

**APPENDICES**

**ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่**  
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## **APPENDIX A LIST OF EXPERTS**

**The expert to verifying the indicator regarding teacher's roles to promote Lifelong Learning skills in the survey in regard to content analysis.**

1. Dr. Sirilak Fuangkarn                      Director and manager Wattana Wittaya Academy, Bangkok.
2. Dr. Sirinan Sriweraskul                      Director of The Prince Royal's College, Chiangmai Province
3. Dr. Pikul Leaysiripong                      Director of Anusarnsunthorn School , Chiangmai Province
4. Dr. Jitpinya Choomsainaayuthaya                      Deputy Director for Academic Affairs, Innovative Learning Center, Srinakharinwirot University
5. Asst. Prof. Dr. Jintana Sujjanun                      Faculty of Education, Chiang Mai University
6. Asst. Prof. Dr. Nittaya Sumretphol                      Faculty of Science and Technology, Rajamangala University of Technology Krungthep
7. Dr. Saksit Rittilun                      Faculty of Education, Kalasin Rajabhat University

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**The expert to verifying the content analysis and to considering the model quality**

1. Dr. Kittisak Newrat Faculty of Education, Chiang Rai Rajabhat University
2. Dr. Saowapa Punjaariyakul Faculty of Education, Chiang Mai Rajabhat University
3. Dr. Thak Thongphubate Faculty of Economics, Chulalongkorn University
4. Dr. Surang Patate Supervisor of Phayao Primary Educational Service Area Office 1
5. Dr. Mareelat Kajitnatitam Faculty of Education, Ubon Ratchathani Rajabhat University
6. Dr. Anudtida ChiangChee Ban San Pasak School, Amphoe Hangdong, Chiang Mai
7. Asst. Prof. Dr. Sirisawat Thongkarnluang Faculty of Education, Suratthani Rajabhat University
8. Dr. Pattana Kowittayakul Faculty of Education, Lampang Rajabhat University

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### Experts to considering the model quality

1. Asst. Prof. Dr. Ratee Nuntasukon Faculty of Education, Suratthani Rajabhat University
2. Asst. Prof. Dr. Songsak Phuseeaon Faculty of Education, Mahasarakham University
3. Dr. Chailikit Soypetkasem Faculty of Education, Thaksin University
4. Dr. Aomtakit Pansri Faculty of Education, Naresuan University
5. Dr. Mahdee Waedramae Faculty of Education, Prince of Songkla University
6. Dr. Paisan Worakom Faculty of Education, Mahasarakham Rajabhat University
7. Dr. Sawatchai Sripanomtanakorn Faculty of Education, Rambhai Barni Rajabhat University
8. Dr. Songsri Toonthong Faculty of Education, Thepsatri Rajabhat University
9. Dr. Preechar Samakee Faculty of Education, Nakhon Si Thammarat Rajabhat University
10. Dr. Kuntan Ngajuar Trat Community College
11. Dr. Sriprapai Inchaihep Boromarajonani College of Nursing Nakhon Lampang
12. Dr. Orawan Samphawamana Boromarajonani College of Nursing Suratthani
13. Dr. Komwat Rungruang Boromarajonani College of Nursing, Surin

## **Academic Experts (School Director, Supervisor, Teachers) and Computer Experts**

**13 people**

### **School Director**

1. Dr. Buntiwa Tawapitak Ban Thung Khao Phuang School, Amphoe Chiang Dow, Chiang Mai
2. Dr. Masarin Tananarapong Navamindarajudis Phayap School, , Amphoe Muang,Chiang Mai
3. Mrs. Sripan Kasornsri *Wat Sri Don Chai* School, Amphoe Sarapee, Chiang Mai
4. Mr. Chairin Chaiwisit Thungman School, Amphoe Wiang Pa Pao, Chiang Rai

### **Supervisor**

5. Dr. Waraporn Anuworalak Supervisor of Chiang Mai *Secondary Educational Service Area Office 34*
6. Mrs. Daranee Payakkul Supervisor of Chiang Mai Primary Educational Service Area Office 1
7. Mr. Det Sarajun Supervisor of Chiang Mai Primary Educational Service Area Office 1

### **Teachers**

8. Dr. Surapee Wongpaiboon The Prince Royal's College, Amphoe Muang,Chiang Mai
9. Mr. Pairung Namgsompornpong The Prince Royal's College, Amphoe Muang,Chiang Mai
10. Dr. Mayuree Duangsri Yupparaj Wittayalai School, Amphoe Muang, Chiang Mai

### **Computer Experts**

11. Mrs. Wenarat Sawangkit Lecturer computer Institute of Computer and Information Technology Chiang Rai Rajabhat University
- 12 . Mrs. Eakrudee Punpittayapat Computer Teacher, Tessaban 6 Nakorn Chiang Rai School, Amphoe Muang, Chiang Rai

13. Mr. Sarawut Tammawong Chief Learning Career and Technology,  
Thawangpha Wittayalai School, Anphor  
Thawangpha, Nan

**Teachers and Schools of the tryout to examine the quality of evaluation model  
for teacher's roles to promote Lifelong Learning skills  
of students at the basic educational level**

1. Mr. Chutipon Namwong Wachirawit School Changkarn, Amphoe Muang,  
Chiang Mai
2. Mrs. Soraya Allmark Wachirawit School Changkarn, Amphoe Muang,  
Chiang Mai
3. Ms. Junya Papinpongsa Wachirawit School Changkarn, Amphoe Muang,  
Chiang Mai
4. Mrs. Anong Kulruan Chum Chon Ban Phrao Num School, Amphoe  
Mae Chaem, Chiang Mai
5. Ms. Samorn Chailam Chum Chon Ban Phrao Num School, Amphoe  
Mae Chaem, Chiang Mai
6. Mrs. Natakorn Wangmai Chum Chon Ban Phrao Num School, Amphoe  
Mae Chaem, Chiang Mai
7. Mrs. Punnikar Paisawat Ban Haen School, Amphoe Tawangpha, Nan
8. Mrs. Sopida Prarom Ban Haen School, Amphoe Tawangpha, Nan
9. Mr. Sawai Changneung Ban Haen School, Amphoe Tawangpha, Nan
10. Mr. Tatchapon Suwannapong Chum Chon Bannawai School, Amphoe Chiang  
Dow, Chiang Mai
11. Mrs. Puntipa Kuengpet Chum Chon Bannawai School, Amphoe Chiang  
Dow, Chiang Mai
12. Mrs. Sudjai Jaruengsuk Chum Chon Bannawai School, Amphoe Chiang  
Dow, Chiang Mai

