine face to face learning and online learning. Also, research has shown that blended learning adopted by some Asian countries has given very little attention to instructional design, or students' learning needs and styles (Tham & Tham, 2011). This is clearly reflected in the statistics for ICT professional development opportunities for the target participants of this project.

2. Although participants have participated in a number of professional development programs on using ICT tools and educational applications elsewhere, there is still a considerable demand for this particular area. Considering their needs and the context where educational software and ICT tools keep evolving day by day, the introduction

to online learning communities, accessible websites, educational software, and authoring tools is essential. Although this content was not present in the first proposal of the project, its addition helps update participants' knowledge on current educational software and tools to facilitate blended learning. Moreover, it also contributes to achieving the third aim of the project, which is to create and sustain an online professional network for teachers in the Mekong Delta River Region.

3. The suggested component on Learning Management System (LMS) by experts is also critical as this is a tool to help teachers interact with students. LMS claims to help increase the efficiency of teaching because it offers institutions a means to deliver large-scale resource-based learning programs. It also helps to facilitate: flexible course delivery; the use of resources; communications and conferencing; activities and assessments; collaborative work; and student management and support (Ryan, Scott, Freeman & Patel, 2000). At a time when LMS is becoming more popular it can be a useful tool to enrich both teachers' and learners' experiences. However, its application and benefits are still not very clear to a great number of participants. As a consequence, an introduction to LMS and a discussion on how it should be used will help participants have another option in designing blended learning courses. As indicated from the data on ICT Professional Development activities in the previous part, LMS resources are not available and popularly used in most of the participants' contexts. It is proposed that only user-friendly and economical LMS will be introduced.

4. Finally, as the participants' needs vary and so does their ICT competence, it is suggested that participants should be grouped according to their learning needs so that they might help each other, and the trainers might find it easier to monitor and facilitate them during the workshop. Also, participants who have higher competence in ICT might share experiences with their peers regarding how they implement ICT and design blended learning courses. Peer discussion and a sharing of collaborative professional development culture among schools have been acknowledged as factors to gain the full potential of ICT resources at schools (Peerear and Van Petegem, 2012).

After getting approval for the project content modification from SoE leaders and World Bank Vietnam, changes were negotiated with the experts from Belgium. This might seem difficult as the program and the contents for the workshop had been planned and agreed by both sides (SoE project team members and Belgian experts). Changes at that time might have caused big challenges for the expert side because the date of the workshop was coming closer and the experts had already planned contents and had developed some important materials. However, as mentioned earlier in this paper, both sides of the project had already agreed to negotiate possible changes to best achieve the project aims. The changes to the project contents and activities were respected by the trainers.

Through email exchanges with the experts, changes for the project and input program were discussed. The exchange was based on the mutual respect and understanding of both project partners for the joint aims of the project. The experts understood the cultural and contextual

influences on the project's effectiveness, therefore all changes derived from the learners' needs and institution resources were accepted. In return, the Belgian experts also foresaw the overloading of the five-day workshop program for participants, and suggested to focus on important aspects and leave some for later phases or future projects. Only when two project partners, together with the third party (Project Sponsor and Coordinator - World Bank Vietnam), agreed on all changes, were the contents for the project workshop finalised. This is summarised in Table 9.

Table 9. A comparison of planned and actual project design based on the needs analysis phase

Intended input contents	Actual input contents
- Instructional design on Blended Learning - LMS (WebCT; Moodle) - Authoring tools - Screen castings (camtasia) - Blogs, wikis - Internet-based projects works - Online teaching and producing electronic materials - Basic website development (Wordpress, Joomla) Social network site (NING)	- General introduction on educational technology and instructional design, blended learning - Instructional design: the different stages of the ADDIE model - ADDIE – Analysis: learning goals, student characteristics, learning activities, context, design learning environment, teaching methods, student guidance and evaluation, focus on technology) - ICT tools: Screen casting, blogs and wikis, mind mapping, authoring tools. - LMS: Moodle
Planned workshop assessment	**Actual workshop assessment**
Individual blended learning proposal	Group or individual blended learning proposal
Planned mode of delivery	**Actual mode of delivery**
Workshop discussion in random groups	Workshop discussion in purposefully arranged groups according to learners' needs or field of expertise.

Evaluating results

The planning and needs analysis phase had significant impact on the effectiveness of the project regarding what should be best customised to local teachers' needs. The report advocated the idea that in teachers' professional development programs, teachers' voices must be heard (Cochran-Smith and Lytle, 1993; Villegas Reimers, 2003) so that behavioural change can actually happen.

In a later reflection and evaluation, the session on *Instructional design: Implementing different stages of the ADDIE model* in the input phase was well appraised by the participants.

The ICT tools session ranked second in the list of favorite contents delivered by experts. The high rankings of participants for those contents showed that the planning phase was successful in identifying learners' actual needs based on their local contexts and individual needs, rather than on any other assumptions (e.g. from literature or experts).

However, due to time constraints of the project (one year), the time allocated for the planning phase was insufficient for the SoE project team members to conduct individual or focus group interviews with local school/college/university teachers and leaders to further investigate in-depth insights into their challenges in designing and applying blended learning courses. If interviews had been done, useful information on particular aspects of blended learning might have been identified and better addressed during the workshop. Nonetheless, project team members took advantage of the Implementation Phase of the project to take field notes and interview local teachers to better help them overcome identified problems, and suggest ways to better implement their proposed blended learning elements in the curricula.

Furthermore, through reflecting on the planning phase, it became clear to the project team that the wide diversity of participants was a barrier for the experts conducting the workshops. If a less diverse population of participants had been recruited, it would have been possible to focus on one or two particular areas of interest. However, a diverse group offered a great advantage of promoting networking and knowledge and experience sharing among participants (Peeraer, Tran & Tran, 2009). There are not many occasions when university teachers, school teachers and department leaders can join together in a workshop and discuss the same issues of ICT integration and subsequently develop different strategies to implement blended learning in the area.

Concluding remarks

The present article illustrates how the action learning approach was used in the first phase (planning phase) of the Blended Learning Project at SoE 2012. The most important educational principles of this philosophy: learning through discussion; learning by doing; and reflective practice (Zuber-Skerritt, 1993) were used to guide how the project should be modified.

Action learning when used for project design, does not need to be complicated and does not require so-called expertise for project facilitators or organisers. In this case, by using a questionnaire as an instrument to investigate learners' ICT competence, ICT professional use

and institutional resources and learning needs, the project team have applied the basis of action learning assumptions to the ongoing learning cycles (of action and reflection), in response to the questions that need to be answered during the planning phase of the project (the ineffectiveness of many teachers' professional development programs). As such, it is recommended that action learning can be used to guide teachers' professional development training programs to address the pitfalls of being ineffective and irrelevant to teachers' needs (von Glasersfeld, 1991; Cochran-Smith and Lytle, 1993; Guskey, 2000; Villegas Reimers, 2003).

Action learning, according to Dick (1997), is cyclic in nature and can be compared to experiential learning, as it is a process for drawing learning from experience. In addition, Dick (1997) also emphasised that the experience drawn from action learning can be gained either individually or in a team, including all stakeholders. This paper has indeed supported this view as the planning phase of the project involved all project stakeholders: project team members of SoE; project sponsors (World Bank Vietnam); trainers; project participants and educational institutes. Therefore, it can be argued that action learning which involves participants from different departments or institutions should be encouraged to build and sustain the community of practice and collaboration among diverse members.

This paper also encourages a new direction for ICT teacher professional development programs for educational institutions. As already reflected during the planning phase, participants of the project tend to have fairly good ICT skills, but they did not mention how efficient they were at developing instructional design for blended learning courses. Blended learning in some Asian countries has been considered as a form of supporting learning, and little consideration has been given to instructional design and strategies, students' learning needs and learning styles (Tham and Tham, 2011).

The paper, therefore, suggests the integration of appropriate pedagogical and instructional design elements into the introduction in blended learning teachers' training projects is essential. This paper supports previous researchers (Schmidt et al, 2009; Peerear and Van Petegem, 2011) regarding the inclusion of pedagogical and instructional elements in ICT teachers' professional development projects so as to prepare teachers for their changing roles in contributing to improve student learning in a creative way.

References

Brinkerhoff, J. (2006). Effects of a long-duration, professional development academy on technology skills, computer self-efficacy, and technology integration beliefs and practices. *Journal of Research on Technology in Education, 39*(1), 22-43.

Cochran-Smith M. & Lytle, S. (1993). *Inside/outside: Teacher research and knowledge*. New York: Teachers College Press.

Dick, B. (1997). *Action learning and action research*. Available from, http://www.aral.com.au/resources/actlearn.html

Guskey, T. R. (1997). Research needs to link professional development and student learning, *Journal of Staff Development*, 18, 36-40.

Guskey, T. R. (2000). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8, 381-391.

Jung, I. (2005). ICT-pedagogy integration in teacher training: Application cases worldwide. *Educational Technology & Society, 8*(2) 94-101. http://www.ifets.info/journals/8_2/8.pdf

Leach, J. (2005). Do new information and communication technologies have a role to play in achieving quality professional development for teachers in the global south? *Curriculum Journal*, *16*(3), 293-329.

Lim, C. P., Chai, C. S. & Churchill, D. (2011). A framework for developing pre-service teachers' competencies in using technologies to enhance teaching and learning. *Educational Media International, 48*(2), 69-83. Available from, http://dx.doi.org/10.1080/09523987.2011.576512

Little, J. (2001). Professional development in pursuit of school reform. In A. Lieberman & L. Miller (Eds.), *Teachers caught in the action: Professional development that matters* (pp. 23-45). New York: Teachers College Press.

MOET. (2008a). *Directive on promoting teaching, training and applying ICT in Education - Period 2008-201.* (55/2008/CT-BGDĐT).

Peeraer, J., Tran, N. M. T., & Tran, T. T. H. (2009). *Policy analysis integration of ICT in higher education in Vietnam*. Paper presented at the international workshop on policies for teachers and educational leaders in innovative education process. Retrieved February 25, 2011, from, http://daotaoquocte.edu.vn/eng/include/coe/conference2009/25.Anh.pdf

Peeraer, J. & Van Petegem, P. (2011a). Information and communication technology in teacher education in an emerging developing country: Vietnam's baseline situation at the start of 'The Year of ICT'. *Computers & Education, 56*(4), 974-982. Available from, http://dx.doi.org/10.1016/j.compedu.2010.11.015

Peeraer, J. & Van Petegem, P. (2011b). Information and communication technology in teacher education in Vietnam: from policy to practice. *Educational Research for Policy and Practice, 11*(2), 89-103.http://dx.doi.org/10.1007/s10671-011-9106-9

Peeraer, J. & Van Petegem, P. (2012). The limits of programmed professional development on integration of information and communication technology in education. In C. P. Lim & C. S. Chai (Eds.), *Building the ICT capacity of the next generation of teachers in Asia. Australasian Journal of Educational Technology,* 28 (Special issue, 6), 1039-1056. http://www.ascilite.org.au/ajet/ajet28/peeraer.html

Ryan, S., Scott, B., Freeman, H. & Patel, D. (2000). *The virtual university: The internet and resource-based learning*. London: Kogan Page.

Sankara, S., Dick, B., and Passfield, R. (Eds.). (2001). *Effective change management through action research and action learning: Concepts, perspectives, processes and applications* (pp. 1-20). Southern Cross University Press, Lismore, Australia.

Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological pedagogical content knowledge (TPACK): The development and validation of an assessment instrument for pre-service teachers. *Journal of Research on Technology in Education*, *42*(2), 123–149.

Tham, K., & Tham, C. (2011). Blended learning – A focus on Asia. *International Journal of Computer Science, 8*(2), 136-142.

Triggs, P., & John, P. (2004). From transaction to transformation: information and communication technology, professional development and the formation of communities of practice. *Journal of Computer Assisted Learning, 20*(6), 426-439. Available from, http://dx.doi.org/10.1111/j.1365-2729.2004.00101.x

UNESCO. (2004). *Integrating ICTs into education: Lessons learned.* Bangkok: UNESCO Asia and Pacific Regional Bureau for Education. Available from, http://www.unescobkk.org/?id=1793

Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature.* Paris: UNESCO, International Institute for Educational Planning. Available from, http://unesdoc.unesco.org/images/0013/001330/133010e.pdf

von Glasersfeld, E. (1991), Cognition, construction of knowledge and teaching. In M. R. Matthews (Ed.), *History, philosophy and science teaching* (pp. 117-132). Teachers College Press: New York.

Zuber-Skerritt, O. (1993). Improving learning and teaching through action learning and action research. *Higher Education Research & Development*, *12*(1), 45-58.

The Process-Genre Approach and the Teaching of Argumentative English Writing in Secondary Schools in Vietnam

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Abstract

The field of English language education has seen developments in writing pedagogy, moving from product- to process- to genre-based and then to integrated process-genre approaches. In Vietnam, teaching secondary school students how to write in English in general is still lagging behind these growing developments. The product-based approach is commonly seen in English writing classes. Within the context of teaching and learning writing, this paper outlines the impact of our implementation of the process-genre approach to teaching argumentative writing to Vietnamese secondary learners. The study, following a one-group pre-test and post-test design, aimed to test the effects of this integrated approach on learners' English argumentative writing and to investigate their perceptions towards the writing module based on Toulmin's Model of Argument (1958). Participants were thirty seven English major Grade 10 students in an upper-secondary school in Vietnam's Mekong Delta. Participants were involved in a five-week intervention program with five three-hour writing sessions. Two main instruments were used to collect data: the English argumentative writing tests; and learners' reflections on the writing module. Results indicated a significant improvement in learners' writing performance and in their positive perceptions toward the writing module designed in light of the process-genre approach.

Introduction

In early September 2012 some of my students in Grade 10 stated that they did not know how to write an argument despite the fact that this genre of writing is required in the entrance examination into an upper-secondary school for the gifted. I was a bit surprised because I thought that they were taught how to write an argument in lower-secondary schools. In the first meeting with my class, I conducted a survey to find out what my students knew about argumentative writing and what problems they had when they produced some. From the survey, it was found that inadequate preparation was done for argumentative writing in Grade 9, resulting in the fact that students did not fully know how to effectively structure an argument although they could define what argumentative writing was. They proposed that they should be instructed on how to plan, support, organise and refute an argument.

Investigating the lower-secondary curriculum of English reveals that insufficient attention is paid to argumentative writing. In the context of lower-secondary schools, where exposure to English is typically limited to one and a half learning hours per week, students receive little

practice writing in English. Of twenty seven hours of English per semester (eighteen weeks), only four hours is allocated for writing practice (writing a personal letter, a passage, a letter of inquiry, a letter of complaint, a speech, a letter to a pen pal and a story) and just forty five minutes for a sub-genre of argumentative writing - exposition (i.e. one-sided argument (Coffin, 2004)). Within this time constraint, the focus of the writing lessons is on learning the language structures in the model text and then replicating this writing model to create a similar text (Ngo & Trinh, 2011).

The product-oriented approaches, i.e. controlled composition and paragraph pattern approaches, have been the dominant mode of instruction in lower-secondary writing classes, emphasising students' final written texts rather than the way they are produced. The result is that students are accustomed to being told what to write but they are unaware of the meaning behind their writing because they are not provided with an adequate knowledge of the various genres, and different purposes for writing texts. In addition, from what my students have shared, they have not been instructed how to structure their ideas into a cohesive and comprehensive text that fully reflects their reasoning, although research shows that learners at a young age are capable of elaborate reasoning (Weiss & Sachs, 1991). Consequently, writing an argument is a challenge for them.

It can be seen that in such a context, without help from teachers of writing, students may not overcome the aforementioned difficulties and might lose their enthusiasm and confidence in learning to write an argument in English. All these things have stimulated me to work with my Grade 10 class and on a writing module designed in light of the process-gene approach and based on Toulmin's Model of Argument (1958). Therefore, this study was designed to test the effects of the implementation of the process-genre approach to writing instruction on students' quality of EFL argumentative writing and investigate students' perceptions towards this writing module. It was hypothesised that implementing the process-genre approach could be an effective strategy, which could help enhance students' writing performance and their perceptions of learning to write an argument in English.

Review of the literature

Approaches to teaching writing

Realising students' difficulties in writing an argument, many researchers and teachers need an effective writing instruction to enhance students' writing performance in argumentation. For years, the teaching of writing in Vietnam has focused on the finished product or product approach aiming at developing classroom activities in which the student is engaged in imitating and manipulating model passages or texts (Ngo & Trinh, 2011). However little attention is paid to the ideas and meaning of students' writings. The notion of learning by imitating is not in line with more contemporary views of language learning, which concentrate more on language at the level of discourse. Instead of looking at complex texts, writing teachers become much more interested in the processes writers go through when composing texts. It is recognised that competent writers cannot produce final texts at their first attempt, but through a process, in which the final text emerges through successive drafts (Bridwell, 1980; Flower & Hayes, 1980, 1981; Larsen, 1983; de Beaugrande, 1984; Bereiter

& Scardamalia, 1987; Witte, 1987; Byrne, 1988; Hedge, 1988; Jensen, 1993; Lipson, Mosenthal, Daniels, & Woodside-Jiron, 2000; Seow, 2002; and Braaksma, Rijlaarsdam, van den Bergh, & van Hout-Wolters, 2004). This realisation leads to the development of a process for writing instruction.

The process-based approach became prominent in English speaking composition classrooms during the 1980s (Zamel, 1982). It sees the composing process as a recursive, exploratory and generative process wherein ideas are discovered and meaning made. In the views of Matsuda (2003), the process approach was considered to be the most successful approach in the history of pedagogical reforms in the teaching of writing and it was, therefore, widely applied by many scholars in their writing classes (Alias, 2002; Adeyemi, 2004; Meeampol, 2005; Storch, 2005; Ho, 2006; Mu & Carrington, 2007; Lee 2008; Chunling Sun & Gouping Feng, 2009; and Ngo & Trinh, 2011). However, this approach seems not to put much emphasis on the writing purpose and the social context in which the writing occurs. Furthermore, it assumes that all writing uses the same process, and it also ignores both the writer and what is being written (Badger & White, 2000).

Limitations of the process approach, therefore, led to the development of the genre-based approach, the essence of which is to teach learners the conventions of different text types including the layout and the presentation, as well as the language (Babalola, 2011) which can serve various communicative purposes (Nunan, 1999). This approach provides learners with the opportunity to write in a social context and helps them learn how to use different types of written discourses with different structures for a real purpose of writing (Yan, 2005). The positive effects of the genre-based approach on the teaching of writing are also acknowledged by many scholars (Badger & White, 2000; Hyland, 2003; Paltridge, 2004; Kim & Kim, 2005; Yan, 2005; Zeng, 2005; and Goa, 2007). However, this approach has been criticised for its ignorance of the writing processes required to produce texts (Badger & White, 2000).

According to theorist Hyland (2003), effective communication within a community depends on understanding the social discourse and hence meeting the expectations of the community by adhering to these social discourse conventions. In order to understand social discourse, students need to be explicitly taught the processes of writing and of structuring texts of various genres. In addition, teachers need to raise their students' awareness of the differences in genre conventions among different cultures and social settings (Flowerdew, 1993). Below is a table that summarises the good points as well as weak points of the process and the genre approaches.

Table 1. A comparison of the process and genre approaches

Attribute	Process approach	Genre approach
Main idea	Writing is a thinking process, concerned with the act of writing.	Writing is a social activity, concerned with the final product.
Teaching focus	Emphasis on creative writer. How to produce and link ideas.	Emphasis on reader expectations and product. How to express social purposes effectively.
Advantages	Makes processes of writing transparent. Provides basis for teaching.	Makes textual conventions transparent. Contextualises writing for audience and purpose.
Disadvantages	Assumes L1 & L2 writing similar. Overlooks L2 language difficulty. Insufficient attention to product. Assumes all writing uses same process.	Requires rhetorical understanding of texts. Can result in descriptive teaching of texts. Can lead to over-attention to written products. Undervalues skills needed to produce texts.

Based on Hyland (2003a, p. 24).

