

The development of nurse practitioners via flexible learning: Toward an innovative Master's degree curriculum in Thailand

ABSTRACT

The changing health system in Thailand has provided Thai people with more equitable opportunities in accessing health care services. As a result of medical practitioner shortages and a strong desire for nurses to expand their scope of practice, the Thailand Nursing and Midwifery Council (TNC) plans to increase the number of nurse practitioners at master degree level to staff primary care units (PCUs) and Health Centres around the country. Nursing master degree curricula in Thailand are currently offered using the traditional on-campus face-to-face mode of delivery and have low numbers of student enrolments. Furthermore, research indicates that many graduate nurses in Thailand are seeking entry to Master's degree curricula, but accessibility, convenience and availability of curricula locally are limiting enrolments.

Nursing education globally is a dynamic and iterative process. Educational curricula are based on the principles of adult learning, continuing professional education and life-long learning, which advocate flexible and learner-oriented education. Flexible learning, which has the ability to closely match the professional and academic needs of the learner, has the potential to lead nursing education toward meeting the TNC policy and health system reform in Thailand. It is essential that nursing education in Thailand be revolutionised, embracing flexible delivery modes by traditional higher education providers.

This paper presents a new model of health care service delivery and the mechanism used to integrate the principles of flexible learning into a new master degree curriculum for nurse practitioners (NPs) in Thailand.

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INTRODUCTION

Many social changes in Thailand have been affected by the reform of systems including health and education, as well as the forces of globalization, in particular, advances in information technology and evidence of a strengthening economy (Srisa-an, n.d.). These pressures have stimulated Thailand to address traditional industry and work toward improvement as a new health care system and a competitive global employment market place. The impact on health care reform and higher education has resulted in a paradigm shift in health care services and higher education. Currently, advances in technology in a climate of globalization and the restructuring of health and education systems in Thailand have led nurses to have greater opportunities in accessing information and new knowledge and prompted an increase in nurse practitioner curricula.

In the new National Constitution (1997), article 52 states that ‘... people have equal rights for standard public health care, and the poor have the right for medical services from public health facilities without any payment ...’. Health system reform in Thailand officially began immediately after the enforcement of the National Health Security Law in 2002. The Law mentions equal opportunity for Thai citizens towards accessing health care services. The universal coverage of health care policy has been implemented. Primary Care Units (PCUs) have been established in addition to the 9,767 exist-

ing health centres around the country to ensure health service accessibility for Thai citizens (Ministry of Public Health 2005). Each PCU is responsible for a population of approximately 10,000. Due to the shortage of medical practitioners, only nurses/midwives and/or public health workers are posted at the health centres or newly established PCUs. Hanucharurnkul et al.’s research (2002) supports the new nurse’s role. They report that if nurses’ knowledge and skills are enhanced they are able to play a more significant role in directing health care reform and in addressing cost effective health care needs of Thai citizens. The shortage of medical practitioners and the expectation of a new role for advanced practice nurses in primary care services has produced a need to educate nursing and midwifery personnel working at the primary care facilities. In response to the country’s need, the Thailand Nursing and Midwifery Council plans to produce 10,000 Nurse Practitioners (NPs) with Master’s degrees and place at least one NP per PCU/Health Centre (TNC 2004). However, the TNC’s objectives may not be accomplished if only conventional classroom face-to-face teaching and limited student enrolments continue.

It is accepted that the concept of flexible learning is widely used in education, including nursing education (Ormerster 2003; Palaskas & Muldoon 2003; Chae 2001; Trevitt 2000; Nunan, George & McCausland 2000). Educa-

tors perceive that 'flexible learning' as a model for education is more appropriate than other accepted models when the needs of consumers require new approaches that limit their necessity to be physically located on site for curriculum delivery (Harris 2000). It is believed that flexible learning is more appropriate to graduate nursing students who are predominantly women, work rotating shifts 24 hours a day, seven days a week, and are likely to be managing family commitments.

Although flexible learning significantly reduces the required amount of formal face-to-face contact and allows students to progress through key course milestones at different rates (Bryant, Compell & Kerr 2003), it is critical to quality learning in many disciplines, including nursing education (Zimitat 2000). This paper discusses and introduces the preparation of the nurse practitioners' curriculum via flexible learning in Thailand.