13. Mrs. Somjit Thonglum Chum Chon Banpaphai School, Amphoe Lee, Lanphun
14. Mr. Somwang Nuwongsa Chum Chon Banpaphai School, Amphoe Lee, Lanphun
15. Mr. Chatee Nammakun Chum Chon Banpaphai School, Amphoe Lee, Lanphun
16. Mr. Warawut Suriyapor Banmaepuka School, Amphoe Sankampang, Chiang Mai
17. Mrs. Sawittee Duunam Banmaepuka School, Amphoe Sankampang, Chiang Mai
18. Ms. Parichart Suwanma Banmaepuka School, Amphoe Sankampang, Chiang Mai
19. Mrs. Rattana Bunditeaktakul Rin Luang School, Amphoe Chiang Dow, Chiang Mai
20. Mr. Denchai Pinsaimoon Rin Luang School, Amphoe Chiang Dow, Chiang Mai
21. Dr. Wipada Wirakul Rin Luang School, Amphoe Chiang Dow, Chiang Mai
22. Ms. Pattarin Manitwiriyakul Rin Luang School, Amphoe Chiang Dow, Chiang Mai
23. Mrs. Rattana Banditeaktakul Rin Luang School, Amphoe Chiang Dow, Chiang Mai
24. Mr. Suwan Punsupa Rin Luang School, Amphoe Chiang Dow, Chiang Mai
25. Mr. Samran Tunpon Rin Luang School, Amphoe Chiang Dow, Chiang Mai
26. Mr. Denchai Pinsaimoon Rin Luang School, Amphoe Chiang Dow, Chiang Mai
27. Mr. Suwan Punsupa Rin Luang School, Amphoe Chiang Dow, Chiang Mai
28. Ms. Arunee Masak Nongkrai School, Amphoe Sansai, Chiang Mai

29. Mr. Pawat Kumyong Nongkrai School, Amphoe Sansai, Chiang Mai
30. Mrs. Nattanun Wongsuwan Nongkrai School, Amphoe Sansai, Chiang Mai
31. Mr. Sompot Kunpitak Dara Academy, Amphoe Muang,Chiang Mai
32. Mrs. Nichapa Kunpitak Dara Academy, Amphoe Muang,Chiang Mai
33. Ms. Rattana Puangjakta Dara Academy, Amphoe Muang,Chiang Mai
34. Mrs. Nichapa Kunpitak Dara Academy, Amphoe Muang,Chiang Mai
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Muang, Phayao
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## APPENDIX B

### Instrument : The survey of the indicator regarding teacher's roles to promote Lifelong Learning skills at the Basic Education Level

#### Part 1 : The opinion survey of the indicator regarding teacher's roles to promote Lifelong Learning skills at the Basic Education Level

**Instruction :** Please consider indicator that appropriate as to indicator regarding teacher's roles to promote Lifelong Learning skills at the Basic Education Level.

Please check ✓ the appropriate responses . The selection and score rate are as follows.

5 = you have opinion that the competencies item is most important

4 = you have opinion that the competencies item is very important

3 = you have opinion that the competencies item is moderately important

2 = you have opinion that the competencies item is less important

1 = you have opinion that the competencies item is fewest important

Indicator	Opinion level				
	5	4	3	2	1
<b>1. Setting study plan</b>					
1.1 Set study plan to promote self-learning					
1.2 Set study plan to promote peer learning					
1.3 Set study plan by integrating various contents and skills					
1.4 Base on research methodology to set study plan					
1.5 Set content and activities to be consistent with the interest and individual differences					
1.6 Organize activities for the learners to practice thinking process skill					
1.7 Organize the practical activities					
1.8 Organize activities to learn from the variety of sources					
1.9 Give the importance to the learning process by reflecting what the learners had learnt rather than what they had been instructed					
1.10 Update learning content					
1.11 Organize the activities for the learners to study					
<b>2. Learning support and setting atmosphere for learning</b>					
2.1 Promote the learners to pursuit knowledge					
2.2 Organize or simulate the situation to motivate learning participation					
2.3 Advise learning sources both inside and outside classroom					
2.4 Provide the guideline of pursuit the sources of knowledge to the learners					
2.5 Organize activities to promote thinking, practicing, and learning processes					
2.6 Provide learning media for the learners					
2.7 Set classroom atmosphere to support the learners based on their potentialities, interests, and requirements					
2.8 Support learning cooperation and experiences exchange among the learners					
2.9 Provide the chance to explain or present the works in classroom					
2.10 Provide the chance to ask questions and show opinion					
2.11 Being friendly and took care of the learners					
<b>3. Class management</b>					
3.1 Set up classroom to support learning activities					
3.2 Give importance to learners' differences and constraints					

Indicator	Opinion level				
	5	4	3	2	1
3.3 Governing the classroom with the regulations					
3.4 Having punishment system based on the regulation and promoting learners' discipline					
<b>4. Observing, monitoring, and assessment</b>					
4.1 Evaluate the learners based on the actual situation					
4.2 Have many types of assessment such as learners evaluate themselves, evaluated by teachers or peers					
4.3 Report evaluation result for the learners' development					
4.4 Identify the evaluation as a part of the learning					
4.5 Evaluate the learning both during and after learning in order to set the development plan for the next academic year					
<b>5. Teachers' attributes</b>					
5.1 Have knowledge of setting up atmosphere to support Lifelong Learning					
5.2 Have teaching knowledge to promote self-learning					
5.3 Aware of the importance of on-going learning					
5.4 Have positive attitude and value the learning					
5.5 Apply technology to develop themselves and the learners					
5.6 Know the learning centers and advise to the learners					
5.7 Be the role model in learning and pursuing knowledge					
5.8 Facilitate the learning					
5.9 Study the information to apply to the leaning constantly					

**Part 2 : The opinion questionnaires of the indicator regarding Lifelong Learning skills of students at the Basic Education Level**

Lifelong Learning skills of students	Opinion level				
	5	4	3	2	1
1. Pursue knowledge					
2. Love reading, writing, and listening for questioning					
3. Be self-learning					
4. Be able to learn continuously					
5. Be able to communicate with language, transfer knowledge, understanding, and attitude via speaking and writing					
6. Be able to analyze					
7. Be able to synthesize					
8. Be creative					
9. Be critical thinking					
10. Be able to predict					
11. Be able to set purpose and make decision					
12. Be able to work in group					
13. Be able to apply technology for learning					

**Instrument : The survey to the expert in considering the evaluation model for teacher's roles to promote lifelong learning skills of students**

**Instruction :** Please consider indicator that appropriate as to the evaluation model for teacher's roles to promote Lifelong Learning skills at the Basic Education Level.