It can be seen from the table that both approaches have some limitations in developing learners' writing skills. This leads to the realisation that the use of either the process or genre approach exclusively might not enable learners to become competent writers. Badger and White (2000), therefore, proposed the process-genre model that combined the two approaches in the hope of achieving the desired results in terms of learner writing. This approach, according to Frith (2006) and Goa (2007), successfully takes into consideration the development of the writing skills and learners' response in light of the process approach as well as the conventions drawn from the genre approach such as knowledge of context, the purpose of writing and certain text features. From Goa's perspective (2007), the process-genre approach characterises not only the learners' creative thinking and the act of how writers form text, but also the knowledge of linguistic features and specific community discourse where a particular genre is evident.

The practical use of this process-genre model of instruction involves the following:

- Teachers should carefully instruct learners through the various processes, providing necessary support and extensive feedback. Learners should be motivated to write, which requires a well-chosen topic by the teacher/learner, suited to the learner's interests (Yan, 2011, p. 3).

- Teachers need to help learners develop writing strategies, starting with the generating and organising of ideas and how to translate these into a written text so

that learners can employ these strategies in the subsequent texts as independent writers, rather than being expected to merely imitate a modeled draft.

- It should be acknowledged that writing must not be an isolated exercise, but it must be built into a lesson that involves all aspects of language – reading, speaking, listening, so that it seems meaningful to the learner and overall language competence is developed (Goodman, 1986).

The contributions of the process-genre approach to learners' writing ability

A number of research studies related to the implementation of the process-genre approach in teaching argumentative writing have been conducted in different parts of the world. Empirical evidence from Yeh (1998b), Varghese and Abraham (1998), Reznitskaya (2002), Udomyamokkul (2004), Siwaporn (2010) and Elson (2011) supports the feasibility of the implementation of the process-genre approach to teaching and learning argumentative writing.

Current literature reveals the positive effects of using the integrated approach for improving the quality of students' performance in English argumentative writing. The results of these studies offer evidence to support the idea that the process-genre approach to writing instruction in English argumentative writing could be potentially beneficial to English-major students in the context of Vietnamese secondary education. For these reasons, the researchers conducted this action research to gain insights into the impact of implementing the process-genre approach to teaching argumentative writing at a Vietnamese secondary school for the gifted.

This study attempts to find answers to the following questions:

1. Does implementing the process-genre approach to teaching argumentative writing improve students' writing performance?

2. What are students' perceptions of the writing module designed in the light of this integrated approach and based on Toulmin's Model of Argument?

Research Design

This study is classroom action research with a one-group pre-test and post-test design. During this study, the implementation of the process-genre approach – the independent variable – was monitored and participants' writing performance – the dependent variable – was measured. After the end of the experimental study, learners' reflections were collected to get insights into participants' perceptions towards the writing module based on Toulmin's Model of Argument (1958). In accordance with the four basic themes of action research (empowerment of the participants; collaboration through participation; acquisition of knowledge; and social change), the following steps were employed in conducting this study:

- Gathering of data

- Interpretation of data

- Action based on findings/implementation of a plan

- Evaluation of results

(Ferrance, 2000, p. 10).

The participants in the study were thirty seven English major students of Grade 10 in an upper-secondary school in the Mekong Delta in Vietnam, and two teachers of English. The material used in this study was a writing module adapted from a course book, *Writing Strategies for the IELTS Test,* and designed in the light of Toulmin's Model of Argument (1958).

According to Toulmin (1958), argumentation is composed of the following elements:

1. Claim [C], which is an assertion presented in response to a problem.

2. Data [D], which include the evidence or grounds on which claims are made.

3. Warrant [W], which supports the link between the claim and data.

4. Backing [B], known as support of the warrant.

5. Qualifier [Q], which is a term indicating the probable nature of the claim.

6. Reservation [R], which refers to the conditions under which the warrant will not hold and cannot support the claim.

(Crammond, 1998).

In the writing module, learners were instructed how to construct an argument based on what they had suggested before the experimental study. Following is a summary of what has been done in a writing class.

1. How to plan an argument.

2. How to support an argument:

    a. Supporting an argument by expressing your opinion clearly in a topic sentence;

    b. Supporting an argument by giving relevant and accurate reasons or facts as evidence;

    c. Supporting an argument by giving examples;

    d. Supporting an argument by giving quotations;

    e. Supporting an argument by mentioning a source; and

    f. Supporting an argument by using transition words and phrases that signal your supporting evidence.

3. How to organise an argument: using both the deductive and the inductive methods.

4. How to refute an argument:

    a. Re-state the opinion;

    b. Correct your opponent's facts;

    c. Deny that the counterargument is related to the topic; and

    d. Indicate that the counterargument is insufficient.

5. Cause and effect.

Typically, the teaching procedure for the process-genre approach involves six steps as follows: (1) preparation, (2) modeling, (3) planning, (4) joint constructing, (5) independent constructing, and (6) revising.

1. *Preparation:* The teacher defines the situation where a written text is required.

2. *Modeling and reinforcing*: The teacher introduces a genre model for the students to consider the social purpose and the audience of the text.

3. *Planning:* Students' background knowledge of the topic is activated by brainstorming, discussing and reading associated material.

4. *Joint constructing*: The teacher and students work together to begin writing a text.

5. *Independent constructing*: The students examine the model texts and jointly construct a text before composing their own texts on a related topic.

6. *Revising*: Students eventually have a draft that will undergo final revision and editing. (Yan, 2005).

Two main instruments were used to collect data, writing tests and learners' reflection. English argumentative writing tests were used to evaluate the quality of participants' writing performance. The pre-test and post-test writings are similar but not the same. They are similar in: test type (evaluating an idea about a topic); instruction; length (at least 250 words); level of difficulty (selected writing topics are consistent with the themes of the national curriculum for Grade 10, *Entertainment* and *Education*, and thus suitable for learners' level) and allotted time (forty minutes). But the specific writing topics between the two tests are different: one is evaluating an idea that movies or television have influenced people's behaviour; and the other is evaluating an idea that higher education should be available only to good students.

In week 1, the pre-test on participants' writing performance was administered and an informal discussion with learners on their problems relating to writing an argument was held. From weeks 2 to 6 (five three hour sessions), the process-genre approach was implemented. In week 8, the post-test in writing an argument was administered. In week 9, participants were encouraged to write their reflections on the writing module.

After the end of the experimental study, learners were encouraged to share their feelings as well as their suggestions about the writing module based on Toulmin's Model of Argument (1958) and designed in the light of the process-genre approach. Due to time constraints, this

was done through a reflection written by participants in fifteen minutes in class. The reflection focused on the following main points: what participants have or have not learned from this writing module; what problems they still have to confront; and what they would like to suggest for future studies. These reflections could be written in either English or Vietnamese to ensure these participants could express their feelings freely.

To evaluate the quality of participants' writing performance, pre-tests and post-tests on English argumentative writing were collected and analysed based on Toulmin (1958) and graded using an analytic marking scale adapted from Nimehchisalem (2011).

Data gained from pre- and post-tests on argumentative writing were subjected to the *Statistics Package for the Social Sciences* (SPSS) version 11.5 for data analysis. First, the *Descriptive Statistics Test* was run to gain results of the participants' writing performance before and after the study. Next, the *GLM Repeated Measures Test* was used to check for the mean difference in participants' writing performance before and after the study.

After seven weeks, the post-test was administered to measure their writing performance after the study. From these two tests, it can be shown that participants' writing performance changes after the study. The mean score of participants' writing performance after the study ($M\ post = 6.85$) is higher than that of the same participants before the study ($M\ pre = 4.97$). This mean difference ($F\ (1,36) = 690.36$, $p = .00$) is statistically significant. The result indicates that there is a significant change in participants' writing performance. It can be concluded that after the study, participants' writing performance has been significantly improved.

Table 2: Participants' writing performance before and after the study

Descriptive statistics for pre- and post- tests

	N	Minimum	Maximum	Mean	SD
SUM	37	2.75	7.50	4.9662	1.60961
SUMP	37	3.50	9.50	6.8514	1.62389
Valid N (listwise)	37				

Tests of between-subjects effects
Measure: MEASURE_1
Transform variable: Average

Source	Type III Sum of sq.	df	Mean square	F	Significance
Intercept	2583,616	1	2583.616	690.355	.000
Error	134.728	36	3.742		

The *Descriptive Statistics Test* was run to gain results of each sub-construct of participants' arguments. These test results show signs of significant improvement in three sub-constructs (task fulfilment, content, and language skills) of participants' arguments, except the sub-construct, organisation. Tables 3, 4, 5 and 6 summarise sub-constructs of participants' arguments reported in the writing tests.

Table 3: Participants' task fulfilment before and after the study

Descriptive statistics for task fulfilment

	N	Minimum	Maximum	Mean	SD
Pre 1	37	.50	1.50	1.0000	.50000
Post 1	37	.50	2.00	1.4730	.42811
Valid N (listwise)	37				

Table 4: Participants' content before and after the study

Descriptive statistics for content

	N	Minimum	Maximum	Mean	SD
Pre 2	37	1.50	4.00	2.6892	.81948
Post 2	37	2.00	5.00	3.6554	.78914
Valid N (listwise)	37				

Table 5: Participants' organisation before and after the study

Descriptive statistics for organisation

	N	Minimum	Maximum	Mean	SD
Pre 3	37	.50	1.50	.7230	.27502
Post 3	37	.50	1.50	.9730	.31060
Valid N (listwise)	37				

Table 6: Participants' language skills before and after the study

Descriptive statistics for language skills

	N	Minimum	Maximum	Mean	SD
Pre 4	37	.25	1.00	.5541	.15740
Post 4	37	.50	1.25	.7500	.27003
Valid N (listwise)	37				

Reflection

The participants were encouraged to share their feelings as well as their suggestions through a reflection focusing on the following main points: what participants have or have not learned from this writing module; what problems they still have to confront; and what they would like to suggest for future studies.

In general, all reflections were positive. All the participants shared that they were well guided through various processes of writing an argument and that they felt fairly confident at each stage thanks to working in groups and with the whole class planning, discussing and constructing the drafts, modeling the drafts on the screen, and getting feedback from their peers and the instructor. They perceived that this way of learning was an interesting and valuable process and that they had made some good progress in each stage, especially in expressing their opinion clearly in the topic sentence.

In addition, these participants mentioned that they could get over their difficulties in structuring an argument by being guided how to plan, how to support, how to organise and how to refute an argument step by step. The easiest part of the learning process they thought was generating ideas and fitting these ideas into the outline of an argument provided for them thanks to working in groups. However, their big challenges were linking ideas logically, backing up their claims and making rebuttals. This was due to their limited language competence and lack of real-life experience. Also, they stated they had difficulty in expressing their ideas in English and choosing the right words because of their lack of a wide range of vocabulary, which resulted in the fact that they just repeated certain words throughout their essays. Their style and syntax were, also, inappropriate since they were influenced by spoken style and first language interference.

From their stated comments, these participants suggested that in the next writing module, they should be given familiar topics to practise regularly and provided with comments/feedback on each essay and suggestions from the instructor in order to improve their writing. Furthermore, introducing and analysing high-scored IELTS samples should be beneficial to learners because they could learn something for themselves. In the meanwhile, the instructor should introduce some good books or materials as references for learners to enhance their real-life experience with a view to supporting them in writing rebuttals.

Discussion

The results of the study showed that implementing the process-genre approach to teaching argumentative writing in secondary education in a Vietnamese context improved participants' writing performance in English and brought about positive perceptions toward learning to write an argument in light of the process-genre approach. These results are consistent with those of the studies conducted previously in different contexts with learners' various levels of competence by Yeh, 1998b; Varghese and Abraham, 1998; Reznitskaya, 2002; Udomyamokkul, 2004; Siwaporn, 2010; Ngo & Trinh, 2011 and Elson, 2011.

The improvement in the quality of the participants' writing might be because the process-genre approach could make participants take into account the notions of readership and the

communicative purpose of writing tasks. The communicative purpose of a piece of writing could help them choose relevant text types and appropriate language. Joint constructing could contribute to participants' success by arousing their interest in actively engaging in group work activities in which they could share, discuss and evaluate their group members' ideas. This active and friendly learning environment facilitated learners' writing because they did their writing based on their group's selection of content and logical sequence of arguments (Ngo & Trinh, 2011).

Through such activities as planning, joint constructing and revising, learners not only focused more on the content of the writing but also played a more active role, the role of a reader and advisor. Since the readers read the draft and tried to judge the meaning of the writing from their own perspectives (Torwong, 2003), the writers tried to write as comprehensively as possible so that their readers understood accordingly.

Through making choices, expressing purposes, reading and re-reading their own and peers' written drafts, students were gradually able to identify errors in their own writing. They became aware of their writing problems and could avoid making similar mistakes in subsequent texts (Ngo & Trinh, 2011), especially when their drafts were shown on the screen and their mistakes were pointed out by their peers in writing sessions. It is for these reasons that participants confirmed that learning to write an argument in light of the process-genre approach contributed to the improvement of their writing quality.

It could also be seen from participants' reflections that most learners seemed to be more confident in their argumentative writing abilities and had achieved some substantial improvements in their essays because learning to write in the process-genre approach took place in the context of teacher-learner rapport and learner-learner interaction. Participants perceived that this active and friendly learning environment created good opportunities for them to have ideas to develop their writing and to overcome some of their writing problems (e.g. lack of vocabulary or structures to express ideas). They, thus, appeared to have enjoyed the learning process and learnt many new and interesting things, especially when they worked in groups planning and discussing with each other and then shared their drafts on the screen to get feedback or comments or suggestions for improvement from their peers as well as from the instructor.

In addition, all learners showed their enthusiasm for learning to write an argument in light of the process-genre approach because it gave them more chances to practise writing for real audiences with clear communicative purposes and they made good use of this opportunity to enhance their writing performance. Therefore, they perceived the step-by-step processes of instruction and joint constructing to the final stage very helpful and confirmed that learning to write in the process-genre approach contributed to the improvement of their writing quality, which resulted in their desire to learn to write an argument in the light of this approach.

Some of the problems participants had could be explained in terms of their limited language competence and lack of real-life experience. English in the Vietnamese context is taught as a foreign language, so the exposure to English is typically limited to the academic settings. This reality results in L1 influence on style and syntax when learners write. They tend to

think of ideas in their mother tongue, and then make a word-for-word translation without paying much attention to appropriate grammatical features for academic writing. In addition, a learners' limited lexical knowledge hinders them from selecting and acquiring appropriate words and phrases to express ideas in rhetorical patterns of English argumentative discourse. Moreover, backing the claims by giving real-life examples, or giving quotations or mentioning a source seems to be more of a challenge for the participants in this study because they have not yet got into the habit of looking for good books or materials relating to aspects of life for further reading. All this influences their ability to make rebuttals to an argument.

Basically, making rebuttals needs a higher level of reasoning, for which learners at this age need more time and practice to develop. Judging an idea from a point of view other than their own requires learners to reach maturity in their thought; the more viewpoints learners are exposed to, the more chances they have to consider alternative points of view.

This coincides with participants' suggestions for future study: learners need more practice with familiar or favoured topics, as stated by Voss and Segal (1991), which means that they should be given the opportunity to choose their position on a topic at the early stage of learning how to write an argument, with a view to helping them become more confident in arguments before taking the next, more complex, step of arguing against their own opinion.

Conclusions and Recommendations

In a context where English is taught as a foreign language, and where teaching learners to build sentences by using word cues, or teaching learners to replicate writing models is considered as 'teaching writing', the use of the process-genre approach in writing classes results in positive gains in learners' writing performance and perceptions of a writing module based on Toulmin's Model of Argument.

While preparations in terms of updated English language philosophy, communicative learning materials, and teachers' expertise towards the implementation of the process-genre approach in writing classes are on their way, the findings from this study raise implications for learning and teaching in contexts like Vietnam. In the first place, learners should be encouraged to write their essays in many stages of writing, applying meta-cognitive strategies for pre-writing, drafting, evaluating and revising, which are beneficial to them (Lv & Chen, 2010).

In the meanwhile, learners need to be explicitly taught the structures for the different genres because implicit knowledge of rhetorical plans, organisational logic and genre form may cause them a lot of problems. In addition, extensive feedback and comments should not be ignored in the teaching process as it can help learners a lot in improving and revising their drafts effectively. Finally, the integrated process-genre approach is extremely effective and helpful in teaching and learning argumentative writing and should be incorporated into other aspects of learning to write in general in the context of secondary schools.

References

Adeyemi, D. A. (2004). *Is the cooperative approach better than the individualized approach in the teaching and learning of composition writing at a junior secondary school in*

Botswana. Available from, http://www.winderdoon.com/WEFT/files/newhorizons_volume114_adeninhunadeyemi.pdf

Alias, E. (2002). Process approach vs. traditional approach: A comparison of effectiveness. Available from, http://www.eltrec.ukm.my/search_thesis.asp?sthesis=proficiency&offset=40

Babalola, H. A. L. (2011). Relative effects of task-based and process-genre instructional approaches on written English performance of polytechnic students in South-western Nigeria. University of Ilorin, Nigeria. (Unpublished doctoral dissertation).

Badger, R. G., & White, G. (2000). A process genre approach to teaching writing. *ELT Journal 54*(2), 153-160.

Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Erlbaum.

Braaksma, M. A., Rijlaarsdam, G., Van den Bergh, H., & Van Hout-Wolters, B. (2004). Observational learning and its effects on the orchestration of writing processes. *Cognition and Instruction, 22*(1), 1-36.

Bridwell, L. (1980). Revising strategies in twelfth grade students' transactional writing. *Research in the Teaching of English, 14*(3), 197-222.

Byrne, D. (1988). *Teaching Writing Skills.* New York: Longman. Available from, http://www.scribd.com/doc/49860749/Byrne-Teaching-Writing-Skills (A well-illustrated text introducing current views of the skill of writing in the second language classroom).

Coffin, C. (2004). Arguing about how the world is or how the world should be: The role of argument in IELTS test. *English for Academic Purposes, 3*(3), 229-246.

Crammond, J. G. (1998). The uses and complexity of argument structures in expert and student persuasive writing. *Written Communication, 15*(2), 230-268.

de Beaugrande, R. (1984). *Text production: Toward a science of composition*. Norwood, NJ: Ablex. (*Advances in discourse processes,* vol. XI).

Elson, J. M. (2011). *A process-genre approach to teaching argumentative writing to grade nine learners*. Rhodes University, South Africa. (Unpublished MA).

Ferrance, E. (2000). *Action Research.* Rhode Island: Brown University. (*Themes in Education*).

Flower, L., & Hayes, J. R. (1980). The cognition of discovery: Defining a rhetorical problem. *College Composition and Communication*, *31*(1), 21-32.

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Communication and Composition*, *32*(4), 356-387.

Flowerdew, J. (1993). An educational, or process, approach to the teaching of professional genres. *ELT Journal*, *47*, 305-316.

Frith, J. (2006). *A process genre approach to writing transactional letters*. Available from, http://www.developingteachers.com/articles_tchtraining/processgenrepf_james.htm

Gao, J. (2007). Teaching writing in Chinese university: Finding an eclectic approach. *Asian EFL Journal, 20*(2). Available from, http://www.asian-efl journal.com/2007_Teaching_Articles.pdf

Goodman, K. (1986). *What's whole in whole language?* Portsmouth, NH: Heinemann Educational Books.

Hedge, T. (1988). *Writing*. Oxford: Oxford University Press.
(A rich source of ideas for the teaching and learning of writing skills, using a framework that includes both 'process' and 'product' considerations).

Ho, B. (2006). *Effectiveness of using the process approach to teach writing in six Hong Kong primary classrooms.* Available from, http://www.cityu.edu.hk/en/research/spring2006ho.pdf

Hyland, K. (2003a). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing, 12*, 17-29.

Hyland, K. (2003b). *Second language writing*. Cambridge: Cambridge University Press.

Jensen, J. M. (1993). What do we know about the teaching of writing of elementary school children? *Language Arts, 70*(4), 290-294.