NURSE PRACTITIONER CURRICULA AND NURSE PRACTITIONERS' FUNCTIONS IN THAILAND: A NEW MODEL OF HEALTH CARE SERVICE DELIVERY

The nurse practitioner (NP) is being recognised in a growing number of countries around the world, for example, the United States, the United Kingdom, Australia, New Zealand, and Canada. International research suggests that NPs be authorised to prescribe medication, prescribe treatment, refer clients to other professionals and to admit patients to hospital (Canadian Nurses Association, 2002). Educational preparation is also recommended at Master level (International Council of Nurses (ICN), 2003). To be endorsed as an NP in the United States of America (USA), the United Kingdom and Australia, for example, candidates must have completed a Master's degree in nursing and be certified by the nursing board of the state in which they want to practise. However, the impetus for the acceptance and subsequent development of NP

models in most countries is related to health system reform (ICN 2001). The nurse practitioners' curriculum in Thailand has responded to the need for a new model of health service delivery.

Nurse practitioners were introduced as a result of the serious shortage of medical practitioners in Thailand. Nurse practitioner roles were recognised and endorsed for practice since 1974 (Hanucharunkul 2004: 14). Furthermore, Thailand also responded to the World Health Organization (WHO)'s Health for All by the Year 2000 and Primary Health Care (PHC). The Ministry of Public Health (MOPH) has supported the community to establish community Primary Health Care (PHC) centres throughout the country for the provision of basic services, disease prevention and health promotion. Traditional NP educational curricula required candidates to be registered nurses (RNs) with five years' professional experience to enrol in university courses that entailed three months to one year of full time study with content delivered by face-to-face teaching in the classroom. The scope of practice of NPs was limited prior to the establishment of the PCUs. The functions of traditional NPs have been focused on primary care activities including prescribing therapies and administering medications. According to the regulation of the Ministry of Public Health, these functions can only be undertaken under the supervision of a physician. Anecdotal evidence suggests that it is rare for physicians to supervise nurses who are providing primary medical care. This situation has provided nurses with an opportunity to expand their skills and enhance their capacity for independence autonomous practice.

The Royal Thai Government agreed to the proposal of the Thailand Nursing and Midwifery Council that each PCU and Health Centre be staffed with at least one RN and one NP. The TNC also proposed that the NPs posted at the PCUs should hold a Master's degree. The Thailand Nursing and Midwifery Council, with cooperation from nursing institutions in all uni-

versities, plans to produce 10,000 NPs at Master's level within ten years, starting from the next fiscal year (TNC 2004). It is expected that the functions of NPs graduating from the Master's degree curriculum will include health promotion, prevention of illness, health assessment, diagnosis, and prescription of medications, as well as home visits and home care (Hanucharunkul 2004). To empower NPs, the Thai Government issued a Ministry Decree to legalise prescribing tasks performed by NPs. This was organized by the effective negotiation of the TNC. The initial NP curriculum at Master level is based on the United States model. However, it is argued that the development of nurse practitioner educational curricula and the scope of NP roles must consider Thai cultural and social demands rather than replicating practices from Western countries.

It is noted that in this transition period there is an immediate need to have NPs work at all PCUs and Health Centres. The new four months nurse practitioner curricula are established and approved by the TNC. Enrolment will be recruited from RNs working at PCUs/Health Centres who will take temporary leave of absence for the training and will return to their jobs after its completion. The NPs graduating from this four months curriculum will have a certain level of prescribing authority (Hanucharunkul 2004).

PRINCIPLES OF FLEXIBLE LEARNING

What is flexible learning?

Flexible learning is a contemporary way to focus on education, from the institution and teacher to the learner (Bryant, Campbell & Kerr 2003; Ormester 2003; Palaskas & Muldoon 2003; Collis & Moonen 2001; Ling et al. 2001; Nunan, George & McCausland 2000; Trevitt 2000). Flexible learning is described by Dekkers and Andrews (2000: 7) as a student-oriented approach to learning which caters for

the individual needs and requirements of the learner, including choice of time and place of study, and suitability to an individual's learning style. Flexible learning includes mixed modes of learning, such as on-campus, off-campus and off-shore, usually based on information technology. Palaskas and Muldoon (2003: 3) explain that the use of information and communication technologies (ICTs) is the key delivery agent to support flexible learning experiences. A variety of flexibility approaches were created to support learners to meet their comfort zones and their milestones.

Flexible learning may be used in combination with existing approaches to teaching including on-campus classroom learning, distance education, open learning, online learning, and a number of other approaches. Flexible learning may also include some on-campus face-to-face activities (Ling, Inglis & Webster 1999). Furthermore, flexible learning approaches involve the use of print and electronic tuition materials. Flexible learning in higher degree nursing education incorporates nursing theory and nursing practice that includes face-to-face activities and preceptorship.

Components of flexible learning in higher education

The components of flexible learning in higher education include technology, pedagogy, implementation strategy and the institution, as adapted by the authors and illustrated in Figure 1.

