

# A learning management model of bachelor of education in five year program in the 21<sup>st</sup> century

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## Abstract

This study aimed to develop learning management model of bachelor of education five year program. The model developed by researcher was intermixture, quantitative and qualitative research. The collaboration system analysis was applied for analysis of system data. The research instrument was a questionnaire consisted of: (1) expected learning outcome and authentic learning outcome (2) the characteristics of undergraduate students (3) learning management model. Research on 3 significant factor and the last stage was establishment of the learning management model checked by experts and professionals using the Delphi Technique. A learning management for the bachelor of education in five year program, research on 3 significant factors (i.e. Input factors, Process factors and Outcome factors) revealed that: 1) For the Input factors, the contents of the curriculum should be diversified in an appropriate manner and it should answer all the needs of students and employers. Also, the instructors should preserve their quality as a role model, by continuing to develop themselves. Lastly, the supporting technologies should be modernized and adequate. 2) For the Process factors, the learning process should focus on the self-learning skills, developing an ability to use information technology media as a learning basis, and on promoting good ethics and professionalism in teaching. 3) For the Outcome factors, graduate students should improve their knowledge as a result of achieving the curriculum's goals. Their employers should be highly satisfied with these graduate students.

**Keywords:** learning management, bachelor of education in five year program, 21<sup>st</sup> century

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## 1. Introduction

“Education” is one of the tools used to develop humans. The National Education Act of B.E. 2542 (1999) set the goal of education management which is to provide opportunity to learn for all people and that learners are most important. The learning process must encourage learners to develop naturally towards full potential (National Education Act of B.E. 2542). The Bachelor of Education (5 year) program is crucial in the production of graduates with the characteristics desired by their potential employers. Also, the program development and management processes must be modern, flexible and meet the needs of the graduate users, students, society and the local community. The program must improve students' knowledge and professional skill and provide students with basic knowledge both in theory and practice and in research necessary for advancement of education

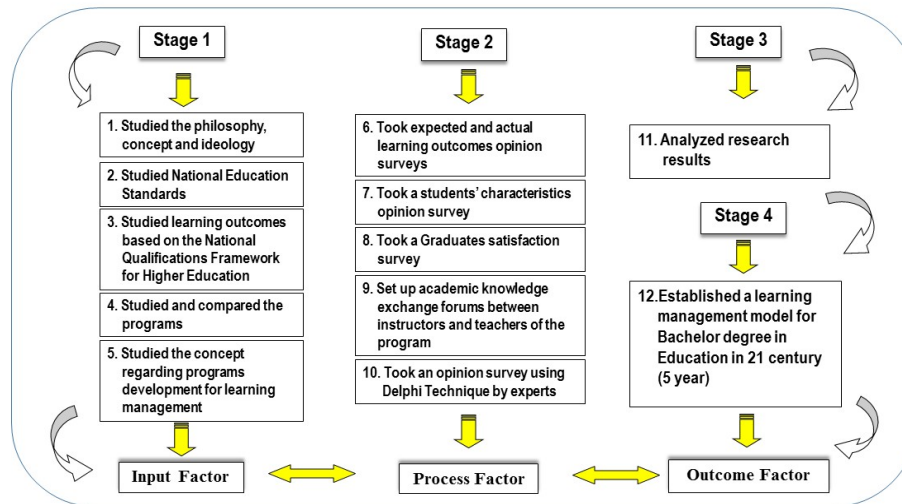
The researcher is aware of the importance of qualifications framework as it promotes quality development in learning management culture and sets standard criteria for graduate quality in the Bachelor of Education (5 year) program and for acceptance at the international level. Therefore, this research aims to find ways to implement appropriate learning process in accordance with the Qualifications Framework which is also known as “Learning Management by using the National Qualifications Framework of B.E. 2552 as a standard” for producing quality and standard graduates.