Kim, Y., & Kim, J. (2005). Teaching Korean university writing class: Balancing the process and the genre approach. *Quarterly Journal*, *7*(2). Available from, http://asian-efl-journal.com/category/volume-7-issue-2/

Larsen, E. K. (1983). A history of the composing process. *Dissertation Abstracts International, 45*(05A), 1381. (UMI no. AA18418240).

Lee, H. (2008). The relationships between writers' perceptions and their performance on a specific-field writing test. *Assessing Writing, 13*, 93-110.

Lipson, M. Y., Mosenthal, J., Daniels, P., & Woodside-Jiron, H. (2000). Process writing in the classrooms of eleven fifth-grade teachers with different orientations to teaching and learning. *Elementary School Journal, 101*(2), 209-231.

Lv, F., & Chen, H. (2010). A study of meta-cognitive strategies-based writing instruction for vocational college students. *English Language Teaching, 3*(3), 136-144.

Matsuda, P. K. (2003). Process and post-process: A discursive history. *Journal of Second Language Writing, 12*, 63-85.

Meeampol, S. (2005). *A study of the effectiveness of the process-based writing in an EFL classroom of second-year student at Bangkok University*. Available from, http://www.bu.ac.th/knowledgecenter/epaper/july_dec2005/sutilak.pdf

Mu, C., & Carrington, S. (2007). *An investigation of three Chinese students' English writing strategies*. Available from, http://eprints.qut.edu.au/13130/1/a1.pdf

Ngo, M. C., & Trinh, Q. L. (2011). Lagging behind writing pedagogical developments: The impact of implementing process-based approach on learners' writing in a Vietnamese Secondary Education context. *Journal on Language Teaching*, *1*(3).

Nguyen, V. L., Nguyen, H. D., Tran, H. P., Dang, V. H., Than, T. L. N., & Dao, N. L. (2012). *Tieng Anh 9* [English for Grade 9]. Hanoi, Vietnam: Education Publishing House.

Nimehchisalem, V. (2011). Determining evaluative criteria of an argumentative writing scale. *Journal on English Language Teaching, 4*(1).
Available from, http://www.ccsenet.org/journal/index.php/elt/article/view/9665/6911

Nunan, D. (1999). *Second Language Teaching & Learning.* Boston: Heinle & Heinle Publishers, Inc.

Paltridge, B. (2004). *Approaches to teaching second language writing*. Available from, http://celta.wikispaces.com/file/view/Paltridge.pdf

Reznitskaya, A. (2002). The influence of group discussions and explicit instruction on the acquisition and transfer of argumentative knowledge. University of Illinois at Urbana-Champaign, Illinois. (Unpublished doctoral dissertation).

Seow, A. (2002). The writing process and process writing. In Richards, J. C., & Renandya, W. A. (Eds.), *Methodology in language teaching – An anthology of current practice*. Cambridge: Cambridge University Press.

Siwaporn, S. (2010). *An analysis of argumentative essays of Thai third-year English majors instructed by the integrated process-genre approach*. Srinakharinwirot University, Thailand. (Unpublished MA).

Storch, N. (2005). Collaborative writing: Product, process and students' reflections. *Journal of Second Language Learning, 14*(3), 153-173.

Sun, C., & Feng, G. (2009). *Process approach to teaching writing applied in different teaching models.* Available from, ccsenet.org/journal/index.php/elt/article/download/350/315

Torwong, P. (2003). *Peer response technique: A proposed model for EFL writing*. Available from, http://hselearning.kku.ac.th/hsexpert/files/patumrat_fulltext.pdf

Toulmin, S. E. (1958). *The uses of argument*. Cambridge: Cambridge University Press.

Udomyamokkul, W. (2004). *A genre-based approach to teaching argumentative writing: Effects on EFL students' writing performance*. Suranree University of Technology, Thailand. (Unpublished MA).

Varghese, S., & Abraham, S. (1998). Undergraduates arguing a case. *Journal of Second Language Writing, 7*(3), 287-306.

Voss, J., Perkins, D. N., & Segal, J. W. (Eds.). (1991). *Informal reasoning education*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Vuong, N. T. (2011). *Writing strategies for the IELTS test*. Vietnam: Nhan Tri Viet Co., Ltd.

Weiss, D. M., & Sachs, J. (1991). Persuasive strategies used by preschool children. *Discourse Processes*, *14*, 55-72.

Witte, S. P. (1987). Pre-text and composing. *College Composition and Communication, 38*(4), 397-425.

Yan, G. (2005). A process genre model for teaching writing. *English Teaching Forum*, *43*(3), 18-26.

Yan, G. (2011). A process genre model for teaching writing. *English Teaching Forum, 43*(3).

Yeh, S. (1998b). Empowering education: Teaching argumentative writing to cultural minority middle-school students. *Research in the Teaching of English*, *33*, 49-83.

Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly, 16*, 195-209.

Zeng, D. (2005). The process-oriented approach to ESL/EFL writing instruction and research. *Teaching English in China, 28*(5), 66-77.

Introducing ICT into an English Language Teacher Education Program in Vietnam

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Abstract

This paper begins to answer one of the research questions in a qualitative, comparative case study which investigates teacher educators' perspectives regarding Information and Communication Technology (ICT) adoption and integration within English language teacher education programs in the Mekong Delta (MD), Vietnam. The research questions set out to examine the current policy regarding ICT adoption and integration, lecturers' ICT adoption, and the factors that impact on the lecturers' uptake of ICT innovation. There were twenty two participants who completed the questionnaires, eleven of whom contributed also to semi-structured interviews. In addition to findings about the influence of ICT infrastructure and facilities, indications are that professional development for teacher educators is essential. The implication is for policy makers and educational administrators to support and encourage staff to adopt and integrate ICT in their teaching practices and to be aware of possible drawbacks of using ICT in English language teaching.

Introduction

Higher education institutions around the world have increasingly been using Information and Communication Technologies (ICT), such as computers, satellite televisions, Interactive Boards, podcasts, online media and mobile devices, to support the learning of on-campus students (Green & Maxwell, 2010; Warger & Dobbin, 2009; Wingard, 2004). Universities and colleges in some countries in Asia have also experienced educational reform or innovation in higher education with the use of ICT in teaching and learning activities (Hu & McGrath, 2011). Vietnam, one of the developing countries in Southeast Asia, has transformed its educational system according to the global tendency to integrate ICT into education.

In Vietnam, to foster the implementation of ICT in education, particularly in teaching English, the government and the Ministry of Education and Training (MOET) have issued policies and made investment in ICT infrastructure nationwide (Peeraer & Van Petegem, 2011; Quach, 2004). Examples of two such policies are *Decision 1400/QD-TTg on the Scheme of Teaching and Learning Foreign Languages in the National Educational System period 2008–2020*, and *Directive 55/2008/CT-BGDDT on Promoting Teaching, Training and Applying ICT in teaching period 2008–2012*. According to Quach (2004), the director of the Information Technology Centre at the Ministry of Education and Training (MOET), the government supports that policy decision through cooperation agreements with ICT companies in order to build technology infrastructure, particularly in the education sector.

MOET has also organised training workshops on ICT for instructors and administrators. However, this type of training can be viewed merely as a short-term strategy, and only building capacity with in-service teachers who will retire before too long. The long-term strategy should focus on the pre-service teacher education, whereby the government will be investing in teachers' use of ICT through their lifelong careers.

Vietnam's educational reforms, with the emphasis on ICT use in classrooms, have led to innovation in teacher education. Pre-service teacher education must prepare pre-service secondary school teachers to use ICT in their pedagogy because there has been a requirement to integrate computer technologies in classes at Vietnamese secondary schools since the 2007-2008 academic year (CTU - School of Education, 2007). In the Mekong Delta, South Vietnam, Faculties/Schools of Education in universities have an important role in preparing pre-service teachers to teach in secondary schools in the provinces. There is thus a need to integrate ICT pedagogy theory into the teacher education curriculum as emphasised by Cornu (1995). In brief, pre-service teachers need to have adequate preparation on how to use ICT in their classroom practice (Abbitt & Klett, 2007; Yusuf, 2005). One of the strategies to achieve this is for teacher educators to adopt and integrate ICT in their own teaching to model how ICT can be used in practice.

There are different factors that influence the preparedness of teacher educators and teachers to implement ICT in education. The influential factors can be classified in various ways such as enabling/disabling, internal/external, non-manipulative/manipulative, or teacher-level/school-level factors. Whatever way they are grouped, the common factors found from previous studies include years of teaching (Bussey, Dormody, & VanLeeuwen, 2000; Gueldenzoph, Guidera, Whipple, Mertler, & Dutton, 2000), teaching style (Gueldenzoph, et al., 2000), previous experience or knowledge about computers (Groves & Zemel, 2000; Stone & Henry, 2003), influences on student learning and interests (Bussey, et al., 2000; Groves & Zemel, 2000; Gueldenzoph, et al., 2000), accessibility and availability of ICT (Bussey, et al., 2000), support in terms of technical and administrative domains (Bussey, et al., 2000; Stone & Henry, 2003), self-efficacy (Albion, 1999; Stone & Henry, 2003), relative advantage (Groves & Zemel, 2000; Moore & Benbasat, 1991), complexity (Groves & Zemel, 2000; Moore & Benbasat, 1991; Stone & Henry, 2003), compatibility (Groves & Zemel, 2000), time (Groves & Zemel, 2000), subjective norms (Groves & Zemel, 2000), incentives (Anderson, Varnhagen, & Campbell, 1998; Wolcott & Betts, 1999), anxiety about using computers (Anderson, et al., 1998), and fear of change (Bussey, et al., 2000). This is a large literature and is constantly growing.

Although there have been numerous studies examining the factors influencing teacher and student use of ICT in education, little qualitative research has been undertaken to explore the innovation of ICT in the area of English language teaching for teacher education and in the context of developing countries in Southeast Asia such as Vietnam. In the Mekong Delta, Vietnam, there have been almost no studies done to investigate the determinant factors that impact the ICT innovation diffusion in teaching English for pre-service teachers at tertiary level. This study will fill in the gap in this field of research.

In the context of the educational reform in Vietnam where there is an emphasis on ICT innovation, MOET has designed policies for investment in ICT facilities and infrastructure (Peeraer & Van Petegem, 2011; Quach, 2004). However, the actual implementation and the extent of teachers' classroom use of ICT still needs to be investigated. One current problem is that few tertiary level studies of ICT integration in teacher education, particularly in TESOL education, have been conducted in Vietnam. If there have been any studies, most employed a quantitative approach, which does not provide an in-depth understanding of the issues, or the studies were conducted in the North and Central of Vietnam but not in the South or in the Mekong Delta. As a result, the picture of ICT innovation in Vietnamese educational context has just partly been described. The question remains as to what factors drive English language teachers (EFL) in Vietnam to adopt ICT innovation in their work in teacher education institutions in the Mekong Delta.

As a result, this study aims to (1) describe the current ICT environment, (2) examine the current teaching practices of the lecturers using ICT, and (3) investigate the factors that impact the lecturers' uptake of ICT innovation. The study's design is qualitative and represents a multiple case study.

Two key data collection strategies were utilised: questionnaires, and semi-structured interviews. Although this qualitative case study still has certain limitations, its findings will contribute to what we know about the more effective incorporation of ICT in pre-service English language teacher education for the Mekong Delta.

The larger study is guided by three research questions.

1. What is the current policy environment for ICT integration in English language teacher education?
2. How have EFL lecturers responded to ICT innovation in their teaching?
3. From the EFL lecturers' perspectives, what factors influence the integration of ICT in their teaching?

Findings from one higher education institution in Vietnam's Mekong Delta are presented in this paper.

Previous studies concerning ICT integration in English language teaching are summarised in the following section.

Factors influencing teachers' use of ICT

Findings from previous studies on ICT use in education show that there are different factors that influence teachers' adoption and integration of ICT in their teaching practices. Some factors focus on the teachers themselves, including teachers' age (Li & Walsh, 2010), years of teaching (Bussey, et al., 2000; Gueldenzoph, et al., 2000), teaching styles (Cooper, 2001; Gueldenzoph, et al., 2000), previous experience or knowledge about using ICT (Groves & Zemel, 2000; Stone & Henry, 2003), compatibility (Groves & Zemel, 2000), relative advantage (Groves & Zemel, 2000), self-efficacy (Albion, 1999; Stone & Henry, 2003), confidence (Bingimlas, 2009), and anxiety and fear of change (Bussey, et al., 2000). Other external factors refer to the infrastructure, learners' learning and administrative aspects; for

instance, the availability and accessibility of facilities and equipment (Li & Walsh, 2010), the stability of energy sources (Bussey, et al., 2000), students' interests and engagement in learning with ICT (Bussey, et al., 2000; Groves & Zemel, 2000; Gueldenzoph, et al., 2000), support in terms of technical and administrative areas (Bussey, et al., 2000; Stone & Henry, 2003), time, workload and policies related to ICT use such as incentives (Anderson, et al., 1998; Groves & Zemel, 2000; Wolcott & Betts, 1999).

In developing countries like Vietnam, one of the main barriers to the adoption of technology in educational settings is lack of infrastructure and technological devices needed for the implementation process (Agyei & Voogt, 2011; Dinh, 2009; Marwan & Sweeney, 2010; Peeraer & Van Petegem, 2011). Yet providing sufficient ICT hardware does not guarantee that technology integration will occur in classrooms (Albion, 2001; Mulkeen, 2003; Ward, 2003). As also mentioned in Drent and Meelissen (2008), computers are available in almost all Dutch teacher education institutions, but most teachers use them for administrative tasks rather than teaching and learning purposes. It is clear that implementation of ICT innovation not only requires necessary facilities but also human resources – the teachers – because

> beyond a certain level of necessity it would appear that more infrastructure does not automatically equate with more use. What is suggested is that teachers who feel confident about their ability to use computers in the classroom and see clear advantages to doing so overcome any negative constraints that may otherwise limit their use (Ward, 2003, p. 11).

There are many studies which confirm the key role of teachers in determining the effectiveness of integrating ICT in classrooms (Baylor & Ritchie, 2002; Law, 2008; Mumtaz, 2000; Voogt, 2004).

Among the research studies mentioned earlier, there have been two particular studies undertaken in the context of higher education in Vietnam. One employed qualitative research design and the participants were novice EFL teachers teaching in an institution in the North of Vietnam. The other study was a larger quantitative research project, which recruited participants from teacher education courses at universities in the North and Central of Vietnam. Although these two studies have been undertaken in Vietnam, the participants were not all teachers of English in pre-service courses. As well, ICT integration in education in the Mekong Delta in the South of Vietnam has not been yet investigated. As a result, the picture of ICT uptake by teachers at higher education, particularly in the ELT for teacher education in Vietnam has not yet been captured or fully understood.

Research methodology

Research design

To investigate the EFL teachers' adoption of ICT innovation for teacher education in the Mekong Delta, a qualitative research design was used. Among the traditions of a qualitative research approach, case study seems to be the most appropriate for this investigation on the current situation of ICT integration at a Faculty of Education in a central university in the

Mekong Delta, Vietnam and factors influencing the EFL teachers' adoption and integration of ICT.

This study is guided by questions that seek rich descriptions of the current environment of, and teaching practices with ICT integration, in English language teacher education. Case study is also 'a very useful design when exploring an area where little is known' (Kumar, 2011, p. 127). For this study, little is known about the ICT adoption in English language teacher education in the Mekong Delta. Moreover, case study relies on multiple sources of data such as documentation, archival records, interviews, observations and artifacts because different sources of evidence will help to increase the reliability of data (Yin, 2009). Based on this, this employed two main sources of data: questionnaire and semi-structured interviews.

Research methods

A multiple strategy qualitative research design was used to investigate the research questions posed for this study. Strategies included open-ended questionnaires and semi-structured interviews. At first, an open-ended questionnaire was employed. The items in the open-ended questionnaire were adapted from a number of previous studies in the related area of ICT in teaching (e.g. Arkin, 2003; Li & Walsh, 2010; Mumtaz, 2000; Phelps, Graham, & Watts, 2011).

The use of this questionnaire was to gather the participants' demographic data such as their gender, age, teaching experiences, teaching subjects, positions in the institution and qualifications, an overview of the policy context (e.g. policies, strategies, infrastructure, administration and support), and information about the teachers' current ICT use. As well, the questionnaire gathered the teachers' perceptions about the factors influencing their ICT use and pedagogy. The information obtained provided an overview of the situation of ICT innovation in language teaching for pre-service teachers, the response of EFL teacher educators towards the change as well as the factors that have impacted the ICT uptake and integration in the context of teacher education in the Mekong Delta.

Semi-structured interviews were utilised to investigate the EFL teachers' current teaching with ICT and the factors influencing their use of ICT for English language teacher education. The semi-structured interviews with open-ended questions were organised to collect more data about the research issues. The interview protocol was designed based on the purpose of this study, the information obtained from the questionnaires and previous research (e.g. Chen, 2008; Marwan & Sweeney, 2010). They helped to investigate in-depth issues on teachers' current teaching practices with ICT and the factors influencing their uptake and use of ICT.

Different sources of information and various types of data collection methods were used to minimise the biases that may occur in qualitative research (Johnson & Christensen, 2008). To increase the validity of the study, the participants' transcripts were sent back to the EFL teacher participants for member checking (Punch, 2009).

Participants

Twenty-two English-as-a-foreign-language lecturers from the Faculty of Education at the first case study university agreed to participate in the research. The participants consisted of nine male and thirteen female lecturers. They completed the open-ended questionnaire which aimed to collect data on the context, their current use of ICT, the factors influencing their uptake and use of ICT, and their demographic data. From the results of the questionnaire and their indication of interest to participate in the interviews, eleven EFL lecturers (three males and eight females) were invited to answer the semi-structured interview questions to elaborate the issues of the research in more depth.

Data analysis

The data obtained via the questionnaires and transcripts of the semi-structured interviews have been categorized according to three main categories: the ICT environment, the current practices of the lecturers and the factors influencing those lecturers' ICT use. Under each main category, there are sub-categories. NVivo10 software was used to support the data analysis process.

Findings and discussions

The ICT environment at the institution

The ICT environment consists of the ICT infrastructure and its administration. The ICT infrastructure includes the availability of ICT facilities such as hardware and software, including its reliability and access to facilities. The ICT administration refers to how the facilities are managed and distributed, the provision of technical support when the lecturers encounter problems while teaching with ICT, and ICT training workshops. According to the responses obtained via the questionnaire and the interviews, the ICT environment at the institution in general has not satisfied the lecturers' needs and expectations. Although they did recognise the advancement of the ICT application at the institution, they thought it was still inadequate for ICT implementation in teaching.

First of all, the lecturers reported that the ICT infrastructure is not sufficient to meet their demands. Almost all of the participants were not satisfied with the availability and accessibility of ICT infrastructure at their institution. Some of them indicated that the overall comment for the institution as a whole unit in terms of ICT facilities was good, but at the level of individual needs of ICT use in their classes the comment would be unsatisfactory. All of them described the process of ICT use in their classes like this: they all had to borrow and fetch the projectors themselves from an assigned venue since the equipment was not readily installed in the classrooms; they themselves set up the projectors with their own laptops brought from home with them; after class meetings, they had to convert the process. All participants shared a similar view to Participant 01.

> It's funny that the university has safeguards, but the projectors are not installed in the classrooms due to the fear of burglary and loss of equipment. As a result, when lecturers want to give PowerPoint

presentations, they have to think of how to obtain the necessary equipment on the next day.

Second, the ICT administration is also perceived as problematic. All lecturers reported that they expected a clearer vision on how to implement ICT into their teaching, and required more flexibility from the management of ICT infrastructure. Participant 02 reflected this view and commented as follows:

> The issue of how to manage the available ICT infrastructure is not good. For example, I was once a coordinator of a program for English improvement for students of non-majored English, I booked a computer lab for students to self-study. However, the lab was only open during the administrative time, like 7.30 am to 5pm, while the students needed to self-study after these hours. There was no after-hour access. Therefore, I think that the administrators just focus on how to equip and install the facilities but they have not had adequate care for how the equipment is used and how effective it is. In other words, the facilities may be available, but the management and plan for usage make me cry.