Although flexible learning has various components, technology is currently accepted as the key component of flexible learning that has greater opportunity for access. Online learning and electronic learning (e-learning) are components of flexible learning. Palaskas and Muldoon (2003: 3) support the use of information and communication technologies (ICTs) as the key delivery agents in curricula that utilise a flexible learning approach. Educational technologies that can promote and support flexible learning include the Internet (e.g. the World Wide Web,

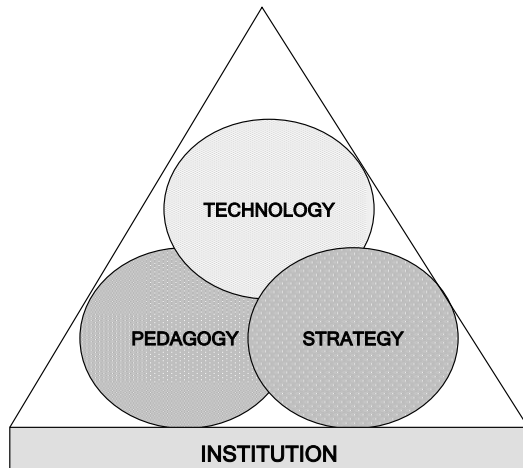


FIGURE 1: FOUR KEY COMPONENTS OF FLEXIBLE LEARNING IN HIGHER EDUCATION
(based on Collis and Moonen 2004)

e-mail, chat rooms, online forums), mailing lists, tele-conferencing, video-conferencing, and computer-based simulations, as well as instructional software CD, video and tape, cassettes.

Pedagogy, the second component of flexible learning, as described by Collis & Moonen (2001), is the manner of teaching and learning processes and a context in which the curriculum is organised and implemented by the instructor. Pedagogical categories via WWW-based applications include course organisation, lectures and contact sessions, self-directed study and assignments, major assignments and examinations. In addition, flexible learning approaches incorporate mentoring/preceptoring elements designed to facilitate learning. The success of electronic learning provides opportunities for critical thinking and discussion between students in various ways. Such discourse is essential in the quality graduate educational experience.

Implementation strategies are the third component of flexible learning. According to Collis and Moonen (2001), the success of the implementation phase is dependent on educational effectiveness, ease of use of the curriculum, environmental factors, and personal engagement. They contend that the success of flexible

learning provision is reliant on a skilled team of educational and technical support staff who share a common goal. Collis and Moonen (2001) indicate that regular meetings of the team are useful in ensuring that the team functions effectively. Although flexible learning and online learning has been increasingly accepted and implemented in a number of universities, the strategies of teaching and learning are required to be appropriate to online learning. This is supported by Sturgess et al.'s (2002) research who found that to enable WebCT to be used effectively, a suitable online learning environment to support Problem Based Learning needs to be developed. An example of this is the report of a 1998–1999 University of Illinois Faculty seminar (1999) which argues that online praxis breaks down socially rather than building a sense of community. This report cautions that once an online curriculum is implemented, the teaching paradigm must change to accommodate online instruction by moderating the online interaction away from the traditional text-based lecture.

The institution is the organisation/provider through which the curricula are offered. Organisations provide the infrastructure and support staff, and provide instructors with access to training, education and professional development curricula that assist them to gain new skills and insights relating to their pedagogical practices. Infrastructure support also includes library services and technological infrastructure available to the instructor for use in the teaching process (Collis & Moonen 2001). Organisations, therefore, have well developed information technology systems and are well equipped to consider the adoption of flexible delivery teaching/curricula. The organisations provide online pedagogy with regular human interaction to ensure that students get maximum benefits without conventional classroom face-to-face teaching. This is supported by the report of the 1998–1999 University of Illinois Faculty seminar (1999) which concludes that high quality

online pedagogy in flexible learning can be carried out if professors make an effort to create and maintain the human touch of attentiveness to their students. Furthermore, Collis and Moonen (2001) support that successful flexible learning must include regular interactions between instructors and learners (teachers and students).

INTEGRATION OF FLEXIBLE LEARNING INTO A NEW MASTER'S DEGREE CURRICULUM FOR NURSE PRACTITIONERS IN THAILAND

Advanced practice is manifest in the work of many Thai nurses. Advanced nursing practice is defined as knowledge and expertise, clinical judgment, skilled and self-initiated care, and scholarly inquiry (Hanucharurnkul 2004). Many Thai nurses, however, have limited access to higher degree education because they are geographically distant from universities and/or the mode of delivery and status of study are inflexible. Ensuring that Thai nurses have the opportunity to consolidate practice, knowledge and skills and have the opportunity to become nurse practitioners will require the development of Master level curricula that are flexible in orientation and therefore more accessible. The development of appropriate educational curricula that address curriculum expectations, as determined by the Thai Nursing and Midwifery Council and the Ministry of Health, will meet the needs of the nurses. Flexible learning as a modality for program delivery is considered appropriate for this initiative and has the potential to meet the needs of the targeted student cohort.