## 2. Documentation

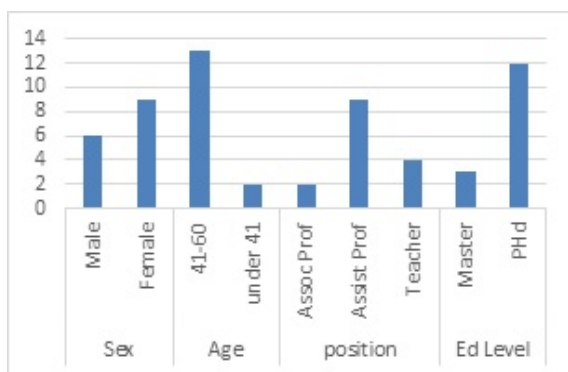
### 2.1. Philosophy and concept of higher education

Higher education is education beyond high school level. John Newman of Oxford University suggested the concept of higher education as “knowledge for its own sake”. The goal of knowledge is wisdom. Higher education allows learners to see the relationships of

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**Figure 1:** The diagram summarizes the process of conducting research on learning management model development in accordance with the National Qualifications Framework for Higher Education B.E. 2552.



**Figure 2:** Sample size and general information on status of survey respondents.

everything which is called “liberal education” Therefore, the goal in higher education is not specialization in something or providing expertise in a profession, it is to elevate the mind, intellect and personality suited for being a great philosopher and to promote manner, thoughts and judgment to solve society’s problems. To achieve such goals is challenging and it is a university’s responsibility as an institution of higher education. One must set the direction and mission of higher education in a modern way (tansiri, 2006) the goal is in accordance with the opinion of Puay Ungpakorn who said that higher education is the highest level of education and to provide higher education is to pass on the great art of the country. Such art is a very important foundation of human life and society (Janwit, 2002), (Prawet Wasee, 2003) Argued that higher education for Thailand must take life as an important factor, not education itself according to a religious prin-

ciple which states that “life is education and education is life”; thus, education involves life. Education must make life better. An education system should be the society’s brain. The brain has 4 intellectual functions: (1) higher education must allow truth perception, as if any untruth is perceived, no wisdom will be created in order to understand the truth; (2) When perceived, the truth must be analyzed and synthesized into a higher level of intellect than before; (3) Utilization considers how it can be used, linked, adapted or resynthesized; and (4) after applying, assessment must be made in order to see its effectiveness and then this repeat the process again to create higher intelligence.

## 2.2. The world and Thailand in the future that will affect Thai higher education

### 2.2.1. World economy and sufficient economy

(1) Higher education must provide proficiency in English and the native ASEAN languages, so that Thai people can communicate with neighboring countries effectively and the opportunities to live and work internationally will increase, especially in ASEAN countries. (2) Higher education must encourage ASEAN studies in many aspects such as cultures, ethnic diversity and regimes. Higher education must also provide legal knowledge in preparation for working transnationally. (3) Higher education must produce graduates who are ready to adapt, are skillful, able to survive amidst the differences of race, religion, culture and language effectively and are able to work with others with high productivity and be accepted internationally. (4) Higher education must focus on the higher education Qualifications Framework to improve the quality of graduates to be equivalent to foreign grad-

**Table 1.** shows the research period, list of studies, samples and research tools for the research on the learning management model of the Bachelor of Education (5 year) program in accordance with the National Qualifications Framework for higher education of B.E. 2552 following the integrated system analysis guideline.

Research Stage	List of Studies	Sample Size	Research Tool/Analysis
Stage 1	1. Philosophy, concept, and ideology 2. National education standards 3. Learning outcomes based on the National Qualifications Framework 4. Programs comparison 5. Concept regarding program development for learning management	Report documents	Check list/interpretations, Content analysis
	6. Opinion regarding expected and actual learning outcomes survey	80, 90, 94 Senior students from KU, CU, & KKU	Survey/ $\bar{X}$ , S.D and Paired Samples t-test
Stage 2	7. Opinion regarding students' characteristics survey on TQF	Graduates user representative/19, 17, 12 School, Headmaster & Teacher Trainer from KU, CU, 17 & KKU, 12	Survey/ $\bar{X}$ , S.D
	8. Graduates satisfaction survey	80 Senior Students from KU	Online Survey/ $\bar{X}$ , S.D
	9. Setting up academic knowledge exchange forums between instructors and teachers of the program in 2 Stage	Experts, teachers from KU & CU	sound recording from Experts/Learning translation, Interpretations, Content analysis
	10. Educational and program professionals/experts opinion survey	10 Experts in Education and Curriculum Development	Delphi Technique/Median, Interquartile range