Also, respondents reported a lack of technical support when encountering any problems while using ICT in class. All of the lecturers perceived that they did not know who was responsible for solving technical difficulties. There were not any official documents indicating the work of technicians, nor where and from whom the lecturers could look for support. Participant 04 said:

> The ICT administration is not very clear. I do know whom I should see to borrow the equipment like projectors, but I do not know if that person is also in charge of a technician. Therefore, when I face any technical problems, I do not know whom I should ask for help.

In terms of ICT training, the participants were varied in their perceptions. Some reported having attended workshops on how to use certain ICT tools, software or the e-learning system called DOKEOS at the institution. On the contrary, some did not have any opportunities to attend training. A possible explanation may be that some lecturers were interested in ICT themselves, so whenever there were workshops, they participated readily. As their teaching experiences could not possibly be the same as each other, workshop themes may not have been suitable.

However, nearly all lecturers agreed that there should be more workshops focusing on teaching using ICT tools, especially on how to use the ICT tools in regard to teaching English, a combination of ICT skills and teaching pedagogy. Many of them suggested that the training workshops should have follow-up sessions or should be organised repeatedly every year. They explained the reasons for their suggestions. Participant 08 shared his experience:

> I attended a workshop on how to use the e-learning system (DOKEOS) seven or eight years ago. Within the recent five years, there have been no workshops on that, so I do not know if the e-learning system has updated

and has any new functions. If I want to use, I have to self-study and research by myself.

Participant 07 emphasised the importance of follow-up sessions as follows,

In the workshops, they (participants/ lecturers) talk much, discuss much, but when they return to their routine work, they do not mind applying what they have learnt in the workshops.

The participants suggested that there should be plans for ICT implementation and regular meetings afterwards to check on ICT integration, to update information, and for sharing experiences.

In brief, the insufficient ICT facilities plus inadequate access to ICT tools contributed to the group of factors that discouraged the lecturers or decreased their interest in using ICT tools in their teaching. According to most participants during the interviews, the availability and accessibility to ICT facilities would be the foremost condition for successful ICT adoption. The next important issue would be the administrators' ICT general plans or policies and the organisation of ICT training.

Lecturers' use of ICT and purposes

In this section the lecturers' self-reported use of ICT tools and their purposes for using these tools in their classroom teaching and their lesson preparation are summarised and presented.

First the ICT tools which have been used by the lecturers is illustrated in Figure 1, and then the summary of reasons of their use of ICT is reported in Figure 2. A discussion then follows.
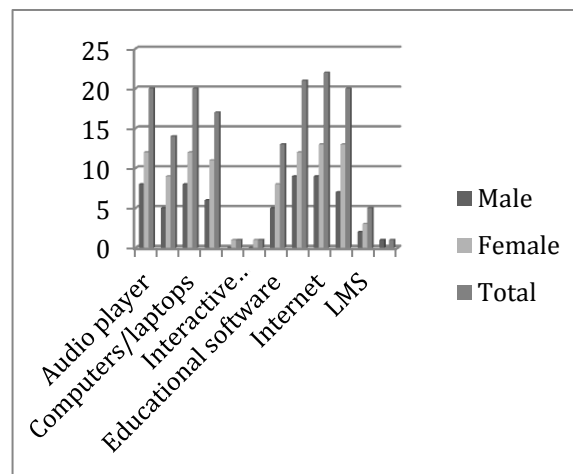

Figure 1: ICT tools used by EFL lecturers

Figure 1 shows the ICT tools used by EFL teachers. From the chart, it can be easily seen that the Internet is the most popular tool used by all participants (100%). Next comes the use of websites (95.5%). Emails, computers/ laptops and audio players account for the third position

(91%). On the contrary, the least used tools are interactive whiteboards and satellite TVs (4.5%). Learning Management Systems (LMS) are not used widely by the lecturers (23%). Few lecturers reported the use of other ICT tools in their ELT. These findings were further consolidated through interviews. Lecturers perceive they have not used any advanced technologies in their teaching. This may be due to the lack of infrastructure, as mentioned above, or the lack of professional development in terms of training opportunities.
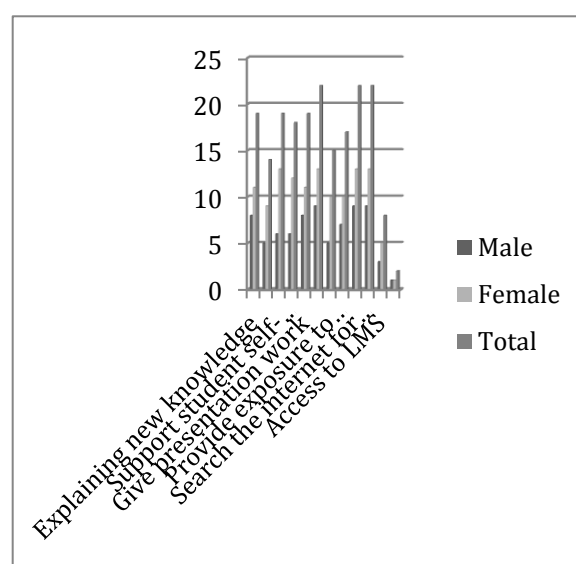
Figure 2: Purposes of ICT use

Figure 2 reports the lecturers' purposes for using ICT in their teaching and lesson preparation. The key purposes include searching for information, providing authentic materials for students, and sending and receiving emails. Other reported purposes for using ICT tools are to explain new knowledge to students, support student self-supported learning and deliver presentations.

The interviews provided more detail about how the lecturers used these tools. The lecturers reported using computers or laptops plus data projectors to prepare PowerPoint slides for their lectures. They reported they did this in order to enrich their lesson plan content as well as make their lessons more interesting and appealing.

In summary, the lecturers at this institution have used a number of ICT tools for various uses.

Factors influencing the lecturers' use of ICT

The information from questionnaires about motivating and inhibiting factors influencing lecturers' uptake of ICT is reported in Table 1 and Table 2 respectively.

Table 1. Factors motivating ICT use in ELT

Items	Percentage
a. It is becoming trendy to use ICT in teaching	63.6
b. ICT is particularly important for teaching my course	63.6
c. ICT helps students become more effective in their EFL learning	86.4
d. ICT enhances students' motivation and interest in learning EFL	86.4
e. ICT helps students develop other skills such as self-learning and lifelong learning skills, teamwork and collaborative skills	90.9
f. The teaching of some skills and knowledge can best be done through the use of ICT	77.3
g. Using ICT enhances the effectiveness of my instruction	81.8
h. ICT helps to incorporate new teaching methods	81.8
i. The more I use ICT the more I see how it can be used to extend and enhance learning	68.2
j. I am offered training on the use of ICT for my instruction	27.3
k. I am good at using ICT, so I would like to try using it for teaching purpose	31.2
l. I am confident about using ICT in my teaching	63.6
m. I like innovation	86.4
n. There are lots of software packages available for me to use in teaching English to my students	54.5
o. It is easy to get access to hardware to use in the classroom	0
p. It is easy to get access to software to use in the classroom	27.3
q. Reliable support personnel are available when I face difficulty in using ICT	22.7
r. All my colleagues are keen to use ICT in teaching	13.6
s. Our school is very supportive in using ICT in classrooms	45.5
t. ICT reduces my workload	31.8

As can be seen from Table 1, there are three key groups of reported motivating factors. The chief motivating factor for ICT use in ELT concerns the perceived benefits of ICT in

fostering students' self-regulated learning, and enhancing their engagement, motivation and interest in learning the language. As a result, the lecturers perceive that students obtain better outcomes thanks to the lecturer's use of technologies in classrooms. The second group of motivating factors indicates the teachers' purposes in relation to their pedagogies and beliefs in language teaching. They perceive that ICT use enhances the effectiveness of their instruction, helping to incorporate new teaching methods. The final enabling factor is reported to be the lecturers' interest in trialling new things, or innovations.

Table 1 also shows the least motivating factors in ICT use in ELT. The remarkable factor is that the access to ICT tools is not easy. Instead of being an enabling factor, the barrier in obtaining access to ICT becomes an inhibiting factor that discourages the lecturers' ICT integration. As well, there is a reported weak learning culture within the organization. In addition, when the lecturers face technical problems, the support is not available. This also demotivates them to integrate ICT into their classroom practices

Table 2. Factors inhibiting ICT use in ELT

Items	Percentage
a. The use of ICT is not appropriate for my EFL teaching	9.1
b. ICT cannot really make a difference to language learning	4.55
c. Students are not well-prepared to use ICT in class	31.8
d. I can do my work quite competently without having to use ICT	36.4
e. I question whether the time and effort required to master the use of ICT is worth it in terms of the actual returns	4.55
f. I do not enjoy using a computer	4.55
g. Limited ICT knowledge and skills scares me to integrate ICT in my teaching	9.1
h. I do not know how to make use of ICT in EFL teaching	4.55
i. I am scared of using ICT in my teaching	4.55
j. Insufficient computer facilities prevent me from using ICT in my teaching	50.0
k. I do not have adequate access to ICT	31.8
l. Technologies are not reliable	27.3
m. There is a lack of technical support for my teaching with ICT tools	59.1
n. I don't want to be different from other teachers by not using ICT tools in classrooms	4.55

o. My institution does not encourage lecturers to use ICT in EFL teaching	9.1
p. A heavy workload prevents me from using ICT in teaching	27.3

Table 2 shows the list of factors reported by lecturers that inhibit their use of ICT in their teaching. Some factors are reported to have a significant influence on the lecturers' uptake of ICT, while others seem not to have any noticeable negative impact on the adoption of ICT.

The two most considerable disabling factors are the lack of technical support when the lecturers encounter problems with ICT tools, and the insufficient facilities, reported by at least 50 percent of the participants. The next influential factors belong to the access to ICT facilities, the needs for ICT use for their work, and the students' preparation to study with ICT in class. The other factors that indicate beliefs, ICT skills, and confidence towards ICT tools seem not influential in this case study.

During the interviews related to the factors that foster or discourage ICT use in teaching, the lecturers mentioned more about the barriers instead of motivating sources. The general impression is that there are negative perceptions of the lecturers towards to ICT implementation. The main reason is that they have encountered difficulties in obtained ICT facilities to support their purposes in teaching with ICT. The lack of ICT availability, the inadequate access to the facilities and the lack of in-time technical support have exhausted them such that they do not consider how to use the technologies innovatively in the classrooms.

Participant 08 said that he felt dissatisfied and wanted to give up using ICT. He stated:

> every time I want to give PowerPoint presentations, I have to bring my four-kilogram laptop to school, and then I cannot borrow a projector as other lecturers have borrowed them all. At that time, I feel upset. I give up. I see other lecturers who do not use ICT in teaching are doing fine.

Participant 11 complained that it takes her 'a lot of time and energy in order to borrow the projector and set up the equipment in class; it is too complicated; it is complex'. She added, 'if there were ICT equipment available, I would use ICT more in my teaching'.

Sharing a similar view on the need for the availability of ICT infrastructure, Participant 02 stated:

> I have attended training workshops on ICT skills, but the ICT infrastructure is not available. You know, if you don't practise regularly, you can't be good at ICT any more although you have learnt it. So, everything *(ICT equipment)* should be available *(for lecturers to use)*.

In addition to IT infrastructure, many participants mentioned the importance of professional development in fostering their uptake of ICT into teaching. The professional development varies in form, content and scheduling according to the participants. Participant 04

emphasised the necessity of training workshops for lecturers whenever there are new kinds of ICT applications introduced. Participant 09 mentioned the importance of introducing good examples of using ICT in teaching as a form of professional development. She said 'the lecturers who have used ICT successfully in teaching should show others their experiences on how they integrate ICT in classrooms. These lecturers will act like models for others to follow'.

Finally, the participants shared their thoughts and expectations regarding ICT administration.

Needs and expectations

The participants also indicated their need for further support in order to facilitate better ICT integration into their classroom teaching. As presented in Figure 3 below, among the eight possible supporting elements, the majority of the lecturers (91%) reported looking forward to more access to ICT facilities such as computers, projectors and multimedia labs, more technical support when there are technical problems, and more successful implementation models. Their demands are aligned with what they have reported as barriers or inhibiting factors for their adoption of ICT into teaching. They also expect to have more relevant software used in education, and to receive more support from administration. They do not report many expectations about receiving their colleagues' encouragement (59.1%). In terms of training, they prefer to have more training in pedagogy for implementing technology into the classroom (77.3%) in addition to training on ICT skills.
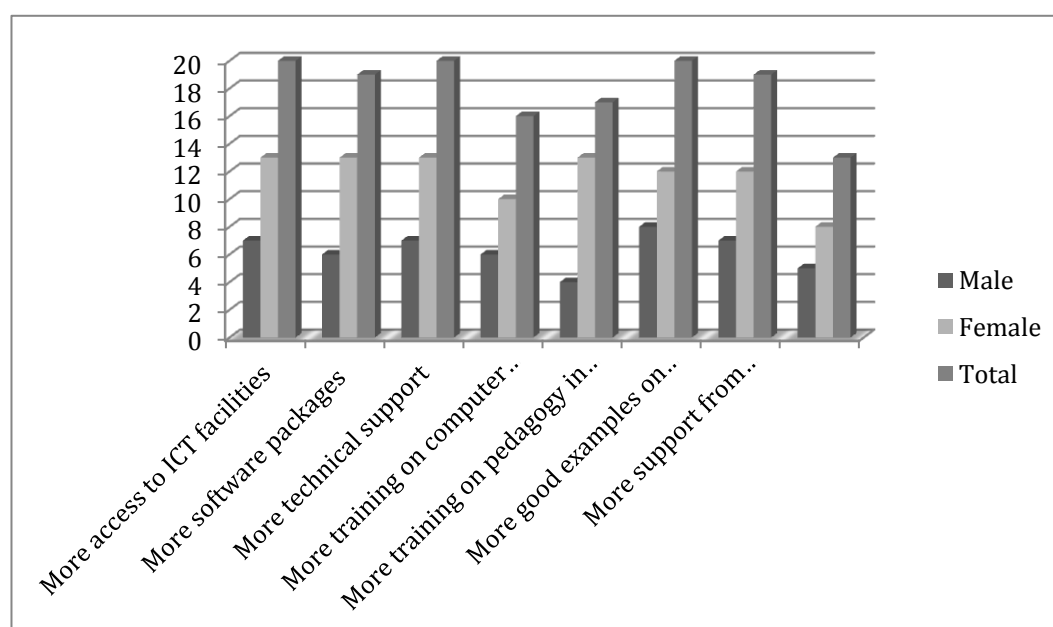

Figure 3: Areas of support needed by the lecturers for ICT use in ELT

This section has reported the findings from questionnaire and semi-structured interviews about the ICT environment in one of the case study universities, as well as the lecturers'

current ICT use and the factors affecting their ICT use as well as their expectations for further support in order to better implement ICT in classrooms.

Conclusions and recommendations

In conclusion, the findings of this part of the case study indicate that ICT availability and accessibility are very important for lecturers' uptake of ICT in their teaching. The lecturers hope to have ICT facilities installed in each classroom, at least with projectors, so they do not fear to think of the tiring process whenever they plan to integrate ICT in their lessons. In addition, technical support is also necessary. In terms of technical support, the administrators should have official documents or announcements to all lecturers about who is in charge as a technician or a team of technicians and where they can seek for help when in emergency such as contact information.

Professional development is an essential aspect of fostering the lecturers to adopt ICT in practices. The participants expect to have regular training courses in not only ICT skills and knowledge but also in how ICT can be used to enhance language teaching and learning. They wish to have more good examples of successful cases in which ICT is used. In addition, they suggest that the training does not stop at one-time training, but follow-up steps must be taken to increase the effectiveness of the training experience. The form of professional development also varies from formal to informal. It can be a fieldtrip to other institutions within the region, the nation or even abroad to observe and learn from others' experiences and practices with ICT implementation. It can also be informal learning, such as conversations among colleagues about any tips or new ICT tools.

ICT is an indispensable part of language teaching and learning, and lecturers perceive it should be integrated into teaching practices. Among the roles of different stakeholders in the process of ICT adoption and implementation, lecturers play the most important role. There are various factors that influence the lecturers' decision to utilise ICT tools in their classrooms. Among them, professional development or training is crucial in addition to the availability of ICT infrastructure and facilities.

However, in order to guarantee these enabling conditions for teachers, what is required is the active and visionary involvement of the administrators of the institution. The administrators should have a clear and detailed plan for ICT implementation at the institution, how the ICT infrastructure is to be installed and managed, and how the lecturers are to be trained and encouraged to use ICT to maximise student learning.

References

Abbitt, J. T., & Klett, M. D. (2007). Identifying influences on attitudes and self-efficacy beliefs towards technology integration among pre-service educators. *Electronic Journal for the Integration of Technology, 6*, 28-42. Retrieved from http://ejite.isu.edu/Volume6/Abbitt.pdf

Agyei, D. D., & Voogt, J. M. (2011). Exploring the potential of the will, skill, tool model in Ghana: Predicting prospective and practicing teachers' use of technology. *Computers and Education, 56*(1), 91-100.

Albion, P. (2001). Some factors in the development of self-efficacy beliefs for computer use among teacher education students. *Journal of Technology and Teacher Education, 9*(3), 321-347.

Anderson, T., Varnhagen, S., & Campbell, K. (1998). Faculty adoption of teaching and learning technologies contrasting ealier adopters and mainstream faculty. *The Canadian Journal of Higher Education, 28*(2,3), 71-98.

Arkin, E. I. (2003). *Teachers' attitudes towards computer technology use in vocabulary instruction*. Master's thesis. Department of Teaching English as a Foreign Language. Bilkent University. Ankara.

Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skills, teacher morale and perceived student learning in technology-using classrooms? *Computers and Education, 39*, 395-414.

Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature. *Eurasia Journal of Mathematics, Science and Technology Education, 5*(3), 235-245.

Bussey, J., Dormody, T., & VanLeeuwen, D. (2000). Some factors predicting the adoption of technology education in New Mexico public schools. *Journal of Technology Education, 12*(1).

Cooper, T. C. (2001). Foreign language teaching style and personality. *Foreign Language Annals, 34*(4), 301-317.

Cornu, B. (1995). New technologies: Integration into education. In D. Watson & D. Tinsley (Eds.), *Integrating information technology into education* (pp. 3-11). London: Chapman & Hall.

CTU - School of Education. (2007). Report on weekly meeting of the administrators of the School of Education, Can Tho University (Biên bản họp giao ban đầu tuần 17/09/2007). Can Tho: Can Tho University.

Dinh, H. (2009). Factors influencing EFL novice teachers' adoption of technologies. *CamTESOL Conference on English Language Teaching: Selected papers, 5*, 99-112.

Drent, M., & Meelissen, M. (2008). Which factors obstruct or stimulate teacher educators to use ICT innovately? *Computers and Education, 51*, 187-199.

Green, M., & Maxwell, G. (2010). Wikify your course: Designing and implementing a Wiki for your learning environment. *EDUCAUSE Quarterly, 33*(03). Retrieved from http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/WikifyYourCourseDesigningandIm/213717

Groves, M., & Zemel, P. (2000). Instructional technology adoption in higher education: An action research case study. *International Journal of Instructional Media, 27*(1), 57-65.

Gueldenzoph, L., Guidera, S., Whipple, D., Mertler, C., & Dutton, L. (2000). Faculty use of instructional technology in the university classroom. *Journal of Educational Technology Systems, 28*(2), 121-135.

Hu, Z., & McGrath. (2011). Innovation in higher education in China: are teachers ready to integrate ICT in English language teaching? *Technology, Pedagogy and Education, 20*(1), 41-59.

Johnson, B., & Christensen, L. (2008). *Educational research - Quantitative, qualitative and mixed approaches* (3rd ed.). Thousand Oaks: Sage Publications.

Kumar, R. (2011). *Research methodology - A step-by-step guide for beginners* (3rd ed.). Thousand Oaks: SAGE Publications.