Please check ✓ the appropriate responses . The selection and score rate are as follows.

- 5 = you have opinion that the competencies item is most important
- 4 = you have opinion that the competencies item is very important
- 3 = you have opinion that the competencies item is moderately important
- 2 = you have opinion that the competencies item is less important
- 1 = you have opinion that the competencies item is fewest important

**Part 1 : The opinion of the evaluation model for teacher's roles to promote Lifelong Learning skills at the Basic Education Level**

**1) Utility**

Utility	Opinion level				
	5	4	3	2	1
1. Information gained from applying the evaluation form responded to the requirement of concerned persons					
2. Evaluation results were beneficial for teachers to develop their roles in promoting Lifelong Learning skills to students					
3. Evaluation results were beneficial information for the administrators, teachers, and concerned persons to set teachers' roles in promoting Lifelong Learning skills to students development policy					
4. The evaluation period was suitable for implementing the evaluation result to teachers' roles development					
5. Evaluation model stimulated the concerned persons to be aware of the benefits of the constant evaluation					

**2) Feasibility**

Feasibility	Opinion level				
	5	4	3	2	1
1. Evaluation model was practical					
2. Evaluation model was consistent with the institute circumstance					
3. Evaluation model was suitable with the teachers and concerned persons' context					
4. Evaluation model possibly received the cooperation from the raters					
5. Evaluation model possibly received the cooperation from the evaluated teachers					
6. Evaluation results could improve/develop teachers' roles to promote Lifelong Learning skills of students					

**3) Propriety**

Propriety	Opinion level				
	5	4	3	2	1
1. The rater evaluated based on ethics, not personal or information received from others					
2. The rater was aware of the privacy of the evaluated persons					
3. Evaluation result provided both outstanding and weakness of what was evaluated					
4. Evaluation model gave priority to the information acknowledgement of the person					
5. Evaluation model had clear criteria which affected to the transparency					

**4) Accuracy**

Accuracy	Opinion level				
	5	4	3	2	1
1. Evaluation model had been developed from the reliable theories					
2. Evaluation model had clear objectives					
3. Factors/indicators of teachers' roles to promote Lifelong Learning skills of students were clearly defined					
4. Clearly defined the concerned person with the evaluation					
5. The evaluation process was practical					
6. Evaluation tools, teachers' roles to promote Lifelong Learning skills of students evaluation form, included all evaluation aspects					
7. Evaluate once a semester was adequate.					
8. Data collection from observation, interview, and examine the documents and empirical information were inclusive					
9. Evaluation criteria was clear and support the final evaluation result accurately					
10. The model to implement the evaluation results was clear and applicable					
11. Evaluation program was easy to practice					
12. Evaluation program was accurate					
13. The speed of the program					
14. Evaluation manual was understandable and applicable					
15. Evaluation manual contained the inclusive evaluation model information					

Opinion

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**Instrument : The evaluation form for teachers' roles to promote Lifelong Learning skills of students at the basic educational level.**

**Part 1 : Personal questionnaire**

1. Name of evaluated .....
- Subject .....
2. Assessor .....
3. Status
  - Teachers (Self-assessment)       Chief of department (Evaluating teacher)
  - Chief of academic (Evaluating teacher)       Director (Evaluating teacher)
4. Term ..... Year .....
5. day/month/year .....

**Part 2 : The opinion survey of the teacher's roles to promote Lifelong Learning skills at the Basic Education Level**

Indicator	Opinion level			
	4	3	2	1
<b>1. Setting study plan</b>				
1.1 Set study plan to promote self-learning				
1.2 Set study plan to promote peer learning				
1.3 Set study plan by integrating various contents and skills				
1.4 Base on research methodology to set study plan				
1.5 Set content and activities to be consistent with the interest and individual differences				
1.6 Organize activities for the learners to practice thinking process skill				
1.7 Organize the practical activities				
1.8 Organize activities to learn from the variety of sources				
1.9 Give the importance to the learning process by reflecting what the learners had learnt rather than what they had been instructed				
1.10 Update learning content				
1.11 Organize the activities for the learners to study				
<b>2. Learning support and setting atmosphere for learning</b>				
2.1 Promote the learners to pursuit knowledge				
1.2 Organize or simulate the situation to motivate learning participation				
1.3 Advise learning sources both inside and outside classroom				
1.4 Provide the guideline of pursuit the sources of knowledge to the learners				
1.5 Organize activities to promote thinking, practicing, and learning processes				
1.6 Provide learning media for the learners				
1.7 Set classroom atmosphere to support the learners based on their potentialities, interests, and requirements				
1.8 Support learning cooperation and experiences exchange among the learners				
1.9 Provide the chance to explain or present the works in classroom				
1.10 Provide the chance to ask questions and show opinion				
1.11 Being friendly and took care of the learners				

Indicator	Opinion level			
	4	3	2	1
<b>3. Class management</b>				
3.1 Set up classroom to support learning activities				
3.2 Give importance to learners' differences and constraints				
3.3 Governing the classroom with the regulations				
3.4 Having punishment system based on the regulation and promoting learners' discipline				
<b>4. Observing, monitoring, and assessment</b>				
4.1 Evaluate the learners based on the actual situation				
4.2 Have many types of assessment such as learners evaluate themselves, evaluated by teachers or peers				
4.3 Report evaluation result for the learners' development				
4.4 Identify the evaluation as a part of the learning				
4.5 Evaluate the learning both during and after learning in order to set the development plan for the next academic year				
<b>5. Teachers' attributes</b>				
5.1 Have knowledge of setting up atmosphere to support Lifelong Learning				
5.2 Have teaching knowledge to promote self-learning				
5.3 Aware of the importance of on-going learning				
5.4 Have positive attitude and value the learning				
5.5 Apply technology to develop themselves and the learners				
5.6 Know the learning centers and advise to the learners				
5.7 Be the role model in learning and pursuing knowledge				
5.8 Facilitate the learning				
5.9 Study the information to apply to the leaning constantly				