uates and to strengthen the network of international higher education to raise the quality of higher education through academic services projects. (5) Higher education should accelerate the development of higher education teachers, both in quantity and quality to be able to use English for education in preparation for full engagement with the ASEAN community and to raise the quality of education to an international level by, for instance, setting up international teacher exchange programs or international academic conferences. (6) Higher education must be quality assured at an international level by creating standard criteria for quality comparison.

### 2.2.2. Changes in Thai society

(1) A change in the demographic structure with an increased aging population in many countries, including Thailand, affects the movement of working people across the country and will have an impact on the development of Thailand in the next 10-20 years. (2) Changes under globalization have caused Thai society to become materialistic and more dependent on technology in daily life. (3) Focusing on producing quality graduates is a policy every country has been seri-

ously and continuously developing. However, Thailand is still unable to improve the education quality substantially due to the dissonance of the whole education system and a lack of a leader who has the vision and commitment to implement the policy seriously and continuously. (4) Preparation is needed for national security issues, derived from risks of both terrorism and transnational crimes which are expanding and more violent including violent issues in the country such as the existing southern insurgency, disharmony caused by inequality, injustice and political instability. Such preparation is deemed crucial to building quality, safe and stable life. (Office of the Higher Education, Vol.5 (2008-2013) No2.)

### 2.3. National education standards according to the National Qualifications Framework for Higher Education B.E. 2552

According to the Ministry of Education Gazette: Qualifications Framework for Higher Education, B.E. 2552, to guarantee the quality of graduates at each level and in each field and to use the Framework as standards to produce quality graduates in compliance to standards of learning set out by Higher Education

Table 2. input factor trend.

input factor trend	Visions of future		
	Median	desirable	undesirable
(The future Teacher Production Program)			
To set a vision is that Thai people can learn all through their lives, be good people, happy, immune and conscious of current world events.	5	100	-
The program's goal should be set in order to develop individuals to have knowledge, skills, wisdom, emotional intelligence, and adaptive skill (flexible and agile)	5	100	-
The <i>program's content</i> should include sciences and specific subjects that enable students to manage knowledge holistically by analyzing and what they learned synthesizing and then applying it to create innovation.	5	100	-
The <i>program development strategy</i> is to prepare for changes such as strategies for teaching in English and other languages in the ASEAN region.	5	100	-
(Teacher's characteristics include :)			
<i>professional ethics</i> , educational leadership, continuous community service mind, the ability to work with others based on democratic public interest which are interconnected and will drive sustainable development for society.	5	100	-
<i>focus on learning and developing activities</i> which promote skills and ethics, problem solving ability, teamwork and communication skills	5	100	-
<i>The ability to develop educational innovation and information technology</i> , is the ability to design, build, improve and choose learning and teaching innovations and the ability to build a learning network.	5	100	-
good influence for students, the ability give advice, information technology proficiency and mentoring and coaching.	5	100	-
(The program's content)			
<i>The program must also be varied</i> , interesting and compliant with working students and enhance students' ability via the worldwide network.	5	92.9	-
( <i>Supporting factor and management</i> ) Sufficient learning and searching sources via network must be available.	5	100	-
To develop a university into a university of learning, the <i>development of a risk management system</i> , of education quality assurance	5	93.3	-
Financial and budget mechanisms must be conducted.	5	93.3	-

Commission which cover at least 5 domains as follows:

- (1) Ethics and morals
- (2) Knowledge
- (3) Cognitive skills
- (4) Interpersonal skills and responsibility.
- (5) Numerical analysis, communication and information technology skills

For fields of study that focus on practical skills, standards of learning in the aspect of the Psychomotor Domain are required. Each domain of standards of learning for each level of qualification and program must at least follow the guideline of Qualifications Framework for Higher Education B.E. 2552 set out by Higher Education Commission (Education, 2008, Vol.15 No 2.)