Law, N. (2008). Teacher learning beyond knowledge for pedagogical innovations with ICT. In J. M. Voogt & G. Knezel (Eds.), *International handbook of information technology in primary and secondary education* (pp. 425-434). New York: Springer.

Li, L., & Walsh, S. (2010). Technology uptake in Chinese EFL classes. *Language Teaching Research, 15*(1), 99-125.

Marwan, A., & Sweeney, T. (2010). Teachers' perceptions of educational technology integration in an Indonesian polytechnic. *Asia Pacific Journal of Education, 30*(4), 463-476.

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research, 2*(3), 192-222.

Mulkeen, A. (2003). What can policy makers do to encourage integration of information and communications technology? Evidence from the Irish School System. *Technology, Pedagogy and Education, 12*(2), 277-293.

Mumtaz, S. (2000). Factors affecting teachers' use of information and communication technologies: A review of the literature. *Technology, Pedagogy, and Education, 9*(3), 319-342.

Peeraer, J., & Van Petegem, P. (2011). ICT in teacher education in an emerging developing country: Vietnam's baseline situation at the start of 'The Year of ICT'. *Computers & Education, 56*(4), 974-982. doi: DOI: 10.1016/j.compedu.2010.11.015

Phelps, R., Graham, A., & Watts, T. (2011). Acknowledging the complexity and diversity of historical and cultural ICT professional learning practices in schools. *Asia Pacific Journal of Teacher Education, 39*(1), 47-63.

Quach, T. N. (2004). Internet and e-learning: The case of Vietnam. Retrieved from gauge.u-gakugei.ac.jp/apeid/apeid04/country_papers/Vietnam.pdf

Stone, R. W., & Henry, J. W. (2003). The roles of computer self-efficacy and outcome expectancy in influencing computer end-user's organizational commitment. *Journal of End User Computing, 15*(1), 38-53.

Voogt, J. M. (2004). Consequences of ICT for aims, contents, processes and environments of learning. In J. Van den Akker, W. Kuiper & U. Hameyer (Eds.), *Curriculum landscapes and trends* (pp. 217-236). Dordrecht: Kluwer.

Ward, L. (2003). *Teacher practice and the integration of ICT: Why aren't our secondary school teachers using computers in their classrooms?* Paper presented at the NZARE/ AARE, New Zealand. www.aare.edu.au/03pap/war03165.pdf

Warger, T., & Dobbin, G. (2009). Learning environments: Where space, technology and culture converge. *EDUCAUSE Learning Initiative, 2009*(1), 1-14.

Wingard, R. G. (2004). Classroom teaching changes in Web-enhanced courses: A multi-institutional study. *EDUCAUSE Quarterly, 27*(1), 26-35.

Wolcott, L., & Betts, K. (1999). What's in it for me? Incentives for faculty participation in distance education. *Journal of Distance Education, 14*(2), 34-49.

Yin, R. K. (2009). *Case study research - Design and methods* (4th ed. Vol. 05). Los Angeles: SAGE Publications.

Yusuf, M. O. (2005). An investigation into teachers' self-efficacy in implementing computer education in Nigerian secondary schools. *Meridian Middle School Computer Technologies Journal, 8*(2). Retrieved from http://www.ncsu.edu/meridian/sum2005/computer_ed_nigerian_schools/

Teachers' Effectiveness in Using English in the Science Classroom in the SMP Lab School, Kebayoran

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Abstract

Teaching Science in English for most Science teachers has become a big problem as most of them lack confidence to conduct their learning activity in English even though they have learned English. Moreover they also have to design their own materials and tests in English. The condition appears as the requirement for being classified as an RSBI school, or an International Standardized School.

The assumption of this research is that the learning process can be improved for both the teacher and the students. The students will better understand the terms in the materials and be able to elaborate on them more in English, while the teacher will be more confident in both spoken and oral English in teaching Science.

Introduction

Since the concept of the international standard school, or the RSBI, was launched in 2008, some schools have constructed programs that meet the specified requirement for RSBI schools. The content of the syllabus demands that the learning process, and even the assessment, for Math and Science be delivered in English.

The SMP Lab School Kebayoran since 2005 has provided English training for teachers not only in Science and Math but also in other subjects. The aim of the training was to maintain the teachers' ability to teach in English, but the result was not really achieved. Most of the teachers felt that the learning process became flat and tiring. They learned English not in the practical way as they wanted. They found it difficult to use English in their daily activities. Since then the training was conducted by the English teachers' team and called BEST (Bilingual Teachers Training).

The purpose of BEST was to facilitate the interest of the teachers to learn English and to build the teachers' confidence in using their English. The team constructed the learning interestingly by having fun activities, problem solving and discussion. The teachers were divided into three levels: level A, level B and level C. The aim of using A, B and C was to avoid labeling their level of ability as elementary, intermediate and advanced.

At the conclusion of the program, the teachers were asked to tell a story in front of other teachers and they brought their own property to support their performance. There were two English teachers from outside the school who were to evaluate and give feedback on their performance. The results of the performance showed that they were satisfied with their English and felt motivated by having their own performance. This training was followed by another training workshop on classroom management and TOEFL preparation led by

Universitas Negeri Jakarta in 2009. As part of this program the teachers were asked to conduct micro teaching and also had to learn how to construct questions.

However, what they learned and practised in the training was not as it was in the classroom. They were suddenly concerned and less confident being in front of the students. They were worried about their English ability and doubted if the materials, especially the terms they delivered in English, were suitable. As a result, they taught their subjects mostly in Bahasa rather than in English even though the sources and the textbook used in the classroom were in English.

The project

To overcome this issue I decided to investigate the effectiveness of the teachers using English in the classroom and how the teachers dealt with classroom management in English as well. I decided I would observe the teachers teaching in the class, including how the teachers assessed the students. I decided that I would focus my research only on Science teachers.

The objective of the research was to investigate the effectiveness of Science teachers teaching in English with Grade 8 students. The investigation was conducted from January to April 2013. By utilising recent theories related to teaching Science in English in an active way I wanted to discover whether the students are more interested in learning Science and whether they have a sound understanding of Science concepts. I also wanted to know of any benefit that the research provided to the teacher.

Literature review

English as Lingua Franca

English as lingua franca refers to the situation when non-native speakers communicate with each other in English while English is not their mother tongue (Harmer: 2001). In some cases when English is used as the medium of instruction in countries which do not use English, the teachers tend to the make grammatical mistakes (Seidlhofer: 2004) and pronounce words incorrectly (Jenkins: 2004). Using English as the lingua franca in a Science class has some advantages over teaching English as a foreign language (Ur: 2009). For example, when a Science teacher teaches the subject in English, he is not concerned so much about the correctness of his English usage but is concentrating upon his material instead, while in an EFL class there is much attention paid to correct grammar and pronunciation.

Content and Language Integrated Learning (CLIL)

Content and Language Integrated Learning is an approach that focuses on how to apply and teach English integrated with other subjects such as Geography, Mathematics, Science and History. The learning process tends to focus on the content of the subject and the students use the language to learn the content (Harmer: 2012). The subjects are not related at all to English language learning and the use of English is seen only as a medium for learning the subjects. The teachers are not seen to be English teachers.

The cycles of the research

First cycle

Planning

The researcher and Science teacher prepared the lesson plan and the content material which would be used in the class, in this case about a mirror. The teacher set up the teaching resources and the activity that would be used in the class. In this phase, the researcher was the observer in the class and recorded the activity.

Action

First meeting

The students came to the class and started the session with praying and the Science teacher greeted the students and opened the class in English. The teacher stated the objective of the material was about how to draw an image by using a compass and ruler in a block note. The teacher got the students to brainstorm by asking for a definition of a mirror. Then the teacher asked the students to prepare all the equipment on the desk. The teacher gave an explanation about how to draw an image on the board. The students paid attention as the teacher was explaining. The teacher drew a point as an axis and drew a line by using the ruler and the students did the same thing. The teacher explained what an axis is and gave the instruction to draw it in their block notes. While the students did the activity the teacher walked around and checked the students' work. The teacher praised their work and asked the students to do the activity in their textbook. The teacher gave feedback about the students' work and convinced the students about the material and the activity. At the end the teacher asked the students whether they had questions about the material.

Second meeting

The teacher opened the class by asking the students about the activity they had completed previously. The teacher asked the students to open their books and their equipment. The teacher asked one of the students to draw an image based on the instruction in the textbook. The teacher was leading the student in how to draw the image and asked the others to pay attention on how to do it. The teacher then asked for the students' comments and praised the student. The teacher once again asked the students to do the activity based on the instruction in the book and made sure that they drew it correctly according to the measurements contained in the book. The teacher checked the students' work and closed the session by asking whether they had any problems with the material.

Observation

The researcher observed the activity in the class and found that in the first and second meetings the Science teacher was quite confident with his English. He opened the class, explained the materials and gave the instruction, and even praised the students in English. The teacher made a joke by labeling one axis as a phone provider in Jakarta in order to make the students remember the term of axis in a mirror in English. The teacher mostly did gesturing during the sessions so that it made the students clearer with the explanation and the instruction. For example, while the teacher was explaining axis he actually drew it step by step. The students understood his English and completed the activity as he gave the instructions. From thirty eight students, three students were trying to ask questions in English and the remaining students chose to be silent but responded to the instruction well. However, the teacher still translated some of his explanation in Bahasa especially when he explained

the terms 'mirror' and 'image'. Doing this indicates that the teacher was worried that the students did not really fully understand the terms and wanted to assist the students' comprehension of the terms.

Reflection

From the two meetings, the researcher found that most of the students were interested and attracted by the activity. The students followed the instruction well and understood the teacher's explanation. However, half the students called the teacher *Mister* without following with his name and there was no correction from the teacher. This may mean that the teacher was not bothered about this or did not understand the usual convention in English. The researcher also found that most of the students understood the explanation although they were quite passive in the learning process. They were quite silent and followed all the instructions, but the teacher was quite active talking.

The teacher felt confident and did not hesitate with his English and he could lead the activity very well. Although he sometimes translated some words in Bahasa he did that in order to maintain the students' comprehension. The way he managed the class was very nice and the class was running well.

Second cycle

Planning

The researcher and the teacher discussed the plan of assessing the student's ability by designing a daily test for them. The teacher designed the questions as multiple choice with thirty percent of the questions in English. The setting of the percentage was similar both for the daily test and the mid semester test. In this case, the teacher would be able to identify how well the students could do the English items and would find out the level of the students' knowledge on the topic.

Action

First Meeting

The students came to the class and started the class with praying and greeting. They stated that in the lesson there would be a daily test. The teacher asked the students to close the books in their bags. One of the students distributed the test paper and the teacher then distributed the questions. The teacher gave the instruction to the students and asked the students to do it carefully. In sixty minutes the teacher asked the students to stop doing the test and submit the papers. He asked what they felt about the test.

Second Meeting

This meeting was the mid semester test and the setting of the session was different from the daily test. The students were sitting according to the previous test and were joined by the students from different levels. In addition, two teachers supervised the room and the students did the test in ninety minutes. The answer sheet used for the test was computerised.

Observation and reflection

The researcher observed that the students did very well on both tests. They did the test carefully according to the instruction. The teacher had no difficulties in managing the students as they did the daily and the mid test.

From the test conducted in the class, the researcher found that the students could answer the English questions, moreover, the questions could not be answered by guessing but the students had to compute and understand them. It means that the students needed to analyse the questions before they answered them.

Results and Findings

Qualitative and quantitative data were used in determining the results. The qualitative was taken from the teacher's interview and the students' questionnaire. The quantitative data was obtained from the students' test results.

The result of the teacher's interview showed that the teacher felt more confident and was satisfied with teaching Science in English. Moreover he could design the test although the percentage of the questions in English was still only thirty percent. The teacher still doubted whether he could raise the percentage. From the students' questionnaire, ninety percent of the students understood the materials delivered in English and were keen on the teacher speaking English in the class. The remaining students still found it hard to understand the teacher's English. However, eighty percent of the students chose to be active listeners in order to comprehend the teacher's explanation. They were worried that they may not understand the materials, and only twenty percent of students participated in the activity.

The results of the tests showed that seventy percent of students could answer the questions in English very well. They understood both the questions and the solutions. Thirty percent of the students still had difficulty answering the questions and it is possible that this group had difficulty understanding the questions and thus had difficulty in answering the questions.

Conclusion and suggestion

Most of the students were interested with the learning process delivered in English and the teacher was also satisfied with his efforts in teaching in English and in setting the tests. In the first cycle most of the students were active listeners and understood the instructions. The teacher was successful in ensuring the students' comprehended terms.

For future research it is suggested that the teacher increase the percentage of the questions in English and the teacher also analyse the questions in English for their level of difficulty. The teacher also needs to speak more clearly to the students so that all the students can understand his explanations. It is recommended that he plans the lessons so the students will be more actively involved in the activity.

References

Brown, H. D. (2000). *Teaching by principles*: *An interactive approach to language pedagogy*. New York: Cambridge University Press.

Harmer, Jeremy. (2012). *Essential teacher knowledge*: *Core concepts in English language teaching.* Harlow: Pearson Education Limited.

Harmer, Jeremy. (2007). *The practice of English language teaching*. Harlow: Pearson Education Limited.

Jenkins, J. (2004). ELF at the gate: The position of English as a lingua franca. In *IATEFL Liverpool Conference Selections,* Pulverness, A. (Ed.). Kent: IATEFL.

Seidlhofer, B. (2004). Research Perspectives on teaching English as a lingua franca. *Annual Review of Applied Linguistics,* 24, 209-239. Available from, http://people.ufpr.br/~clarissa/pdfs/ELFperspectives_Seidlhofer2004.pdf

Ur, Penny. (2009). *English as a lingua franca and some implications for English teachers*, from http://www.tesol-france.org/Colloquium09/Ur_Plenary_Handouts.pdf

How Corrective Feedback and Graphic Organisers Affect Students' Writing: A Case from Suratthani Rajabhat University

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Abstract

This research aimed to study how corrective feedback and graphic organisers enhanced students' competency and motivation in learning English writing. The research sample was forty English major students at Suratthani Rajabhat University who enrolled in an English writing course. They were randomly selected. One single group pre-test- post-test design was the experimental plan of this research. The students were asked to complete a questionnaire on motivation in writing strategies. They also had to complete a writing achievement test using lesson plans taught by the researcher. The findings revealed that corrective feedback and graphic organisers could enhance the students' competency in learning English writing and increase their motivation in these areas.

Background and rationale

The English language is one of the most important languages in the world because it is used to communicate in many people's lives. However, English literacy is not only concerned with conversation, but also includes writing, which is considered very important in English education. According to Thomson (2008), effective writing is very significant and a skill which every educated man, woman, and child should pocess. Writing is something which anyone can master if they go about it in the right way. At the present, Thai students have problems in writing fluently and accurately in English. We as English teachers should pay more attention to these kinds of problems. Ability to write well is especially important for those who want to be English teachers in the future.

One of the best ways to deal with writing problems is to use graphic organisers to manage thinking skills before students start to write. Graphic organisers, or mind maps, knowledge maps, story maps, concept maps, or concept diagrams are pictorial or graphical ways to organise information and thoughts for understanding, remembering, or writing. They can be used to enhance learning and create a foundation for learning. Having a way to organise ideas, facts, and concepts graphically facilitates effective student learning. Many students are visual learners, thus, a visual approach to brainstorming or organising information is essential. Graphic organisers appear to be a valued approach in teaching and learning. Students are required to think in multiple directions when using graphic organisers which makes learning an active and meaningful process. Organisers help students generate mental images of information and create graphic representations of information.

Ausubel (1963) wrote that the manner in which knowledge is represented can influence learning. The appropriate organisers can help students form relationships between previously acquired knowledge and new concepts. Learning takes place when the learners' cognitive

structure expands with the new knowledge. According to Ellis (2001) information is more easily learned and understood with visual organisers. Once students acquire the basic, yet solid foundation of a concept, then future content can be addressed at higher cognitive levels by linking greater differentiations of the concept to the initial foundation, thus leading students to become more strategic learners.

Moreover, corrective feedback can also assist students to produce accurate writing. However, this depends on the type of feedback provided. Storch and Wigglesworth's study (2010) into the efficacy of direct (reformulation) and indirect (editing symbols) feedback and the factors impacting on advanced learners' processing, uptake, and retention found that editing symbols prompt learners to engage more deeply than reformulation-type feedback. In addition, it was revealed that the more students engage with feedback, the more likely they are to learn from it.

Purpose of the study

Based upon the research noted above it was decided to study how corrective feedback and graphic organisers could enhance Thai students' competency and motivation in learning English writing.

Data collection and analysis

Data were collected from forty third year students who were majoring in English and enrolled in the Paragraph Writing Course at the Faculty of Education, Suratthani Rajabhat University. Data were collected by using ten teaching writing plans together with graphic organisers and corrective feedback (editing symbols). In addition, students were required to complete a questionnaire aimed at determining their motivation regarding writing strategies. The data were analysed by using SPSS for Windows and provided information on the students' achievement in writing English and on their motivation.

Results

From Table 1 it can be seen that students' achieved a higher score on a post-test after they had undertaken the course.

Table 1. The achievement of students writing English

คะแนน	N	($\overline{X}$)	SD
Pre-test	40	7.47	3.121
Posttest	40	13.45	3.541

From Table 2 most aspects of motivation for writing were in the high level except for writing competency. Some students thought that they could write English better, but some specified that they should seek more improvement.

Table 2. Students' motivation for writing

No	Detail	Score
1	Writing skill takes an important role in language learning.	4.33
2	Graphic organisers helps me to create the idea of writing.	3.50
3	I can think effectively with graphic organizers.	3.69
4	Feedback is good for me.	3.42
5	Editing symbols motivate me to learn more about writing**.**	4.42
6	I can write English better.	2.80

Discussion

According to the results, the majority of students made a significant improvement in writing and were motivated to use graphic organisers again in the future. These results support the studies by Sheen et al. (2009) and Ellis et al. (2008) which suggest that targeted written corrective feedback is more effective than untargeted feedback because students gain more confidence in writing. Using editing symbols also helps to improve their writing achievement because this helps them know how to correct mistakes or errors.

References

Abrams, J. C. (1991). Introduction to thematic issue. *Journal of Reading, Writing, and Learning Disabilities International*, *7*(3), iii-iv.

Ausubel, D. (1963). *The psychology of meaningful verbal learning*. New York: Grune & Stratton.

Darch, C., Carnine, D., & Kameenui, E. (1986). The role of graphic organizers and social structure in content area instruction. *Journal of Reading Behavior*, *18*(4), 275-295.

Dye, G. (2000). Graphic organisers to the rescue! *Teaching Exceptional Children*, 32, 1-5.

Ellis, Rod. (2008). *The study of second language acquisition* (2nd ed.). Oxford: Oxford University.

Lightbown, P. M., and N. Spada. 1999. *How languages are learned*. Oxford: Oxford University Press.

Meyer, D. J. (1995). *The effects of graphic organisers on the creative writing of third grade students.* (Unpublished thesis). ERIC document, ED 380803.

Sheen, Y. Wright, D. & Moldawa, A. (2009). Differential effects of focused and unfocused written correction on the accurate use of grammatical forms by adult ESL learners. *System*, 37, 556–569.

Stipek, D. (1998). *Motivation to learn: From theory to practice* (3rd ed.). Boston: Allyn & Bacon.

Storch, N. and Wigglesworth, G. (2010). Learners' processing, uptake, and retention of corrective feedback on writing. *Studies in Second Language Acquisition*, *32*, 303-334.

Thomson, Stephen. (2008). *Art of writing English: Importance of writing skill.* Retrieved May 8, 2010, from, http://www.articlesbase.com/writing-articles/art-of-writing-english- importance-of-writing-skill-657757.html

The Design of Learning Tasks to Promote Student Teachers' Performance Based on the Thai Qualification Framework

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Abstract

This case study examined two classes of ninety students from the Faculty of Education of Nakhonsithammarat Rajabhat University in Thailand. The main focus of the study was on the design of learning activities which coincided with the Thai Qualification Framework in Education (TQF1), a Thailand education guideline to ensure national, and international standards, in education. The TQF1 emphasises six domains of learning: ethics and moral development; knowledge; cognitive skills; interpersonal skills and responsibility; analytical and communication skills; and learning management skills. In this study, the learning tasks were developed based on group work projects and built upon on-going prior tasks, peer learning activities, analysis of self and group learning outcomes, and evaluation of tasks. The data was gathered through course reviews, observations, student journals, interviews, and group discussions. The results show characteristics of learning tasks that increase performance of student-teachers according to TQF1. The findings suggest future designs of learning tasks and further study of TQF1 implementation.