**Part 3 : The opinion survey of the Lifelong Learning skills of students at the Basic Education Level**

Lifelong Learning skills of students	Opinion level			
	4	3	2	1
1. Pursue knowledge				
2. Love reading, writing, and listening for questioning				
3. Be self-learning				
4. Be able to learn continuously				
5. Be able to communicate with language, transfer knowledge, understanding, and attitude via speaking and writing				
6. Be able to analyze				
7. Be able to synthesize				
8. Be creative				
9. Be critical thinking				
10. Be able to predict				
11. Be able to set purpose and make decision				
12. Be able to work in group				
13. Be able to apply technology for learning				

**Part 4 : Implementing Evaluation Result for Development the teacher's roles to promote Lifelong Learning skills at the Basic Education Level**

**4.1 Implementing Evaluation Result for Development of teacher's roles to promote Lifelong Learning skills at the Basic Education Level**

**4.1.1 Implementing Evaluation Result for Development the Setting study plan**

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**4.1.2 Implementing Evaluation Result for Development of Learning support and setting atmosphere for learning**

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**4.1.3 Implementing Evaluation Result for Development of Class management**

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**4.1.4 Implementing Evaluation Result for Development of Observing, monitoring, and assessment**

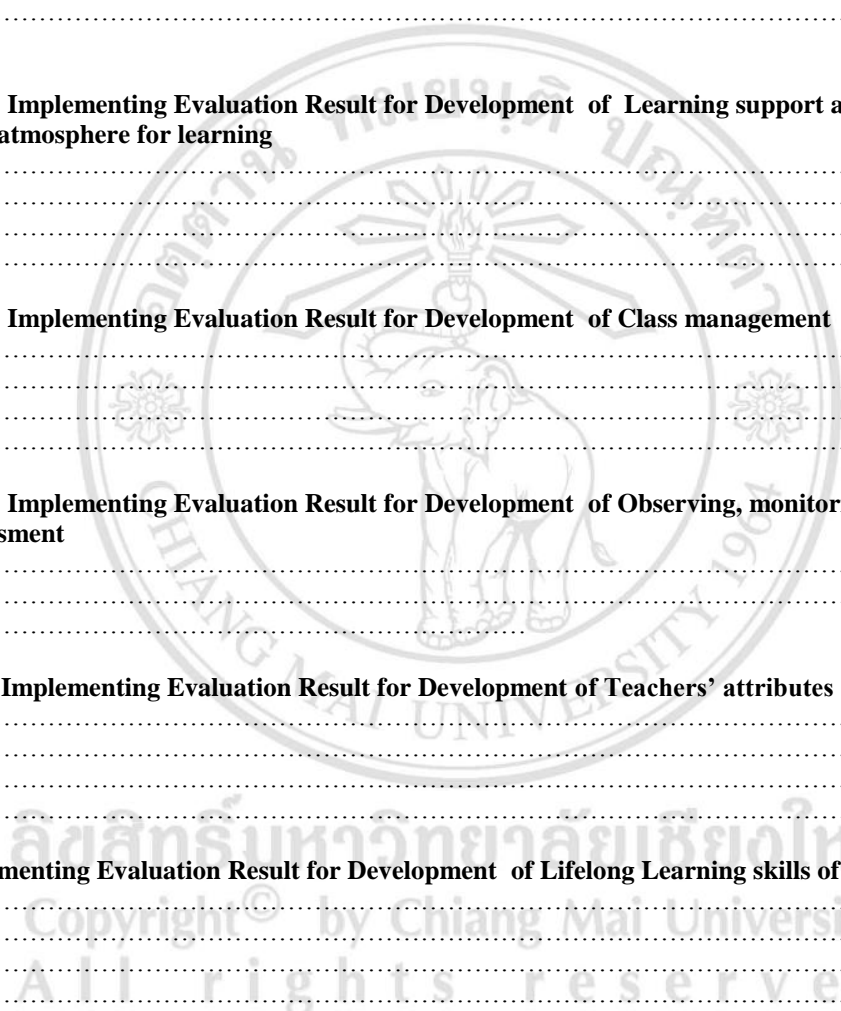
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**4.1.5 Implementing Evaluation Result for Development of Teachers' attributes**

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**4.2 Implementing Evaluation Result for Development of Lifelong Learning skills of students**

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## Interview of the tryout to examine the quality of the evaluation model

1. Result of the tryout to examine the quality of evaluation model for teacher's roles to promote Lifelong Learning skills of students. You have opinion that the appropriate of model.

1.1 The Purpose of Evaluation

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1.2 Evaluating Issues

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1.3 Evaluation Methods: assessor, evaluation process, instruments for evaluation, duration in evaluation and data collection

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1.4 Criteria for Evaluation

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1.5 Evaluation Report and Ways to Evaluation Application

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2. The problem and solutions of the tryout to examine the quality of evaluation model

2.1 The problem of the tryout to examine the quality of evaluation model

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2.2 Do you have suggestions ?

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3. Do you have to add in evaluation model for teacher's roles to promote Lifelong Learning skills of students ?

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4. Do you have to confident to use the evaluation model for teacher's roles to promote Lifelong Learning skills of students ?

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5. Comments and Sugesstions

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## APPENDIX C

### **Manual of evaluation model for teacher's roles to promote Lifelong Learning skills of students at the basic educational level**

#### **Detail of use the manual**

Manual of evaluation model that help user to understand. The evaluation model for teacher's roles to promote Lifelong Learning skills of students at the basic educational level referred to the structure showed the relationship between the significant factors of the evaluation of teacher's roles to promote Lifelong Learning skills of students at the basic educational level which consisted of 1) evaluation objectives 2) evaluation subjects 3) evaluation method 4) evaluation criteria 5) evaluation reporting and implementing the evaluation result for development

#### **1) Evaluation Objectives**

To allow the teachers to gain reversed information to be the guideline for development their roles to promote Lifelong Learning skills of students. The evaluation model applied to the evaluation on Primary school level based on the concept of Medel Anonuevo (2001) which mentioned that the process of promoting students to have Lifelong Learning skills should be formed since the primary school level because it was the preliminary stage of learning and development. An inefficient basic would have great effect on the higher educational level.