To equalize the quality of graduates in a field of study at each level of qualification, it is necessary to set the standard of qualifications in the Bachelor of

Education (5 year) program to be in accordance with the Qualifications Framework for Higher Education. Therefore, by virtue of Sections 8 and 16 of the Administrative Organization of the Ministry of Education Act, B.E. 2546, the Minister of Education, by the recommendation of the Higher Education Commission, at meeting No.1/2554, held on 6 January, B.E. 2554, issued an announcement stating that (1) the learning management standard of Bachelor in Education (5 year) program must not be lower than the "Qualification Standard of Bachelor degree in Education (5 year) program" (2) Bachelor of Education (5 year) program organization and development must aim at establishing standards of learning for graduates under which such a program and other elements must follow the Qualification Standard of Bachelor degree in Education (5 year) program attached with the announcement. (3) Any higher education institutions that provide a Bachelor of Education (5 year) program

Table 3. process factor trend.

process factor trend	Median	Visions of future	
		desirable	undesirable
Learning process includes			
<i>Happy learning</i> . An atmosphere suitable for learning must be provided. Teachers must apply good teaching techniques and methods.	5	100	-
<i>Appropriate learning</i> must be provided by stimulating the learning situation to be as close as possible to reality in deep and broad dimensions in order to produce real learning.	5	100	-
A <i>multi intelligence learning process</i> must also be implemented by designing flexible and varied learning management.	5	100	-
Multi intelligent learning <i>enables students to connect knowledge in theory and in practice together</i> and <i>uses modern learning media and technology</i> .	5	100	-
There should be <i>a variety of styles and types of activities</i> that increase students learning curve and stimulate them to reach full potential.	5	100	-
Assessment and evaluation process.			
Tools are used to assess and evaluate based on teaching and learning process.	5	100	-

after the announcement came into force must improve their program to follow the Qualification Standard of Bachelor degree in Education Program within the B.E. 2555 academic year.

The Education Program involves art and the science of teaching psychology, learning management, teacher and personnel training and preparation before taking up a position. The Program also includes teacher and personnel development for formal education, non-formal education and informal education. Learning management for the Education Program consists of teaching subjects and majors in humanities, social sciences and natural science. Therefore, the Education Program is interdisciplinary with the social sciences, humanities, and other scientific disciplines being linked and integrated in order to improve quality for learners both of school age and above which will result in their ability to develop a sustainable economy, society and environment.

### 3. Research Methods

This research was conducted using Mixed Method Research, including Documentary Research, Survey Research and Qualitative Research in the form of focus group research. There were 4 stages of data collection: Stage 1–2 was the study of input factor, process factor and output factor and the study of learning management model of Bachelor degree in Education (5 year) program.

Stage 3 A analysis and synthesis of research results.  
Stage 4 Establishment of the learning management model evaluated by experts and professionals using the Delphi Technique. A diagram of the 4-stage research process is shown below.

### 4. Research results

The results of the research on the Input factors, Process factors and Output factors regarding graduates' satisfaction toward Education Program in Learning Management were as follows:

1. The results of studying the general information on the status of the survey target groups are illustrated in Table 2. This bar graph shows the sample size and survey takers' general information. About 60 percent of the survey takers (9 respondents) are female, and the rest (6 respondents) are male. The graph also reveals that most of the survey takers are aged in between 41 - 60 years; 13 of 15 to be exact. In addition, the graph also depicts the information about their educational position and the level of education as well: For the educational position/titles, there are 9 Asst. Profs., 2 Assoc. Profs., and 4 teachers/lecturers. For the level of education, there are 12 survey takers who achieve a master's degree and the remaining 3 survey takers achieve the Ph.D. level.

2. Regarding the results of the research on *input factor* trend, experts have commented on the "possibility" and "visions of the future" that they are most suitable and extremely and very desirable are illustrated in Table 3.

3. Regarding the results of the research on *process factor* trend, experts have commented on the "possibility" and "visions of the future" that they are most suitable and extremely and very desirable as illustrated in Table 4.