Background of the study

Discussion of quality teaching and better qualified teachers has captured much attention in Thailand due to a rapid growth in technology and globalisation. Student teachers under the teacher education program must be properly trained and reflect Thailand's education policies as well as standards required by the teacher training program of the School of Education. To assist in meeting international standards and to provide a framework for the teacher education programs, a Thai Qualification Framework in Education (TQF1) was launched in 2009.

The framework was designed by the Office of Higher Education Commission (OHEC) and focused on six domains of learning:

1. Ethics and moral development.

2. Knowledge.

3. Cognitive skills.

4. Interpersonal skills and responsibility.

5. Analytical and communication skills.

6. Learning management skills.

(Higher Education Commission, 2009).

Since this time teacher education institutions have been required to follow the Framework Guidelines when designing their curriculum and course specifications. Though educational institutions have been implementing the Framework Guidelines for some years, there are still challenges in applying TQF1 in a real classroom. Studies suggest that the failure of the learning outcomes reflects an inadequate knowledge of the student teachers and their cognitive skills (Pitiyanuwat, 2013). In response to concerns about the implementation of TQF1's effective implementation I conducted this study primarily focused on the design of learning activities that coincided with the TQF1 to improve students' learning outcomes.

Since 2010, I have been teaching the Principles of Learning Management course and the Curriculum and Basic Education Management course, which are the required subjects in the teacher training program (a five year program). The course objectives require students to understand concepts, processes, problems and trends in curriculum development and policies and the current basic education management context. The course also aims to create students' positive attitudes towards the course and a teaching professional career. In teaching these courses I attempted to create a constructive learning environment in combination with the concept of contemplative education. I found that effective teaching strategies together with the contemplative education concept have helped improve learning outcomes.

My research supports many previous studies, which suggested that an incorporation of contemplative education theory when working in groups increases students' learning and improves their cognitive skills (Taattong, 1999). In addition, the studies have shown that a discussion of a case study of talented teachers, school visits, and peer teaching practices can be effective teaching strategies. These strategies allow students to undertake given tasks individually, in pairs, and in groups.

Although students seem to benefit from those tasks, they lack practice in real classroom settings. They are unable to see the connection between the given learning tasks and skills needed in the TQF1 (Saripa, 2012). In my classroom analysis of learners, I also found that students would rather work in groups than doing tasks individually. The study conducted by Johnson and Johnson (1989) supports and verifies that group work is useful to develop appropriate skills in collaboration, simulate a real work environment, and lead to greater efficiency and effectiveness. While studies have proved positive gains through using group work (Bruner, 1985; Johnson & Johnson, 1989; Slavin, 1995), some studies have shown that individual productivity may be better than group productivity due to the groups' failure to realise the full potential of individual members and allocate resources in the optimum way (Brown, 1988).

This study employed a qualitative approach - classroom action case study. The TQF1 was utilised as a benchmark to design learning tasks in the 'Principle of Learning Management' course for second year students in the Faculty of Education of Nakhonsithammarat Rajabhat University in Thailand. The study intended to promote students' cognitive skills as lifelong learning and also other skills of TQF1 by using specific learning tasks to improve students' learning outcomes. The data were gathered through course reviews, observations, student journals, interviews, and group discussions. It was anticipated that the findings would demonstrate the characteristics of the appropriate tasks given to students to achieve the TQF1

in the context of the course and also would provide guidance for future research aimed at ensuring that student teacher development programs match the requirements of TQF1.

Literature review

Instructional design for higher education

Instructional design is defined as:

> a systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction. It is the entire process of analysis of learning needs and goals and the development of a delivery system to meet those needs. It includes development of instructional materials and activities; and tryout and evaluation of all instruction and learner activities (University of Michigan, 2013).

In higher education, there are no specific teaching methods or theories that guarantee the best result. Learner's attitude, subject content, and classroom environment can influence learning and teaching outcomes. Therefore, the teacher plays a crucial role in choosing an appropriate instructional method to meet objectives of the course. Teachers should implement multiple teaching methods and strategies to their teaching in each class (Tephasadin Na Ayudhya, 1999, Timpson, 2006).

Tephasadin Na Ayudhaya suggests that before deciding on the teaching methods, teachers should consider the following:

1. what are the intentions of the course objectives

2. who are the students

3. what kinds of content should be included

4. what are the appropriate teaching methods to transfer the knowledge

5. how students' knowledge should be evaluated

Timpson (2006) believes in empowering students to take control of their own learning. Therefore, the instructional design should discourage lecturing alone. A higher order thinking instructional approach such as projects and presentations should be emphasised when planning instructional design for higher education.

Khammanee (n.d.) adds that higher education instructional design of the 21st century should emphasise student-centredness. Instructional methods such as self-directed learning, project based learning, cooperative learning, team learning, and beyond subject matter learning should be implemented in classroom teaching. Using such instructional methods, students are encouraged to move away from the traditional memorisation learning method to an integration of higher forms of thinking, such as analysing and evaluating. Polsaram (n.d.) agreed with Khammanee on allowing students to become more autonomous in their own learning.

According to Polsaram, a sound instructional design should highlight the following characteristics:

1. Utilising a group work activity to encourage students' cooperation and create a positive outlook. This learning activity will also help students to develop critical thinking, improve problem solving skills, including the creation of in-depth understanding of the subject.

2. Encouraging collaborative learning among students of diverse backgrounds. Students have a chance to share ideas, discuss opinions, and compare differences in order to complete the task.

3. Stimulating interaction between students text book/documents and provide group evaluation. Students need to be actively involved in the evaluation process. This activity will help students to gain confidence in their own learning skills.

4. Offering distance learning to give students more flexibility of their time and convenience. The instruction can be done via online web-based tools. In addition, the available technology tools encourage students to have more communication with their peers and teachers.

Creating a constructive learning environment

Traditionally, the teacher has been considered a controller of the classroom environment. The teacher has power and authority to decide curriculum content and activities. Modern teaching methods discourage a teacher-centered approach. Researchers support the concept of constructivism, in which students become active learners and control learning (Jonassen, 1999, Timpson, 2006). In a constructive learning environment, students build their knowledge based on their current and prior experiences. The teacher's role shifts to be a facilitator who assists students' learning, instead of giving a lecture.

Although research has shown a constructive learning environment benefits performance, character development, and insight, teachers hesitate to implement the concept in their teaching due to their busy schedule, over-crowded curriculum, and their vague ideas of theoretical frameworks and practices (Niaz and Calik, cited in Calik, 2011). This shows that teachers need more guidance and support to implement or design a constructive learning environment. To create a classroom as a constructive learning environment, the teacher and student's roles must be transformed. The teacher will be a collaborator who assists and encourages students to freely question, challenge and formulate their own ideas, opinions and conclusions. The student becomes the active learner and plays a central role in mediating and controlling their own learning.

As well as the transformation of teacher and student roles, meaningful learning activities should be utilised. Jonassen (1999) suggests that constructive learning activities should be contemplative in nature. They are intended to enhance students' logical and conceptual growth, including creating a deeper understanding of course content. A group work activity has proved to be an effective tool to create a constructive learning environment because it can

boost critical thinking skills, foster social independence and support among students, and improve relationships between peers (Faust & Paulson, 1998; Burden & Byrd, 1999; Kemp, 2010).

Teacher education in Thailand

The educational system has gone through many reformations to improve teacher and student quality. According to the 1999 National Education Act of Thailand, students enrolled in teacher education programs must be trained intensively for five years before gaining a bachelor's degree. Since 2003 students are required to take compulsory courses for their major, including teacher ethical behaviour. The students also spend their last year doing the teaching practicum at their chosen schools.

When graduating, the student teachers are expected to demonstrate the following:

1. Knowledge in their subject area.

2. Self-reliance, including ability to solve complex problems and develop creative solutions.

3. Ability to use appropriate mathematical and statically techniques to solve difficult issues.

4. Possess in-depth knowledge and understanding of research literature in a field, be able to interpret, analyse, and evaluate.

Student teacher graduates must have critical thinking, problem solving, and career and learning skills. They should be creative and innovative, and possess cross-cultural understanding, collaboration, teamwork and leadership skills. They must communicate well. Lastly, student teacher graduates must have knowledge of information media and information communication technology (Pitiyanuwat, 2003). In addition to these characteristics, the National Education Act expects the students to have a high level of ethical and moral sensitivity when dealing with sensitive issues.

Research methodology

This classroom action research was conducted during the second semester of 2012. The study employed a TQF guideline and student centered strategies to design learning tasks to improve student teachers' performance. The learning tasks were developed based on group work projects and built upon on-going prior tasks, peer learning activities, analysis of self and group learning outcomes, and evaluation of tasks. While many aspects need to be investigated to improve student teachers' performance this study only focused on a design of learning activities which coincide with TQF in terms of subject content, course description, and students' satisfaction toward learning and teaching.

Target group

The target group was two classes of ninety student teachers who studied the Principle Learning Management course in the second semester of 2012.

Research tools

There were three types of research tools. First, the course specification (MKO-3) was drafted to transfer the course plan into practice. Second, learning management evaluation forms were created to measure student teachers' performance according to TQF1. Third, records of course online evaluation were used to understand students' attitudes toward the course.

Data collection

Data were collected through a PAOR cycle. At the P stage, the researcher reviewed the course specification (MKO-3) to design learning tasks that reflect the skills in TQF1 and adjusted the MKO-3 accordingly. At the A and O stages, the researcher implemented the MKO-3 and observed student teachers' performance of the learning tasks while they were doing the tasks in group activities, discussion sessions, and task presentations. Task products were examined at these stages as well. At the R stage, the research reviewed the teaching and learning activities and the assigned tasks through students' journal writing, interview, and group discussion.

Data analysis

Content analysis, theme categorising, and data triangulation were applied to identify the characteristics of the designed learning tasks and student teachers' performance according to TQF1. Mean score analysis was used to show the student teachers' attitudes toward the course.

Findings

Content analysis results

The study identified characteristics of an effective learning task that can increase performance of student-teachers according to TQF. The task should have these five characteristics.

1. Learning tasks engage students through a collaborative and constructive learning environment i.e. respectful, understanding, caring, and helping – teachers have a key role in shaping up concerns about those values.

2. Students are provided opportunities to explore theory and practices about principles of learning management through multi learning activities and sources. There has to be more focus on free and assigned group works, lectures, demonstrations, discussions, printed and online document reviews. Students have a key role in constructing their own learning.

3. Students visit schools and are assigned group work. They are required to report on their assigned work and to write-up journals. This assists them to incorporate their new knowledge into what they already know. They then propose recommendations based upon their observations.

4. Students are assigned to work in the same group to create a teaching plan and try it out in a real class setting at the school they visited.

5. The task provides an authentic assessment. Teachers have to assign students to evaluate their own tasks product – teaching practices. School teacher and learners have to cooperate with student teachers to assess teaching plans and practices. The student teachers analyse the result of their work, make a presentation using media, and provide a document report.

The results also indicated that constructive learning environments must be incorporated together with assigned tasks. The following are some activities that have been shown to create a constructive learning environment in the 'Principle of Learning Management' course.

1. *Being a teacher*. The students reflect on many aspects (e.g. why join the teaching profession? what kind of obstacles have they encountered? what or who inspired them? what their ultimate goal is in a teaching career?). Then, the students draw or create a profile to represent their reflection. Next, with a depth listening method, they share their created profile with their peers. The task's goal is to help students to improve an intra/ interpersonal understanding.

2. *Origami*. The students work in groups to brainstorm the end product of folding a paper. They take turn to teach group members to fold a paper into a form of certain things such as a bird, a boat. Then, the group presents the end product and shares with the class the group's working process. This task intends to boost students' thinking skills in terms of concept of learning, process of learning, and results of learning. The activity also improves relationships among peers.

3. *Matching* (learning principle vs. teaching principle). Each student chooses one pre-written card from a deck. The card deck contains different items either on the principle of learning or a principle of teaching. Then, the students search for the card which matches the learning or teaching principle they have selected. Next, they form a group of two to three pairs of learning and teaching principles and do a role play of teaching practice. Other groups observe and figure out what learning and teaching principles are applied. This activity challenges students to think in a constructive and innovative way. It encourages participation and stimulates thinking skills.

4. *Teaching method*. Students are given a list of questions to answer. They can look up for answers from a professional teaching method book. Students independently draw a mind mapping of teaching method concepts. Then, they work in pairs and choose the most effective teaching method which suits the content they selected. Next, the group prepares the teaching practice to present in class. This activity helps students to recapture ideas on designing a teaching method to suit content and student background.

5. *Self-learning*. Students are assigned to study some content topics from library and online sources. At the end of the lesson, they present knowledge learned to the class. The presentation can be done in different formats, such as writing an academic report, conducting an oral presentation, and exhibiting a poster board. This activity develops a student's punctuality, responsibility, discipline, learning skills, and self-directed learning.

6. *Classroom teaching observation*. Students are divided into groups to observe teaching professionals work in a real classroom setting. They then interview the school administrative team and teachers. Students also observe the classroom environment and school surroundings. This activity allows students to gain a better understanding and more insight about teaching and learning. Also, it strengthens team work relations, caring, and process skills.

7. *Lesson plan design*. Students develop a lesson plan for learners in the assigned school. The lesson plan design is under the supervision of the researcher. At first, general content topics are in the lesson plan. Then, the focus shifts towards the content in the basic education curriculum. This supportive scaffolding method engages students to learn from simple to sophisticated content knowledge. The students benefit from the process. They gain more confidence in task-related teaching practice.

8. *Lesson plan implementation*. Students have to implement the lesson plan, which they previously designed to a real class. However, they first conduct a teaching practice with peers in a micro teaching class. Then, the lesson plan, students' teaching performance, and peer feedback are discussed and revised. Next, the students use the lesson plan for a real teaching classroom. The activity allows students to experience and feel a sense of being a teacher.

9. *Learning reflection*. Students review information they have learned in a week within and outside the classroom, regarding the activities engaged, their appreciation of being a teacher, and skills or attributes developed during the one week. Then, students write a reflection on the course book. This activity helps students to reflect on their own teaching and learning. The students can make changes in their teaching in the future.

Theme categorising results

The researcher found common emergent themes that reflect students' learning according to TQF1 as follows:

- In terms of moral and ethical improvement, students revealed, '… teachers needs to have self-control and are able to do their assigned tasks effectively'. They understand the importance of punctuality, generosity, and self-discipline.

- One student showed his/her thought on content knowledge in this way, '…I understood it clearly since I had to research information and review knowledge that I have learned'.

- Students demonstrated cognitive skill development as, '…the school doesn't have much technology equipment, but our group can solve that problem by hand-made teaching aids with resources available to meet content and learners'.

- For interpersonal skills and responsibility, students got along well with classmates, students, and school teachers '… when we have to contact a school, we have to be

polite and respectful to the principals and the school staffs. Also, we have to be a good team worker when it comes to a group work project'.

- For analytical and communication skills, the designed learning skills helped students to have hands-on experience with authentic communicative situations. Students were also able to practice analytical skills by evaluating their tasks. A student confirmed, '…it's crucial to have right technology tools for the right lesson and for students' ability to learn'.

- Students gained confidence in their learning management skills and improved their attitude towards a teaching career. This is because the designed task allowed them to practise and learn from real classroom teaching situations, '…being able to try to manage a classroom with real students and a real classroom made me feel like I was in a real battle, which tested my teaching ability'.

Mean score analysis results

Student attitudes towards the course were found to be at a high level with the mean score of 4.84 (from 5.00). When each item of the two groups' mean score was considered, the results showed that the overall highest mean score is 4.87 (item 1), followed by 4.86 (items 3, 12, 13). The mean score result is supported by students' opinions from group discussions and journal writing analysis. The result of the mean score is shown in Table 1.

Table 1. Student attitudes towards the course 'Principle of learning management'

No.	Item	Group 1	Group 2	Over all
1	The teacher clearly informs students of the course's learning outcome, content, learning activities, and evaluation.	4.82	4.92	4.87
2	The teacher uses effective teaching strategies which are suitable for course content and students' interests.	4.77	4.82	4.80
3	The teacher encourages students to express opinions and share experiences accordingly.	4.82	4.89	4.86
4	The teacher promotes students' thinking and learning skills.	4.82	4.87	4.85
5	The teacher motivates students to learn and suggest learning resources for lifelong learning.	4.80	4.89	4.85
6	The teacher encourages students to apply the knowledge learned from the class to their daily life.	4.80	4.87	4.84
7	The teacher effectively uses learning materials or innovations to promote students' learning.	4.80	4.89	4.85
8	The teacher uses appropriate and reliable assessment methods which correspond to the learning outcomes.	4.77	4.89	4.83

9	The teacher promotes and develops students' desired characteristics.	4.80	4.89	4.85
10	The teacher is an inspiration and acts as a role model for students.	4.80	4.89	4.85
11	The teacher begins and ends the lesson on time.	4.70	4.87	4.79
12	The teacher has a good personality, dresses appropriately, and is polite.	4.80	4.92	4.86
13	The teacher dedicates time to teach students.	4.80	4.92	4.86
14	The course could promote students' self-development.	4.75	4.87	4.81
15	The teaching approach used in this course could develop students' positive attitudes towards the course.	4.73	4.89	4.84
	Average mean scores	**4.78**	**4.89**	**4.84**

From Table 1, among the two groups, item 1 has the highest mean score, i.e. the teacher clearly informs students of the course's learning outcomes, course content, learning activities, and evaluation (mean score=4.87). Item 3 (the teacher encourages students to express opinions and share experiences accordingly) and item 4 (the teacher promotes students' thinking and learning skills), show student attitudes on teaching strategies have a mean score above 4.80 in groups 1 and 2.

Conclusion and recommendations

In this study, the effective learning tasks that increase performance of student-teachers according to TQF include five characteristics: collaborative and constructive environment; multi learning activities to explore theory and practice; school visit and making a report; trying out an idea in a real class setting; and task assessment by personal involvement. From the early stages of the study, students showed confidence in their learning when group activities and dialogue-based contemplative education philosophy were applied (Saripa, 2012). The tasks were based on students' backgrounds and the need to have students more engaged. The five characteristics of the TQF guidelines were orderly assigned to ensure students' readiness for subsequent learning. Then, the new target tasks were built upon the previous tasks.

The findings suggest positive results and encouragement for the future design of a learning task. The tasks should reflect the student's interests, course objectives, and standards required by TQF1. Students should be made aware of the learning task goals at the beginning of the course. Next, more learning tasks should be designed with the objective of promoting kindness, harmony, and sportsmanship. With these emphases, students will gain more courage to share opinions and ideas with their groups. An implementation of the group work concept and cognitive skill activities will benefit students' learning. Lastly, various development and innovation ideas should be studied to find the most effective way to improve student teachers' performance according to TQF.

References

Burden, P., & Byrd, D. (1999). *Methods for effective teaching* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Brown, R. (1988). *Group processes* (2nd ed.). Oxford: Blackwell.

Bruner, J. (1985). An historical and conceptual perspective. In *Culture, communication and cognition: Vygotskian perspectives.* London: Cambridge University Press.

Çalık, M. (2011). How did creating constructivist learning environment influence graduate students' views? *Energy, Education, Science and Technology,* Part B *Social and Educational Studies, 3*(1), 1-13.

Faust, J. L., & Paulson, D. R. (1998). Active learning in the college classroom. *Journal on Excellence in College Teaching*, *9*(2), 3-24.

Johnson, R. T., & Johnson, D. W. (1986). Action research: Cooperative learning in the science classroom. *Science and Children, 24*, 31-32.