#### **2) Evaluated Subjects**

There were factors, indicators, factors and indicators loading

#### **Factors and Indicators**

Evaluate by indicators of teacher's roles to promote Lifelong Learning skills of students at the basic educational level that the researcher obtained from related principles, concepts, and theories which were: factors and indicators of teachers' roles to promote Lifelong Learning skills of students at the basic educational level and actors and indicators of Lifelong Learning skills of students at the basic educational level.

**3) Evaluation Method** consisted of rater, evaluation process, evaluation tool, evaluation timeline, and evaluation method.

Indicators in the related factors were evaluated and compare to the evaluation criteria. The rater should understand the factors, indicators, and evaluation criteria on the evaluation manual. Only the behaviors related to the indicators were evaluated. The feeling or the information has been told from others should not be considered. The evaluation should consider the roles or behaviors of the evaluated person behaved which were the outstanding roles or behaviors compare to the scoring rubrics by interviewing or questioning the evaluated person focusing on the participation and empirical information.

## **Rater**

Studying document and researches related to teacher evaluation. It was found that the evaluation should be completed from the concerned persons who were able to provide information reflected the fact. Thus, the teachers' roles to promote Lifelong Learning skills evaluation model set the qualification of the evaluated teachers in two groups to make it accurate and reliable which were:

1) Teachers evaluated themselves on the roles and behaviors based on the indicators and evaluation criteria.

2) Two concerned persons: colleagues and/or Head of Department and/or Head of Academic and/or the administrator evaluated the teachers. They should be the operation staff who worked together and were able to observe the roles and behaviors of the teachers, understood the factors, indicators, and evaluation criteria, had justice in evaluation considering from related documents, evidences, empirical information, not the personal opinion or feeling.

## **Evaluation Process**

Teachers' roles to promote Lifelong Learning skills of the students at the basic educational level evaluation process consisted of preparing evaluation, processing evaluation, and summarizing the evaluation result.

Preparing evaluation was to prepare the understanding and knowledge to the teachers who employed the evaluation model, study the detail on the manual.

Processing evaluation was to evaluate the teachers' roles to promote Lifelong Learning skills of students at the basic educational level.

Summarizing the evaluation result was to analyze the result, summarize the result, and the guideline of implementing the result.

## **Evaluation Tool**

The evaluation tool was the evaluation form for teachers' roles to promote Lifelong Learning skills of students at the basic educational level. There were three main parts of the evaluation form: 1) general information of the applicants 2) teachers' roles to promote Lifelong Learning skills of students at the basic educational level evaluation and 3) Lifelong Learning skills of students. In part two, teachers' roles to promote Lifelong Learning skills of students had 5 factor, 40 lists in total. Part 3, Lifelong Learning skills of students had 13 lists. The evaluation criterion was Rubrics.

## **Evaluation Time**

Evaluation time for evaluating teachers' roles to promote Lifelong Learning skills of students must be conducted at least once a semester such as at the beginning of the term and/or in mid-semester and/or at end of semester. This would be beneficial for the teacher to obtain the reversed information from the evaluation in order to prepare the improvement on teachers' roles to promote Lifelong Learning skills of students.

## **Data Collection**

Data was collected by observation, interviewing the evaluated teachers, examining the related document, and empirical information.

## **4) Evaluation Criteria**

Absolute criterion, which was the criteria had been developed from the principles of teachers' roles to promote Lifelong Learning skills of students at the basic educational level, related document, and the experts' opinion was applied. It was the Rubrics criteria, the scoring guideline which was the combination between scoring criteria and rating scale. Rubrics criteria defined the differences of behaviors of teachers' roles and Lifelong Learning skills of students to be the guideline for grading. Moreover, it was applied from the guideline of basic education to the practical approach of Bureau of Academic Affairs and Educational Standards, Office of Basic Education Commission, Ministry of Education (2007)

## **5) Reporting Evaluation Result and Implementing Evaluation Result**

When finishing evaluate all indicators, the rater or the in charge person input data on the evaluation program to evaluate and summarize the evaluation result.

### **Evaluation Program**

The researcher created the evaluation program to facilitate the users to access via website <http://www.lllskill.com/assessment/index.php>. However, there would be the authorize restriction to access the evaluation. The person in charge of school system was to be considered by Head of Department or Head of Academic or the administrators. The researcher set Username and Password to the school system controller and school system controller was able to authorize those to the raters and the evaluated teachers in school. In addition, to access the evaluation report, the users must be authorized.

### **Reporting Evaluation Result**

Reporting the evaluation result to teachers, administrators, and other concerned staff, they would be able to learn the reversed information in order to improve their roles in promoting Lifelong Learning skills to the students. There were two types of the evaluation result reports: the report on the overall evaluation result of each factor, and the report of evaluation result of each indicator in the factors.

### **Implementing Evaluation Result for Development**

It was beneficial for teachers to gain the reversed information to improve their roles in promoting student to have Lifelong Learning skills through learning processes. In addition, it was beneficial for Head of Department, Head of Academic and the administrators to set the teachers' roles development plan policy. This approach had been developed from studying the documents; teacher development system, Institute for Development of Educational Administrators, Ministry of Education (2005, pages 17-19) and synthesizing related researches to teacher development approach from the electronic database which gathering thesis, researches, textbooks, journals, and 13 of Thai Digital Collection during 2004-2014: Teacher Development System, Institute for Development of Educational Administrators, Ministry of Education (2005), Samorn Praituen (2009), Thanabordee Buayairaksa (2007), Thongboon Jan-Horm

(2009), Kiatchai Phuimart (2009), Ratchaya Wiwek (2008), Nittaya Thongsong (2009), Surachet Soisawing (2009), Santi A-Wanna (2008), Somboon Phurahong (2008), Kittinart Fuengfung (2005), Amnuay Kitchareon (2004), and Waratchaya Wiwek (2008).

There were four approaches to develop teachers' roles to promote Lifelong Learning skills of the students which were: 1) self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries. The detail of development approach by each factor (Appendix ๓ pages 318-321).

In addition, the researcher created the website to be a source of information, which related to teachers' roles in promoting Lifelong Learning skills to the students for people to study and apply for self-development in setting study plan, learning support and environment for learning, class management, observing, monitoring, and assessment, teachers' attributes, and Lifelong Learning skills of students. The link to the website was: <http://www.llskill.com>



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**Factors, indicators, evaluation criteria and evaluation result criteria of teachers' roles to promote Lifelong Learning skills of students at the basic educational level,**

**Factors 1 :** Teachers' roles in study plan Setting study plan which were promoting self-learning, promoting peer learning, integrating various contents and skills, based on research methodology to set study plan, setting content and activities to be consistent with the interest and individual differences, organizing activities for the learners to practice thinking process skill, organizing the practical activities, organizing activities to learn from the variety of sources, giving the importance to the learning process by reflecting what the learners had learnt rather than what they had been instructed, update learning content, and organizing the activities for the learners to study.