The current approach of higher degree nursing education in Thailand is that of face-to-face teaching in conventional classrooms, fixed class timetabling, and the limiting of student enrolments because of available classroom facilities. While the nursing institutions, which are the responsibility of the Ministry of Education and

the Ministry of Public Health, will be autonomous due to the effect of globalisation on technology advances and growth in economy as well as Thailand context changes including financial reform and educational reform, it is improbable that graduate nurses will be permitted to study further through the full time mode, which is only offered by traditional higher degree curricula. However, recently, some universities have extended their educational curricula to other provinces for those who want to pursue their education but are unable to take educational leave. These curricula are offered at flexible times in the evenings and on weekends. These innovations in program delivery are consistent with the principles underpinning flexible learning.

Hingkanont (2001) found that the majority of the graduate nurses who completed their education via a distance educational mode would consider studying while remaining employed if access to higher degrees was available to them. Nursing education in Thailand is poised to enter a new phase if demand of nursing service is to be met. Currently, ten nursing institutions offer Master's degree programs (Commission on Higher Education 2004), available as on-campus traditional curricula only. Furthermore, an important reason for the TNC's plan to produce a large number of nurse practitioners is to place them at PCUs. As a result of the TNC's plan, it is reasonable to integrate flexible learning into a new Master's degree curriculum for nurse practitioners in Thailand, if all processes are well thought out and transitions taken into account.

Anderson and Mercer's research (2004) is relevant to this project and reveals that there are no differences in the application of knowledge to practice between students who undertook the traditional classroom course, students who completed the course through a mixture of classroom and part-time online studies, and students who undertook a fully web-based course. Furthermore, several NP curricula using the internet-based classes offered through distance

education have been successful in the USA (Stawowy 2002). However, it is argued that clinical nurses have the capacity to assess the clinical skill of students engaged in clinical practice, but they must be supported.

Preceptorship has been used to support students in clinical areas, according to Howard (1999). Recently, the role of preceptor has become increasingly important in preparing new or transitioning nurses to function more efficiently (Wright 2002). It is believed that preceptorship can bridge the gap between nursing education and the reality of the workplace. Furthermore, preceptorship as a strategy for supporting students in the clinical setting who are distant from the educational provider is a useful adjunct for flexible learning such as nurse practitioner curricula.

Macklin and Blenkham (2003) contend that clinical skills and knowledge can be assessed using 'patient scenarios'. This approach provides the student with the context in which practice occurs, allowing them to relate theory to the reality of practice. It is indicated that clinical simulation could provide the opportunity for repeat practice that is essential for learning such skills in nursing. Clinical simulation is consistent with cognitive learning theory because it is interactive, builds on prior knowledge and relates to real clinical problems, assert Feingold, Calaluce and Kallen (2004 cited by: Johnson, Zerwic & Theis 1999). However, Simpson (2003) states that nursing remains a high-touch, not just a high-tech, profession. He also argues that clinically focused nursing education curricula must include supervised exposure to the clinical context. It is proffered that nursing education curricula that aim to enhance clinical skills and knowledge, for example, the preparation of the NP curriculum, must include supervised clinical practice.

Technology is becoming an important learning tool that facilitates students access to a variety of information and solutions by themselves. Therefore, to enhance and update nursing

knowledge and skills, graduate nurses' competency with computer technology, such as online and e-learning is increasingly important in new global discourses and the current climates in Thailand. Flexible learning is presented as an appropriate methodology that supports lifelong learning that is the important goal of educational reform in Thailand. However, it should be cautioned that technology does not replace human face-to-face contact that is the heart of nursing practice. The authors recommend that flexible learning curriculum for NPs can be used for both conventional classroom study and distance mode.

The flexible learning curriculum must incorporate a variety of learning methods, including education and communication technologies, computer technology and human face-to-face interaction, in order to meet professional needs and student demand, as well as overcome the distant geography of Thai nurses.

CONCLUSION

The authors consider that the development of NPs in an innovative Master's degree curriculum via flexible learning is a useful mechanism to develop this important role in Thailand. The flexible learning milieu is also suited to the current Thai nursing educational context and is consistent with global nursing trends. If flexible learning is to be implemented, it is essential for faculty and student to understand the underpinning principles of flexible, adult learning. It is essential that the preparation of the components of flexible learning in higher education include technology, pedagogy, implementation strategy and the institution. The important issue that must inform future directions in higher degree nursing education is: *Does increasing flexibility in educational curricula improve the quality of the learning experience, in particular, in nursing practice?* Clearly, the importance of this clinical role dictates empirical research as well as theoretical discourse and debate.

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