Jonassen, D. (1999). Design constructivist learning environments. In *Instructional-design theories and models,* 2*: A new paradigm of instructional theory* (pp. 215-238). Hillsdale, NJ: Lawrence Erlbaum Associates.

Kemp, S. (2010). *Constructivism and problem-based learning*. Retrieved on August 25, 2013, from http://www.tp.edu.sg/pbl_sandra_joy_kemp.pdf

Khammanee, T. (n.d.). *Thailand Qualification Framework: Teaching strategies*. Retrieved from, http://misdesign.sct.ac.th:81/academic/upload/stat/92aac14329f843b4.pdf

Office of Higher Education Commission. (2009). *National Qualifications Framework for Higher Education in Thailand implementation*. Retrieved March 11, 2013, from, http://www.mua.go.th/users/tqf- hed/news/FilesNews/FilesNews8/NQF-HEd.pdf

Pitiyanuwat, S. (2013). Research results of educational reform indicator: Quality of higher graduates according to TQF. A paper disseminated at workshop on measurement and evaluation of TQF learning outcomes, 4-5 March, 2013 Bangkok. (Unpublished).

Polsaram, P. (n.d). *Instructional reform in higher education: The development of learning process at Bachelor Degree level*. Retrieved January 26, 2013, from, www.edu.chula.ac.th/eduinfo/ed_resch/pansak.pdf

Saripa, A. (2012). *An application of group activity and dialogue to promote cognitive skills of student teachers in the curriculum and basic Education Management Course.* Faculty of Education, Nakhon Si Thammarat Rajbhat University (Unpublished).

Slavin, R., (1995) *Cooperative learning: Theory, research, and practice* (2nd ed.). Boston: Allyn and Bacon.

Taattong, K. (1999). *Sbitha model: The instructional model for cognitive skills development*. Nakhonprothom: Petchakasem Press.

Tephasadin Na Ayudhya, W. (1999). *Selecting teaching method for higher education*. Retrieved from, www.dpu.ac.th

Timpson, W. (2006). *147 practical tips for teaching sustainability: Connecting the environment, the economy, and society.* Madison, WI: Atwood Publishing.

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, *63*, 384-399.

University of Michigan. (1996). *Training and instruction design*. Retrieved from, http://www.umich.edu/~ed626/define.html

Preparing Students for a National Nursing Licensure Exam: Designing the Test

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Nakhon Pathom Rajabhat University, Thailand

Abstract

The Faculty of Nursing, Nakhon Pathom Rajabhat University, Thailand is a new faculty established in 2009. Our first group of students will take a Nursing License Exam in March 2014. The percentage of students passing all the subjects in their first national exam will be used to indicate the quality of the Faculty. We have learned from the nursing education institutions which have had their students take the national license exam in previous years that tutoring and getting students familiar with exam questions increases the percentage of successful students. As we have one year to prepare our students we have begun a study exploring the process of designing exam questions which would be beneficial for students taking the national exam. The participants in this action learning study were five invited experts and twenty five academic staff of our faculty. Our previous exam questions were reviewed, and the comments and suggestions made by the experts guided a process of designing a test relevant to the national exam. The process and some well designed questions will be presented.

Introduction

In Thailand, there are eighty four government and private nursing education institutes offering a Bachelor of Nursing Science Program. The quality of the education program and training are accredited by the Ministry of Education and the Nursing Council. Each institution is responsible for implementing the program as well as the training according to the criteria and standards of the accreditors. Even with a nursing degree in hand, nursing graduates would not be employed if they did not pass the National Nursing License Examination. Therefore, it is an important task of the training institutes to prepare students not only to learn to be good nurses, but also to be capable of taking the licensing exam successfully. To be successful, students have to get at least sixty out of one hundred marks from each six subjects: laws and ethics in nursing; adult and elderly nursing; maternity nursing and midwifery; pediatric and adolescence nursing; psychiatric nursing; and community nursing.

Multiple choice questions with four answer options where one is the correct or the best answer are used for the test. The higher the percentage of successful students in their first time exam indicates the quality of the institutes. Generally, the more famous the institute the higher is the percentage of successful students. Poarohit et al., (2011) identified six strategies for preparing students for the license examination: developing a positive attitude toward the licensing examination; motivating students to achieve their best results; increasing memory techniques; competition techniques; knowledge management; and social support. However, tutoring and getting students familiar with the exam questions has been used by all institutes in preparing students to take the exam.

The Faculty of Nursing, Nakhon Pathom Rajabhat University, Thailand, established in 2009, will have the first group of students to take the National Nursing License Exam in March 2014. As we have one year to prepare our students we have begun a study exploring the process of designing exam questions which would be beneficial for students taking the exam. Therefore the objective of this study is to improve our exam questions to the level of the license exam.

Literature review

Tests are usually used to assess a learner's knowledge or understanding and ability to utilise/ apply knowledge. There are many kinds of tests e.g. short answers, label diagrams, fill in the gaps, multiple choice questions, matching and alternating choice questions, true/false questions and templates.

A multiple choice question (MCQ) is a question or incomplete statement followed by four or five options from which the learner selects the best answer. Incorrect options are called distracters which are used to side track learners who may not know the correct answer. There are many advantages of multiple choice questions (Campbell, 2011; Piontek, 2008) including:

- marking/scoring is uniform, standardised and usually quick; objectivity in marking reduces any teacher variability factors;
- it is possible to assess a learner's knowledge as well as their ability to discriminate amongst several possible alternatives;
- it is possible to test judgment as well as memory because it is possible to have more different questions than most other types of tests. MCQ provides a better sample of the topic being assessed than most other formats with the same time period; and
- MCQ allows for higher order questions to be asked; and the questions can assess more complex cognitive tasks.

MCQ is a test commonly used in medical science subjects, particularly for the license exams and is suitable for a large number of students being tested. The issues of MCQ involve the time consuming task of constructing effective questions and designing appropriate distracters which adequately cover the areas intended to be tested.

The process of designing MCQ is composed of writing the stem or question and then providing four or five alternative answers. When creating the item, it is important to consider whether the students would be able to answer the question without looking at the options. This makes the purpose of the question clear. It is important to make sure there is only one best answer and the distractors are appealing and plausible. Many recommendations for designing MCQ have been noted (Campbell, 2011). For example, allocate approximately one multiple choice question per minute; questions should be meaningful; questions should be stated in positive terms and represent a specific problem in the stem of the question; at least four responses should be included for each question; the use of 'none of the above' or 'all of the above' as an option should be avoided, as should the use of grammatical clues at the end of a stem.

The Thailand National Nursing License Exam is offered by the Thai Nursing Council a few times each year to new nursing graduates, professional nurses who have not yet obtained a license, and those whose licenses have expired. Most of new graduates take the exam in March. If they could not pass all the six subjects at once, they could take the exam on the remaining subjects as many times as necessary until they pass all the subjects. The exam takes the whole day to cover the tests for six subjects. Each subject has between eighty and one hundred MCQ items with ninety to one hundred and twenty minutes to complete each section.

All nursing education institutes have agreed that the nursing license exam questions are well designed and assess learners' higher levels of learning. It appears that more than eighty percent of the questions in each subject are at application and analysis levels. Books containing previous nursing license exam questions are available for new graduates to buy for their own preparation.

Methodology

Learning through action has been used as the approach to this issue. Each step of learning through action is clarified as follows.

- Step 1. *Identify an issue*: The issue is how do we improve our MCQ for application level or higher so that our students will be familiar with the kind of questions asked and hence be successful when they take the National Nursing License Exam.
- Step 2. *Gathering data*: This step included a literature review on: designing better MCQ; NCLEX questions; Thai nursing license exam questions from previous years; and an evaluation of our MCQs regarding the six subjects which students will take in the license exam. Five experts were invited to assess the quality of our MCQs. All experts pointed out that more than eighty percent of our MCQs are at low levels, such as the memory and understanding level.
- Step 3. *Interpreting data*: A group of academic staff responsible for each subject accepted the experts' findings and discussed the issue of why most of our MCQs are at memory and understanding level. We concluded that it might be a result of being a new faculty where a majority of staff do not have sufficient teaching and evaluating experience.
- Step 4. *Acting on evidence*: Based upon our staff discussions with the experts, we have come up with guidelines for the preparation of nursing exam questions as follows:
  1. Start with a test blue print for each teaching topic. This is composed of a list of objectives at least three levels (including application level), content, and questions for each objective. There should be five multiple choice questions prepared for each hour of teaching.
  2. Submit the questions to the subject coordinators two weeks before the exams.
  3. Three to five appointed experienced staff review the questions and give comments.

4. The questions are revised and submitted to the subject coordinators three days before the exams.

Along with the implementation of the guidelines, a workshop on designing MCQs and group work on selection of useful nursing license exam questions in previous years has been arranged.

- Step 5. *Evaluating results*: Our guidelines have been implemented but the workshop and the selection of the questions has not yet been completed. We will have a final exam in the second semester in early October this year when we will again evaluate our MCQs. An example of MCQs on the topic 'common cold' which the author has designed for the workshop mentioned in Step 4 is presented below.

Test blue print on the topic 'common cold'

Objectives	Content	Teaching-learning activities.	Evaluation
Explain overall phenomenon of the common cold.	The common cold (also known as nasopharyngitis, rhinopharyngitis, acute coryza, or a cold) is a viral infectious disease of the upper respiratory tract which primarily affects the nose and sometimes the throat. Symptoms include coughing, sore throat, runny nose, sneezing, and fever which usually resolve in seven to ten days, with some symptoms lasting up to three weeks. Upper respiratory tract infections are loosely divided by the areas they affect, with the common cold primarily affecting the nose, the throat (pharyngitis), and the sinuses (sinusitis), occasionally involving either or both eyes via conjunctivitis. Symptoms are mostly due to the body's immune response to the infection rather than to tissue destruction by the viruses themselves. The common cold may occasionally lead to pneumonia, either viral pneumonia or secondary bacterial pneumonia. No cure for the common cold exists, but the symptoms can be treated. It is the most frequent infectious disease in humans with the average adult contracting two to three colds a year and the average child contracting between six and twelve.	Students share their experience. An instructor summarises.	Which one is a typical characteristic of the common cold? (Understanding).

Objectives	Content	Teaching-learning activities.	Evaluation
	The common cold is the most common human disease and all peoples globally are affected. Adults typically have two to five infections annually and children may have six to ten colds a year (and up to twelve colds a year for school children). Rates of symptomatic infections increase in the elderly due to a worsening immune system. **Prognosis** The common cold is generally mild and self-limiting with most symptoms generally improving in a week. Severe complications, if they occur, are usually in the very old, the very young or those who are immune suppressed. Secondary bacterial infections may occur resulting in sinusitis, pharyngitis, or an ear infection. It is estimated that sinusitis occurs in 8% and an ear infection in 30% of cases.		
Differentiate symptoms of the common cold from other respiratory problems.	The typical symptoms of a cold include cough, runny nose, nasal congestion and a sore throat, sometimes accompanied by muscle ache, fatigue, headache, and loss of appetite. A sore throat is present in about 40% of the cases and a cough in about 50% while muscle ache occurs in about half. In adults, a fever is generally not present but it is common in infants and young children. The cough is usually mild compared to that accompanying influenza. While a cough and a fever indicate a higher likelihood of influenza in adults, a great deal of similarity exists between these two conditions. A number of the viruses that cause the common cold may also result in asymptomatic infections. The color of the sputum or nasal secretion may vary from clear to yellow to green and does not indicate the class of agent causing the infection.	Students share their experience. An instructor summarises.	Which of the following cases is an example of a common cold? (Analysis).

Objectives	Content	Teaching-learning activities.	Evaluation
	Progression Symptoms may begin within 16 hours of exposure and typically peak two to four days after onset. They usually resolve in seven to ten days but some can last for up to three weeks. Cough could be longer in children.		
Identify causes and risk factors.	Over 200 viruses are implicated in the cause of the common cold; the rhinoviruses are the most common. Others include coronavirus, influenza viruses, adenoviruses **Risk factors:** 1) living in a cold climate; 2) age below 5 years; 3) insufficient sleep; 4) malnutrition; 5) infant did not receive breast feeding.	Lecture and discussion.	Darin, 18 years old, looks quite healthy but often catches a cold 6-8 times a year. What should you ask her? (Application).
Give advice to clients in terms of prevention and management when an individual already has a common cold.	**Prevention**: 1) regular hand washing and face masks when around people who are infected; 2) vaccination has proved difficult; 3) zinc supplements may help to reduce the prevalence; 4) routine vitamin C supplements do not reduce the risk or severity of the common cold, though they may reduce its duration. **Management:** Non-medication: Getting plenty of rest, drinking fluids to maintain hydration, and gargling with warm salt water, are reasonable conservative measures. Medication: 1) Antipyretics e.g. paracetamol and ibuprofen to reduce fever and body discomfort; 2) anti-histamine and decongestant to reduce runny nose; 3) cough medicine now requires consideration; 4) antibiotics and antivirals are not necessary; 5) alternative medicine e.g. zinc, vitamin C, echinacea and vitamin D. Only zinc has been proven effective.		Udom travels between Bangkok and Nakhon Pathom by a mini bus every day. There is always someone with a common cold in the bus. How could Udom protect himself from catching a cold? (Application). Lisa catches a cold, has headache and runny nose. What drug she should take? (Application). Somchai prefers herbs rather than drugs. What would you suggest for his cold? (Application).

Multiple choice questions developed from the test blue print

1. Which one is a typical characteristic of the common cold?
   A. Presents nose symptoms and lasts within 7 days
   B. Presents throat symptoms and lasts within 7-10 days
   C. Presents fever and headache and lasts within 7 days
   D. Presents cough and lasts more than 10 days
   A is correct answer.

2. Which of the following cases is most likely to be a common cold?
   A. Mana 25 years old, has always coughed in the morning for a month.
   B. Nina 20 years old, has had runny nose and conjunctivitis for two days.
   C. Lin 50 year old, had mild cough and stuffy nose for four days and then this disappeared.
   D. Preecha 40 years old, has had red and severe sore throat and high fever for two days.
   C is correct answer.

3. Darin, 18 years old, looks quite healthy and often catches a cold, 6-8 times a year. What should you ask her?
   A. If she does not eat anything particularly.
   B. If she has had adequate sleep.
   C. If she exercises regularly.
   D. If she drinks alcohol.
   B is correct answer.

4. Lisa catches a cold, has a headache and runny nose. What medication should she take?
   A. Dextrometrophan and aspirin.
   B. Chlopheniramine and paracetamol
   C. Chlopheniramine and Dextrometrophan
   D. Aspirin and paracetamol
   B is correct answer.

5. Somchai prefers herbs, vitamins or minerals rather than drugs. What would you suggest for his cold?
   A. Echinacea
   B. Vitamin A
   C. Vitamin C
   D. Zinc
   D is correct answer.

Results and discussion

As our identified actions have not been completed, a re-evaluation has not been performed. At the moment we do not know what the outcome of our actions will be, however a higher proportion of MCQs at the application level is expected. Hopefully, our junior staff would be more capable of designing better MCQs because of the workshop and previous exam questions selection. The following are the author's reflections on the process of action learning.

First, the process allowed me to convey to our academic staff that our tests were not at the license exam level and the questions generated by the appointed external experts were more acceptable than those developed by our own senior staff. All agreed that better tests would facilitate students' learning and were more likely to lead to success at the license exam. A number of activities have been identified. We have only one strategy where each instructor has to identify the number of MCQs at various levels regarding each topic she teaches.

Second, in the previous few months we have all learnt that the preparation of effective MCQs needs experience and a lot of time and effort. The MCQs should be developed as an instructor prepares a lesson plan on any topic. The questions should be asked according to the objectives and content identified. In fact, the Thai Nursing Council requires us to present lesson plans for all subjects when the Council Committee conducts an accreditation. Having looked at our lesson plans, we found that no one identified questions to be asked in relation to each objective. We identified only a method for attaining each objective. Almost all of us prepared the test just a few weeks before the exam when we were about to finish the courses.

We developed the questions based on our lecture notes or recommended texts. It seemed that the lesson plan which contained identified objectives were useless. The plan stayed on the shelf only for the representatives from the Thai Council to see. The lesson plan should be utilised in the teaching-learning process, therefore an instructor could emphasise what students must accomplish and how they would be evaluated. This would help students to be able to focus on what content is more important and what is less important. The author's reflections indicate the need for the administrators to convince instructors to complete a lesson plan which contains questions to be asked in the exam ahead of their teaching.

Third, there are principles, techniques, and recommendations for designing better MCQs which our staff should know. In designing MCQs at application level, instructors should present a real scenario or case with certain information in practice and ask what/how is the most appropriate action to be taken (Dickinson, 2011; Schreyer Institute for Teaching Exellence, 2013). In fact, it is congruent with nursing educators' working patterns that they spend a lot of time with students practising many activities, teaching, guiding, demonstrating, leading discussions etc., in relation to patient care. However, many instructors described scenarios based on their imagination. They could learn these through a workshop which we plan to organise within a few months.

In the mean time, we have invited experts from well established nursing education institutes to guide students in preparing themselves for the license exam. In addition, each instructor has been requested to select previous nursing license exam questions relevant to their topics

for students to practise. The author has asked them to review these exam questions in groups, so that they could learn from each other, not only their own topics but others also. It was not surprising that they preferred to work individually because of time limitations, perhaps not recognising the benefits of group work.

This action learning study not only attempts to facilitate students' learning but also the learning of staff and the author. We are involved in an on-going process to work better and help students to learn better.

References

Campbell, D. E. (2011) How to write good multiple choice questions. *Journal of Paediatric and Child Health,* 47, 322-325.

Dickinson, M. (2013). Writing multiple choice questions for higher level thinking. *Development Learning*. Retrieved 25/08/13, from, www.learningsolutionsmag.com/articles/804

Paorohit, W., Pungsawang, N., Boonyawa,W. (2011). The development of preparation strategies in Licensing Examination for Professional Nursing and Midwifery of the Air Force Student Nurse and the Air Men Student Nurse. *Royal Thai Air Force Medical Gazette*, *57*(1), 17-23.

Piontek, M.E. (2008). *Best practice for designing and grading exam*. Center for Research on Learning and Teaching, University of Michigan. (CRLT Occasional paper no. 24).

Taylor, C. R., Lillis, C., LeMone, D., Lynn, P., Lebon, M. (2011). *Study guide for fundamentals of nursing: The art and science of nursing care*. Philadelphia: Lippincott Williams and Wilkins.

Thai Nursing and Midwifery Council. (2013). *Thailand nursing licensure examination.* Retrieved 25/08/13 from, http://www.tnc.or.th/files/2010/02/page-135/about_tnc_thailand_nursing_and_midwifery_council_8034c.pdf

Thai Nursing and Midwifery Council. http://www.tnc.or.th/files/2010/02/page-135/about_tnc_thailand_nursing_and_midwifery_council_8034c.pdf

Health Promotion Awareness Through Empowerment:
Nakhon Pathom Rajabhat Nursing Students

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Abstract

This action research project aims to apply the basics of the empowerment concept to health promotion teaching and learning activities, as part of the health promotion subject in Nakhon Prathom Ratjabhat University's program in Bachelor of Nursing Science. The teaching and learning activities aimed to enhance health promotion consciousness of the students. The fifty seven students, divided into groups of twenty eight and twenty nine, were assigned a task. In the first week each student was required to evaluate their own experiences about health promotion by naming their experiences and analysing their health condition. Then, each student identified the area within which they could make some behavioural improvement and planned an activity to bring about change in their behaviour, making a pledge of a reward if they accomplished it, and a pledge of punishment if they failed the task. During the third to the eighth week, the students were asked to practice health promoting behaviours according to their plan and were encouraged to report their ideas and reflections to the instructor in charge of each group. The findings show that all of the participants gained more knowledge and practiced more health promoting behaviours. All of the students were able to take control of their activities and demonstrate critical awareness through reflection. The students' level of satisfaction with this teaching method was very good.