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
1. Set study plan to promote self-learning	Teaching activities that encourage learners to discover how to learn on their own. What are the learning on their own.	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners, teachers and related inquiries.	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Developed a model to evaluate learning and teaching the learners 2547, pages 129 .
2. Set study plan to promote peer learning	Event teaching that encourages students to learn from peers. Matching the learner or group to learn together. To exchange opinions,	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that	The compliance reviews of educators and those involved in it. Average of at least 2.75 on	The implementation of basic education into practice in 2550 pages 41-42.

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
	share knowledge and division of duties and responsibilities to learn together properly.					promote the development of learners, teachers and related inquiries.	a scale of 4 levels.	
3. Set study plan by integrating various contents and skills	Teachers can plan The content and teaching activities by integrating content and diverse skills.	Teachers have lesson plans and teaching, but not taught as planned.	Teachers have lesson plans and teaching of integrating content and diverse skills. Using teaching techniques repeatedly. Teaching not stir the interest of learners.	Teachers have lesson plans teaching content integration and diverse skills. Using teaching techniques repeatedly. Teaching not stir the interest of learners.	Teachers have lesson plans teaching content integration and diverse skills. Using a variety of teaching styles / approaches. Planned activities can be organized.	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners, teachers and related inquiries.	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	The implementation of basic education into practice in 2550 pages 30.
4. Base on research methodology to set study plan	Teachers organized activities that encourage learning. Students use research as part of learning in which they are interested or want to fix the problem within the scope of the course content, with	There is no plan activities that encourage learning. Students use research as part of learning.	Plan activities that encourage learning. Students use research as part of learning, but not taught as planned.	Plan activities that encourage learning. Students use research as part of learning and giving the students a chance to practice the	Plan activities that encourage learning. Students use research as part of learning and giving the students a chance to practice the conception and	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Guidelines for assessing the quality of basic education. The Quality of Education in 2554, pages 107.

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
	the aim of encouraging the students a chance to practice the conception and management. Find a reason to answer the proposition that students set.			conception and management. Find a reason to answer the proposition that students set.	management. Find a reason to answer the proposition that students set. And bringing the two together and learning together.	learners, teachers and related inquiries.		
5. Set content and activities to be consistent with the interest and individual differences	Teachers can plan The content and learning activities in line with its interests. And the difference between person.	Teachers plan learning activities, but not taught as planned.	Teachers plan learning activities that take into account their interest. Differences between individuals But not taught as planned.	Teachers plan learning activities that take into account their interest. Differences between individuals Planned activities can be organized To develop students to their full learning potential.	Teachers plan learning activities that take into account their interest. Differences between individuals The learners are involved in planning the event. Planned activities can be organized To develop students to their full learning potential.	Lesson plans to teach the students. After teaching record Supervision records The analysis of individual learners.	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	The implementation of basic education into practice in 2550 pages 81.
6. Organize activities for the learners to	Event teachers teaching the students had the opportunity to explain	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy	The compliance reviews of educators and	Guidelines for assessing the quality of basic

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
practice thinking process skill	how. How to summarize their ideas. The training process.			practice)		project. The student projects and activities that promote the development of learners. Ask teachers and those involved.	those involved in it. Average of at least 2.75 on a scale of 4 levels.	education. The Quality of Education in 2554, pages 107 .
7. Organize the practical activities	Event teachers teaching the students had the opportunity to do practical training in a real situation or as close to the real situation.	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners. Photos in teaching activities. Ask teachers and those involved.	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Guidelines for assessing the quality of basic education. The Quality of Education in 2554, pages 107 .
8. Organize activities to learn from the variety of sources	Teachers learning activities that allow students to learn from a variety of sources in different formats. Using this method of learning such as reading further	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4	Development Indicators Education for Lifelong Learning in 2547, pages 169.

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
	research. Practice what has criticized the research.					development of learners. Ask teachers and those involved	levels.	
9. Give the importance to the learning process by reflecting what the learners had learnt rather than what they had been instructed	Teachers pay more attention to the process of learning to reflect on what they have learned together, find or create new knowledge of the instructors is only conducive to learning, rather than to the student. just recipients and learn by the instructor or facilitator to convey.	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners. Ask teachers and those involved	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Teachers operational performance of teachers. Institute of Management Studies Ministry of Education (2548).
10. Update learning content	Teachers have to modify the content of the teaching activities. Presents a new learning experience. Improve the content taught to date.	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners. Ask teachers	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Teachers operational performance of teachers. Institute of Management Studies Ministry of Education (2548).

Indicators	Teachers' performance	Quality Levels				Data Collection	Evaluation Criteria	Source of Evaluation Criteria
		Level 1	Level 2	Level 3	Level 4			
						and those involved		
11. Organize the activities for the learners to study	In the classroom, teachers help students discover the essence or new knowledge from the research and education.	No practice	Occasionally practice (1-60% of the practice)	Frequently practice (61-80% of the practice)	Regularly practice (81-100% of the practice)	The lesson plans, teaching materials, teaching a literacy project. The student projects and activities that promote the development of learners. Ask teachers and those involved	The compliance reviews of educators and those involved in it. Average of at least 2.75 on a scale of 4 levels.	Teachers operational performance of teachers. Institute of Management Studies Ministry of Education (2548).