4. Regarding the results of the research on Output factor trend, experts have commented on the "possibility" and "visions of the future" that they are most suitable and extremely and very desirable as illustrated in Table 5

**Table 4.** process factor trend.

process factor trend	Median	Visions of future	
		desirable	undesirable
<b>Activities and student development.</b>			
Activity models should be changed based on situations and society's needs so that students have direct experience from practicing teaching in learning institutions located in quality service areas.	5	100	-
A love of the teaching profession by students should be encouraged.	5	100	-
Good culture and local wisdom should be acknowledged, taken care of and maintained.	5	100	-
<b>Ethics.</b>			
Should be ethical, generous, hard-working, punctual and admirable.	5	100	-
They should also be voluntary, self-disciplined responsible and should stick to professional ethics and have good values.	5	100	-
<b>Knowledge.</b>			
Should be able to integrate knowledge regarding the teaching profession such as education principles, educational philosophy, the teaching profession, teachership, design and development of the program.	5	100	-
They should also be able to apply knowledge to society	5	100	-
To integrate the teaching profession and a specific profession together such as teaching psychology, program, innovation and information technology development and evaluation and assessment.	5	100	-
<b>Cognition.</b>			
Students should be leaders with cognitive ability to think, creatively develop learning management (learn how to learn) and have visions.	5	100	-
They should be able to academically think about sciences they study and link them to others.	5	100	-
<b>Interpersonal relations and responsibilities.</b>			
Students should be caring, helpful and able to creatively solve their own as well as others' problems.	5	100	-
<b>Analysis, communication and information technology.</b>			
Students should be able to use communication to define their specific purposes such as teaching reports and be self-motivating.	5	100	-
<b>Learning management skill.</b>			
Students should be experts in managing learning for a variety of learners including those who have high or medium competency or those who have special needs.	5	100	-
Students should also acquire knowledge searching skill, a new knowledge paradigm and be eager to learn on their own (self-learning)	5	100	-
They should be capable of design critical thinking and apply it to solving a problem such as by inductive and deductive reasoning as well as systematic thought process.	5	100	-

## 5. Conclusion and Suggestions

In the new paradigm of learning management for the Bachelor of Education (5 year) program in the 21st century, the results revealed that the National Qualifications Framework for Higher Education B.E. 2552 and learning skills in the 21st century are hardly different. The important thing is that the teachers must change themselves first and understand the changing world by using mixed learning processes and the Learner Center learning model. Learning outcomes must include 3 aspects which are cognitive domain, objective domain and psychomotor domain. With regard to TQF, there must be 6 aspects included. (1. Ethical and moral, 2. Knowledge, 3. Cognitive skills, 4. Interpersonal skills and responsibility, 5. Numerical analysis, communication and information technology skills, 6. Professional practice skills)

Therefore, learning management must follow the higher education institute's policy on the desirable characteristics of students which is based on the Thai Qualifications Framework for Higher Education B.E. 2552.

Expected learning outcomes for TQF on the aspects of ethics and morals are aimed to develop students' morality and responsibility for themselves and others in overview. In particular, they are separated individually as mind-mapped by the teacher.

Cognition skill means the ability to find facts, to understand and evaluate ideas and concepts and to solve complex issues for which knowledge must be evaluated in order to creatively solve complex issues.

Interpersonal skill means that the students must be able to work in teams and be responsible for themselves and others. Responsibility is reflected in ethics and morals while team work is reflected in interpersonal skills in higher education.

Numerical analysis, communication and information technology skill. There should be subjects that provide students with opportunity to express their opinions. Communication should be clear, concise and get to the point. Therefore, it is teacher's duty to help students with communication and their usage of modern communication tools in this so-called Information Age.

Learning management skill. Knowledge, cognitive and interpersonal skills must be encouraged. Students must acquire these skills by themselves. Teachers can only give them advice. To help students acquire these 3 skills, teachers must use new methods of teaching, demonstration, experimentation, discussion, creative thinking and projects. Critical thinking must also be conducted. If teachers want to promote these 3 skills, the focus should not be too much on teaching and lecturing. If evaluation needs to be in accordance with TQF, achievement, skills and attitude must be evaluated based on objectives in order to meet the National Qualifications Framework for Higher Education B.E. 2552

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