Introduction

The Faculty of Nursing, Nakhon Pathom Rajabhat University was established in 2008 with accreditation from the Thai Nursing Council and started the first teaching cycle of Bachelor of Nursing Science in 2009. The results of the learning outcomes evaluation of nursing students in the core course of the nursing curriculum in 2010 indicate that the score on the core course subjects was at the low to moderate levels. As a result, how the subject, Health Promotion, should be taught became a hotly debated issue. The argument centred around whether traditional methods or innovative methods should be implemented, and this involved a distinct difference in beliefs about the type of strategies that should be used to teach students who are soon to be registered nurses. Registered nurses meet competency-based professional standards and quality assurance requirements.

The course director of Health Promotion conducted a preliminary student evaluation in December, 2011. The results show that the students would like to have instructors teach with a variety of techniques such as lecture (55.10 percent), discussion with the practicing of procedures (55.10 percent), lecture and group discussion (44.50 percent), lecture with

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multimedia (38.76 percent), take inquiry questions before and after teaching (30.61 percent), and a reduction in assignment papers (30.61 percent).

The subject Health Promotion is one of the core courses in every Bachelor of Nursing Science program, with some universities introducing empowerment concepts as a teaching approach. This approach includes realising the importance of self-performed healthcare, the necessity of self-responsibility, pride, self-esteem, improvement of problem-solving skills, and self-criticism (Tassniyom, 2011). It was decided to investigate whether applying the empowerment concept to teaching activities of nursing students with different characteristics and backgrounds would increase student health promotion consciousness and the ability to control themselves.

Research question

How does applying the basics of the empowerment concept through health promotion teaching and learning activities affect the health promotion consciousness of students.

Research objectives

The research objectives were:

1. To apply the basics of the empowerment concept through health promotion teaching and learning activities as part of the Health Promotion subject.
2. To enhance health promotion consciousness including health promotion knowledge and health behaviour practices of the students, through health promotion teaching and learning activities.

Review of the literature

Health promotion

The World Health Organization defines health promotion as a process of enabling people to increase control over the determinants of their health and therapy to improve their health (WHO, 1986). The Ottawa Charter identifies three basic strategies for health promotion, including advocacy to create the essential conditions for health, enabling all people to achieve their full health potential, and mediating between the different interests in society in the pursuit of health. The five priority action areas were outlined in the Ottawa Charter for health promotion: building healthy public policy; creating supportive environments for health; strengthening community action for health; developing personal skills; and re-orienting health services.

Empowerment

During the last two decades, the word empowerment has become a popular term, widely used within the health services. The word empowerment stems from the Latin word 'potere' meaning 'to be able' (Gibson, 1991). A clear understanding of empowerment is necessary for nurses to take advantage of this important tool.

Gibson (1991) defined empowerment as a social process of recognition, promoting and enhancing people's abilities to meet their own needs, solve their problems and mobilise the

necessary resources in order to feel that they are in control of their lives. Even more simply defined, empowerment is a process of helping people to assert control over factors which affect their health. The researcher defined the empowerment of student nurses as a process and outcome arising from involving authority, ability, awareness, and decision making to control the students' own lives.

The reviewed literature indicates that the antecedents of empowering people involves providing opportunities for doing, participating in activities, establishing relationships with each other, gaining knowledge or information, developing experience or skill or action and acceptance, and supporting and caring (Gibson, 1991; Gilbert, 1995; Kenneth, Carlos & Randolph, 1996; Rodwell, 1996; U.N. General Assembly, 2000; Tassniyom, 2011).

The Project

Teaching health promotion in the Faculty of Nursing Science, Nakhon Pathom Rajabhat University

Nakhon Pathom Rajabhat University, in the Western region of Thailand, provides for the development of the local region and Thai society, as well as being a resource of knowledge for the general public. It aims to provide a balanced education for the development of decent and valued individuals so as to benefit both local people and the general public. Therefore, the Faculty of Nursing offered opportunities for further education in nursing that serves the local needs of the people. The Faculty vision is to be an institution of quality nursing education.

The subject Health Promotion consists of two credits taught in the second semester of the second year of study. The course description emphasises the evolution in health promotion, factors that influence health behaviour and health promotion, strategies for health promotion practice in individuals, families, communities and schools, based on ethical and professional conduct.

The course director's desire is that the learning process of health promotion will be focused on applying theory to health promotion activities that will lead to critical thinking and critical awareness. This begins to contribute to the appropriate health care of others by encouraging students to take care of themselves. The course content and teaching strategies involved two elements. The first, based on activities in the classroom such as lectures, discussions, discussion of scenarios, role play and field trips, and the second, based on outside the classroom activities, applies the basics of the empowerment concept through health promotion teaching and learning activities. The overall content and activities are shown in Table 1.

Table 1: The Content and teaching strategies of health promotion

	Content	Teaching strategies
1	The concepts of health wellness and holistism and the evolution in health promotion.	Lecture and discussion.

	Content	Teaching strategies
2	The concepts and theories of health promotion.	Lecture, discussion and role play.
3	Strategies of health promotion.	Lecture and discussion on scenario.
4	Health education.	Lecture and discussion.
5	Health promotion and Thai traditional medicine.	Lecture and discussion.
6	Health promotion in area base: school, work place, and hospital.	Lecture, discussion and field trip.
7	Ethics and health promotion.	Lecture and discussion on scenario.
8	Health promotion issues in individuals such as healthy food consumption, physical activities, recreation, tobacco and alcohol consumptions, and drug addiction.	Applying the basics of the empowerment concept and content of health promoting issue through health promotion teaching and learning activities for 8 weeks.

Based upon the literature reviewed, the development of individual health is facilitated by: using ideas to help students learn to analyse the factors that affect health in a variety of dimensions; develop an awareness of the importance of the factors identified; and to seek to resolve the issues (Tassniyom, 2011).

Methodology

Research design

This study used an action research approach utilising quantitative and qualitative approaches.

Prior to the course students were given explanations and information and were encouraged to ask questions. The identity of individuals was kept confidential. Students had the right to refuse to answer questions at any time without having to give a reason, nor expect there to be any effect on their welfare, or results.

The sample consisted of fifty seven second year nursing students who registered to study Health Promotion in second semester in the academic year 2011.

Instruments for collecting data

The Healthy Behaviour Questionnaire

The Healthy Behaviour Questionnaire was developed by the Nutrition Division, Ministry of Public Health, Thailand (Ministry of Public Health, 2009). It contains twenty items for measuring physical activity, healthy consumption and emotional management with a three-level rating scale, comprising eighteen positive items and two negative items. Scores of healthy behaviours ranged from 0-100 points. The Cronbach's alpha coefficient score was 0.78. After calculating the score of all items measuring physical activities, healthy consumption and emotional management, the researcher compared the scores with the standard criteria as follows: less than 60 points indicated poor healthy behaviours; 60 to 79

points indicated moderate healthy behaviours; and equal and more than 80 points indicated good healthy behaviours.

The Subject Satisfaction Questionnaire

The questionnaire contained fifteen items with a five-level rating scale for measuring: satisfaction of the students with the instructor; content; teaching and learning activities; media and supporting teaching and learning; and measurement and evaluation strategies. The scores range from 0 to 5 with very poor to strong satisfaction, respectively. The mean score over 4.5 means the students were very satisfied with the quality of teaching.

The Health Promotion Knowledge Questionnaire

The questionnaire used the standard test items from the Academic Committee of the Nursing Faculty, for the final formal test. The test items had been tested for their internal validity by this Committee, and by the Community Nursing Department Committee. The formal test consisted of thirty multiple choice items related to the empowerment concept, healthy food consumption, physical activities, recreation, tobacco and alcohol consumption, and drug addiction. Correct answers were assigned a score of 1 and incorrect answers assigned 0 score.

Instrument for Research Activities

The instrument for research activities is the procedure of applying the five steps of the empowerment concept to the teaching activities including: identifying and naming an issue the students were experiencing; gathering data and analysis; planning; acting on evidence and evaluating results; and the detailing of the procedure.

The procedure

After the completion of the classroom-based activities, the course director divided fifty seven students into two groups of twenty eight and twenty nine students, and assigned an instructor for each group for two hours per week. In the activities, the students were encouraged to reflect on their activities.

Five steps in the learning cycle were as follows:

The first week

Step 1 Experiencing and identifying an issue

Each student was required to do a pedigree analysis and administer the healthy behaviour questionnaire, measure their weight, height, waist circumference, blood pressure, pulse and calculate BMI. They then analysed the health condition and evaluated their own experiences about health promotion, naming the experience, and discussing their feelings for their own health, with their friends and the instructor. Finally, the student identified an issue for promoting her/his health.

The role of the instructor for each group was to facilitate students undertaking an anthropological assessment and to do the healthy behaviour questionnaire, and then to assist

them to reflect upon the interpretation of results, and encourage them to identify an issue for promoting her/his health.

Step 2 Gathering data and analysis

In this phase, the instructor emphasised the importance of understanding their own health, and to contemplate health problems or risks that could arise. After identifying the health promoting behaviours that needed to be improved, the students investigated the issue they wished to act upon and searched for previous studies utilising databases and reputable journals which reported empirical studies. They then drew up an action plan about a health promoting activity relevant to themselves.

The instructor assisted the students in their search for information, and provided advice about a key point that each student should study and appreciate.

The second week

Step 3 Planning

Before establishing the action plan, each student identified their areas for behavioural improvement and planned a task. After reflecting on the plan with their group and the instructor the students adjusted their plans after getting feedback.

The instructor encouraged the students to undertake a task, and provided the opportunity for each student to present and discuss the action. Suggestions were made about the indicators that would be most appropriate. Finally, students and teachers designed, and agreed on, the recording of daily activities and their feelings about the selected activities.

The third to eighth week

Step 4 Acting on evidence

The action phase took place over six weeks, and the students were encouraged to take action to enhance their health, such as physical exercise, healthy food consumption and emotional management.

The students were asked to write daily reports revealing their feelings about the practical activities.

The instructor arranged a group lesson for two hours every week and encouraged reflective thinking, or adjusted planned activities as appropriate. In this phase each student made a pledge of reward if she or he accomplished the task and a pledge of punishment if she or he failed.

The instructor facilitated group discussion and reflection on the results of practice and student feelings. Finally, encouraging the students to solve any obstacles the instructor provided support and counseling for promoting her/his health.

The end of the eight weeks

Step 5 Evaluating results

Evaluating the effects of the changed practice took place to determine whether an improvement occurred. In this step the students evaluated themselves, and the course director evaluated the health promotion consciousness of the students including knowledge, healthy behaviours and their ability to control their health promoting practices.

The instructor facilitated students with the healthy behaviour questionnaire, and their reflection on results.

Results and discussion

Quantitative data

Characteristics of the students

The mean age of the students was 21.43 and most of them were female (94.74%) students who came from the Western region of Thailand. More than half of them had a normal BMI and waist circumference, and one in three of the students practiced healthy behaviours as shown in Table 2 and Table 5.

Table 2: The number and percentage of the students divided by the BMI and waist circumference (n=57)

The BMI and healthy behaviour levels	Number	%
BMI:		
Underweight (BMI <18.5)	3	5.26
Healthy weight range (BMI = 18.5 - 22.9)	38	66.67
Overweight (BMI = 23 - 24.9)	13	22.81
Obese (BMI >25)	3	5.26
Waist circumferences:		
Normal range ≤80 cm (31.5 inches) for females and ≤ 90cm (35.5 inches) for males	43	75.44
Abnormal	14	24.56

Health promoting activities of the students

The health promoting activities selected by students were physical exercise, healthy food consumption and emotional management as shown in Table 3.

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Table 3: Health promoting activities selected by students (n=57)

Health promoting activities	Number	Percentage
Physical exercise (50.88%)		
Jogging exercise for controlling weight	12	21.05
Aerobic dance for controlling weight	9	15.79
Basketball for strengthening the muscle	4	7.02
Yoga exercise	4	7.02
Healthy food consumption (43.86%)		
Control diet to lose weight	22	38.60
Control diet to gain weight	3	5.26
Emotional management by breathing exercises and meditation (5.26%)	3	5.26

Health promotion consciousness: Knowledge and practice of healthy behaviours

The researcher defined health promotion consciousness as knowledge about the concept of empowerment, healthy food consumption, physical activities, emotional management, tobacco and alcohol consumption, and drug addiction. The practice of healthy behaviours was evaluated through questionnaires.

The results indicate all the students gained more knowledge on health promotion after taking the formal final test as shown in Table 4. The knowledge related to health promotion topics such as the empowerment concept, healthy food consumption, physical activities, recreation, tobacco and alcohol consumption, and drug addiction.

Table 4: Health promotion knowledge measured on the health promotion test (n=57)

The scoring of the health promotion test (total scores = 30)		
≥ 24 scores ($\geq 80\%$)	42	73.68
$21 - 23$ scores (70 - 79%)	8	14.04
18 - 20 scores (60 - 69%)	7	12.28
15 -17 scores (50 - 59%)	0	0.00

Because students selected activities about healthy food consumption, physical activities, and emotional management it was the responsibility of the instructor to provide information for

discussion of the content about recreation, tobacco and alcohol consumption, and drug addiction.

Healthy behaviour practices

After analysis of the healthy behaviours self assessment questionnaire, it was found that the students increased their healthy behaviours from only 31.57 percent to 87.72 percent. Moreover, no student was identified as having poor health behaviours.

Table 5: The number and percentage of the students divided by the BMI and healthy behaviour levels (n=57)

Healthy behaviour levels	Before the course		After the course	
	Number	Percentage	Number	Percentage
Healthy behaviours				
Good appropriated (BMI Score $\geq$ 80)	18	31.58	50	87.72
Moderate (BMI Score = 60 - 79)	25	43.86	7	12.28
Poor appropriated (BMI Score < 60)	14	24.56	0	0.00

The rating of student satisfaction with the course was 4.68 out of 5.0 and satisfaction with the teaching method was 4.75 out of 5.

The changed healthy behaviours of the students may have been influenced by the inner motivation of each of them. The questionnaire asked about physical exercise, healthy food consumption and emotional management and the students selected only one health promoting activity, but the overall healthy behaviours were changed in all three areas. This indicates that the group discussion provided an opportunity for the students and the instructors to share their feelings about continuing the practice, and gain new information and suggestions for adjusting their plans, and therefore lead to wider change. Some of them said that hearing their friends' practices influenced their own practices. To sum up, the process of teaching provided a source for empowering the students which increased information and knowledge, relationships, and opportunities for practicing and acceptance. The source for empowering the students came from themselves, friends and instructors.

Qualitative data

Qualitative data were collected by observation, recording discussions and reflections, and the students' diaries. This data related to authority, ability, awareness, and decision making to control themselves.

Authority

The students reflected their authority by demonstrating their power to determine, or judge their own health condition according to the pedigree analysis, the anthropology measurement and the healthy behaviour questionnaire. Moreover, the students feel that they can handle their lives by adjusting and following their planned action. For example, a student wrote in her diary that:

> ...After I finished fundamental nursing practice, I would like to sleep. I do not want to do anything, but I realized that my health has some risk for diabetes disease because my grandma get sick with diabetes and I am over weight and also have poor healthy behaviour practice, so I became determined to jogging exercise for controlling weight at least five days a week.

Ability

Ability is the quality of being able to do something, especially the physical, mental, financial, or legal power to accomplish something. The students were encouraged to research for academic information with which to implement a practice aimed at promoting their health. Some of them said that they did not practice vigorous exercise, or seek a macrobiotic food shop, but they continued practising by seeking available facilities in the university such as an instructor of sport whose expertise in vigorous exercise could help them, or someone who could advise them on how to prepare healthy meals by themselves. These practices indicate they have a power for accomplishment.

Critical awareness

Awareness means having knowledge or cognisance. After the students identified their issue for promoting health they said that the important thing for promoting health was awareness of risk factors, unhealthy behaviours and avoidance of the harmful behaviours as follows:

> After I know about my risk that I might be a hypertension patient from the pedigree analysis, I read the book related to the disease and search data from the internet to answer the question how to prevent it. I know that hypertension come from parent genetics, obesity, high salt and cholesterol diet. However, I can prevent it by eliminating these risk factors.

> (Student no. 6 said in his diary).

> I realized that to take care of myself is very important. I proud of myself that I can do exercise more than I planned ... When I went home for the weekend I adjusted the jogging to Yoga exercise with my parents. I mean the jogging exercise is just one means to healt,but I can do other thins to increase my pulse rate

> (Student no. 51 told the group discussion).

Decision making to gain self-control

This is the main concept of empowerment. All of the students reflected on their decision making to control their activities.

The second semester is very busy. I need to practice in the regional hospital for two days and to study four subjects in class. I learn five days a week. It seems like having no time to exercise. Then I decided to eat macrobiotic food for promoting my health. An obstacle was there was no healthy shop available in the hospital practicum and the university canteen. I needed to adjust my plan and eat vegetarian food in some days. Finally, I can complete my mission of the plan. that is why I proud of myself

(Student no. 16 said in her diary).

I decided to do the aerobic dancing for controlling my weight with my friends. We have a problem during the weekend and the long weekend because all of them go back home. I do the aerobic dance at my home by myself. My s think it that it does not make sense. So I stop practicing. But when I came back to the dormitory I continuing practicing with my group of friends.

(Student no. 1 told in the group discussion).

According to the course director the reflections of the students indicates that they understood the importance of authority, ability, critical awareness, and decision making leading to self-control as a means of empowerment.

In summary, applying the basics of the empowerment concept to health promotion teaching and learning activities among the nursing students can be empowering. They have opportunities for doing things, participating in activities, establishing relationships with each other, gaining knowledge or information, developing experience and skills, and experiencing acceptance, support and caring.

The nursing students were satisfactied with this teaching method and it is considered that it should be part of the teaching method of Health Promotion in the Faculty of Nursing. Furthermore, the nursing students who gained this knowledge and experience in the process of empowerment are likely to disseminate this to people who they come in contact with in their work. This will empower the population to be more aware of their own health and that is the goal of nursing teaching.

Acknowledgement

References

Gibson, C. H. (1991). A concept analysis of empowerment. *Journal of Advanced Nursing*, *16*(3), 354-361.

Gibson, C. H. (1991). The process of empowerment in mothers of chronically ill children. *Journal of Advanced Nursing*, *21*(6), 1201-1210.

Gilbert, T. (1995). Nursing: empowerment and the problem of power. *Journal of Advanced Nursing, 21*(5), 865-871.

Hills, M. (2000). *Report of a workshop for teachers of health promotion*, 6th Brasilian Congress on Collective Health, Campo Grande, August 2000.

Kenneth, B. H., Carlos, J. P., & Randolph A. (1996). *Empowerment Takes More than a Minute*. San Francisco: Berrett-Koehler.

Labonte, R. (1993). Health promotion and empowerment: Practice frameworks. Toronto: Centre for Health Promotion/ParticipAction. Retrieved from, http://www.globalhealthequity.ca/electronic%20library/Labonte%20Health%20Promotion%20and%20Empowerment%20Report.pdf

Ministry of Public Health. (2009). *The healthy behaviour questionnaire: Self assessment*. The Nutrition Division, Thailand. Retrieved from, www.hpc11.go.th/download/DPAC/7.doc

O'Neill, M., & Hills, M. (2000). Education and training in health promotion and health education: Trends, challenges, and critical issues. *Promotion and Education, 7*(1), 7-9.

Rodwell, C. M. (1996). An analysis of the concept of empowerment. *Journal of Advanced Nursing, 23*(2), 305–313.

Tassniyom, N. (2011). Teaching health promotion based on the empowerment concept. *Thai Journal of Nursing Council, 267*, 17-29. (Special issue).

United Nations. (2000). General Assembly. 55th Session. *United Nations Millennium Declaration.* Retrieved July 1, 2012 from, www.un.org/millennium/declaration/ares552e.pdf

World Health Organization. (1986). *The Ottawa Charter for Health Promotion*. Ottawa: Canadian Public Health Association; Health and Welfare Canada. Retrieved from, http://www.phac-aspc.gc.ca/ph-sp/docs/charter-chartre/pdf/charter.pdf