## Example of reporting evaluation result and implementing evaluation result

1. Name of evaluated Somchai Rakkanit Subject Mathematic

2. Term 1 Year 2557

3. day/month/year 20 / 08 / 2557

**Result of** teacher's roles to promote Lifelong Learning skills of students at the basic educational level

### Factor 1 : Setting study plan

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 (evaluated themselves)	2 (concerned persons)	3 (concerned persons)			
1. Set study plan to promote self-learning	8	4	4	3	3.67 Very Good	29.36	(355.30/100) = 3.55 Qualified Very Good Level
2. Set study plan to promote peer learning	7	3	4	4	3.67 Very Good	25.67	
3. Set study plan by integrating various contents and skills	9	4	4	3	3.67 Very Good	33.03	
4. Base on research methodology to set study plan	9	3	4	3	3.33 Very Good	29.97	
5. Set content and activities to be consistent with the interest and individual differences	9	4	4	4	4.00 Very Good	36.00	
6. Organize activities for the learners to practice thinking process skill	10	3	4	3	3.33 Very Good	33.33	
7. Organize the practical activities	10	3	4	3	3.33 Very Good	33.33	
8. Organize activities to learn from the variety of sources	12	4	4	4	4.00 Very Good	48.00	
9. Give the importance to the learning process by reflecting what the learners had learnt rather than what they had been instructed	10	3	4	3	3.33 Very Good	33.33	
10. Update learning content	8	3	4	3	3.33 Very Good	26.64	
11. Organize the activities for the learners to study	8	3	4	3	3.33 Very Good	26.64	
<b>Total</b>	<b>100</b>					<b>355.30</b>	

**Factor 2 : Learning support and setting atmosphere for learning**

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 evaluated themselves)	2 (concerned persons)	3 concerned persons)			
1. Promote the learners to pursuit knowledge	14	3	3	3	3.00 Good	42.00	(309.91/100) = 3.10 Qualified Good Level
2. Organize or simulate the situation to motivate learning participation	9	3	3	3	3.00 Good	27.00	
3. Advise learning sources both inside and outside classroom	8	3	3	3	3.00 Good	24.00	
4. Provide the guideline of pursuit the sources of knowledge to the learners	7	3	2	2	2.33 Fair	16.31	
5. Organize activities to promote thinking, practicing, and learning processes	8	3	3	2	2.67 Fair	21.36	
6. Provide learning media for the learners	8	3	4	3	3.33 Good	26.64	
7. Set classroom atmosphere to support the learners based on their potentialities, interests, and requirements	8	4	4	4	4.00 Very Good	32.00	
8. Support learning cooperation and experiences exchange among the learners	9	4	4	4	4.00 Very Good	36.00	
9. Provide the chance to explain or present the works in classroom	9	2	2	2	2.00 Fair	18.00	
10. Provide the chance to ask questions and show opinion	9	3	4	3	3.33 Good	29.97	
11. Being friendly and took care of the learners	11	3	4	3	3.33 Good	36.63	
<b>Total</b>	<b>100</b>					<b>309.91</b>	

**Factor 3 : Class management**

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 evaluated themselves)	2 (concerned persons)	3 concerned persons)			
1. Set up classroom to support learning activities	23	3	3	3	3.00 Good	69.00	(259.24/100) = 2.59 Unqualified Fair Level
2. Give importance to learners' differences and constraints	28	3	2	2	2.33 Fair	65.24	
3. Governing the classroom with the regulations	27	3	3	3	3.00 Good	81.00	
4. Having punishment system based on the regulation and promoting learners' discipline	22	2	2	2	2.00 Fair	44.00	
<b>Total</b>	<b>100</b>					<b>259.24</b>	

**Factor 4 : Observing, monitoring, and assessment**

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 evaluated themselves)	2 (concerned persons)	3 concerned persons)			
1. Evaluate the learners based on the actual situation	29	3	3	3	3.00 Good	87.00	(326.27/100) = 3.26 Pass level good
2. Have many types of assessment such as learners evaluate themselves, evaluated by teachers or peers	14	3	3	3	3.00 Good	42.00	
3. Report evaluation result for the learners' development	19	3	4	3	3.33 Good	63.27	
4. Identify the evaluation as a part of the learning	18	3	3	3	3.00 Good	54.00	
5. Evaluate the learning both during and after learning in order to set the development plan for the next academic year	20	4	4	4	4.00 Very Good	80.00	
<b>Total</b>	<b>100</b>					<b>326.27</b>	

**Factor 5 : Teachers' attributes**

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 evaluated themselves)	2 (concerned persons)	3 concerned persons)			
1. Have knowledge of setting up atmosphere to support Lifelong Learning	9	1	1	1	1.00 Poor	9.00	(170.03/100) = 1.70 Unqualified Poor Level
2. Have teaching knowledge to promote self-learning	9	1	2	2	1.67 Poor	15.03	
3. Aware of the importance of on-going learning	18	1	1	1	1.00 Poor	18.00	
4. Have positive attitude and value the learning	18	2	2	2	2.00 Fair	36.00	
5. Apply technology to develop themselves and the learners	10	2	2	2	2.00 Fair	20.00	
6. Know the learning centers and advise to the learners	8	2	2	2	2.00 Fair	16.00	
7. Be the role model in learning and pursuing knowledge	10	2	2	2	2.00 Fair	20.00	
8. Facilitate the learning	8	2	2	2	2.00 Fair	16.00	
9. Study the information to apply to the leaning constantly	10	2	2	2	2.00 Fair	20.00	
<b>Total</b>	<b>100</b>					<b>170.03</b>	

### Lifelong Learning skills of students

Indicator	Weight of the indicator	Score			Evaluation Result	Total Score	Total Evaluation Result
		1 evaluated themselves)	2 (concerned persons)	3 concerned persons)			
1. Pursue knowledge	8	3	3	3	3.00 Good	24.00	(263/100) = 2.63 Unqualified Fair Level
2. Love reading, writing, and listening for questioning	9	3	3	3	3.00 Good	27.00	
3. Be self-learning	7	3	3	3	3.00 Good	21.00	
4. Be able to learn continuously	7	3	3	3	3.00 ดี	21.00	
5. Be able to communicate with language, transfer knowledge, understanding, and attitude via speaking and writing	8	4	4	4	4.00 Very Good	32.00	
6. Be able to analyze	9	2	2	2	2.00 Fair	18.00	
7. Be able to synthesize	9	2	2	2	2.00 Fair	18.00	
8. Be creative	8	2	2	2	2.00 Fair	16.00	
9. Be critical thinking	9	2	2	2	2.00 Fair	18.00	
10. Be able to predict	7	2	2	2	2.00 Fair	14.00	
11. Be able to set purpose and make decision	8	2	2	2	2.00 Fair	16.00	
12. Be able to work in group	6	3	3	3	3.00 Good	18.00	
13. Be able to apply technology for learning	5	4	4	4	4.00 Very Good	20.00	
<b>Total</b>	<b>100</b>					<b>263.00</b>	

### Result of teacher's roles to promote Lifelong Learning skills of students at the basic educational level

Factor	Percentage of weight	Mean	Evaluation Result	Implementing Evaluation Result for Development
<b>Factor 1 : Setting study plan</b>	26	3.55	Qualified Very Good Level	-
<b>Factor 2 : Learning support and setting atmosphere for learning</b>	35	3.10	Qualified Good Level	-
<b>Factor 3 : Class management</b>	19	2.59	Unqualified Fair Level	Evaluation Result for Development of Class management
<b>Factor 4 : Observing, monitoring, and assessment</b>	12	3.26	Pass level good	-

Factor	Percentage of weight	Mean	Evaluation Result	Implementing Evaluation Result for Development
Factor 5 : Teachers' attributes	8	1.70	Unqualified Poor Level	Evaluation Result for Development of Teachers' attributes
<b>Total</b>	<b>100</b>	<b>3.03</b>	Qualified Good Level	

### Result of Lifelong Learning skills of students

Factor	Mean	Evaluation Result	Implementing Evaluation Result for Development
Lifelong Learning skills of students	2.63	Unqualified Fair Level	Evaluation Result for Development of Lifelong Learning skills of students

### Implementing Evaluation Result for Development of teacher's roles to promote Lifelong Learning skills of students at the basic educational level

Factor	Development	Activity	Responsible for the development / promotion providers.	Time
3. Class management	1) self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	Schools have held planning meetings. Finding Help Providing expert knowledge or So that teachers are competent in managing the classroom to encourage students to learn life skills.	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	1. Development of self-consistently all year. 2. Expert Advisor / learning / training / seminars throughout the academic year.

### Evaluation result criteria

Average Score	Quality Levels
Lower than 1.75	<b>Unqualified Poor</b> Level and required the prompt improvement
1.75 – 2.74	<b>Unqualified Fair</b> Level and required the improvement
2.75 – 3.49	<b>Qualified Good</b> Level and the weakness could be improved and had no effect on teachers' roles to promote Lifelong Learning of students
3.50 – 4.00	<b>Qualified Very Good</b> Level and affected teachers' roles to promote Lifelong Learning of students efficiently

**Implementing Evaluation Result for Development of teacher's roles to promote Lifelong Learning skills of students at the basic educational level**

Factor	Development	Activity	Responsible for the development / promotion providers.	Time
1. Setting study plan	1) Self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	Schools have held planning meetings, teaching and learning. Guidelines for the use of new teaching techniques. Supply or experts to assist in the development plan for learning that encourages students to learn on their own. Learn from peers Thinking Skills Exercises Learn from a variety of sources in different formats. Activities for the students to research and education. Encourage teachers to attend training / education for the knowledge to improve teaching students the skills for lifelong learning.	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	1. Development of self-consistently all year. 2. Expert Advisor / learning / training / seminars throughout the academic year.
2. Learning support and setting atmosphere for learning	1) Self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	1. Development of self-consistently all year. 2. Expert Advisor / learning / training / seminars throughout the academic year.
3. Class management	1) Self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning	Schools have held planning meetings. Finding Help Providing expert	Responsible for development, including teachers, school district offices of	1. Development of self-consistently all

Factor	Development	Activity	Responsible for the development / promotion providers.	Time
	from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	knowledge or So that teachers are competent in managing the classroom to encourage students to learn life skills.	education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	year. 2. Expert Advisor / learning / training / seminars throughout the academic year.
4. Observing, monitoring, and assessment	1) Self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	Schools have held planning meetings. Finding Help Providing expert knowledge or Teachers and encourage participants to improve their knowledge of monitoring and evaluation.	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.	1. Development of self-consistently all year. 2. Expert Advisor / learning / training / seminars throughout the academic year.
5. Teachers' attributes	1) Self-development by reading textbooks, searching from internet, leaning from media, experimenting from the real situation, learning from the experts, and training. 2) Developing by the experts by giving advice, suggestions, demonstration, providing sample of learning plan to the teachers, exchanging learning networks, applying local wisdom to learning management. 3) Training in the set courses: class training, training by distance learning, training by electronic media, workshops. 4) Further education by studying the curriculum	Schools have held planning meetings. Finding Help Supply or technical experts to help develop the activity of teaching so that teachers are competent in teaching that promotes lifelong learning. Teachers awareness of the importance of continuous learning. Have a good attitude and appreciation of	Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel.	1. Development of self-consistently all year. 2. Expert Advisor / learning / training / seminars throughout the academic year.

Factor	Development	Activity	Responsible for the development / promotion providers.	Time
	of the institutes or department in the country, studying the curriculum of the institutes or department in other countries.	learning. A good example of learning and thirst for knowledge. Encourage teachers With the use of technology to improve themselves and learn the skills for lifelong learning.	Office of the Secretary of Education, University College Union and private entities.	

### Implementing Evaluation Result for Development of Lifelong Learning skills of students

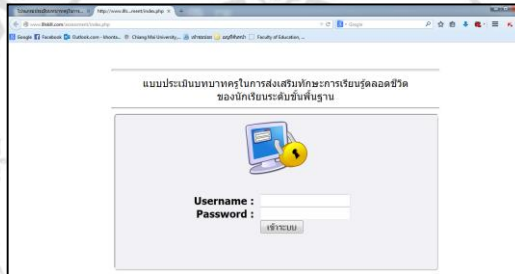
Factor	Development	Activity	Responsible for the development / promotion providers.	Time
1. Lifelong Learning skills of students	<p>1. Self Development May use the following methods: Reading from texts Internet research Learning from the media Learning from the specialist knowledge to practical use. Study Visit</p> <p>2. Provide the knowledge or expertise to assist in the development. May use the following methods: Counseling Advising demo sample preparation, teaching a good role model for teachers to study. To use the network to share and learn. Using local knowledge to help students.</p> <p>3. The trained according to the prescribed curriculum. May use the following methods: The classroom training Training using distance media. Training using electronic media Workshop</p> <p>4. Education may use this method. The study followed the course of the study. Or domestic entities The study followed the course of the study. Or agencies abroad.</p>	<p>Schools have held planning meetings, teaching and learning. Guidelines for the use of new teaching techniques. Supply or experts to assist in the development of teaching and learning. Management classes Reinforcement and support an atmosphere conducive to learning. Encourage teachers capable of teaching that promotes lifelong learning. Teachers awareness of the importance of continuous learning. Have a good attitude and appreciation of learning. A good example of learning and thirst for knowledge. Improve knowledge, monitoring and evaluation, encourage teachers to attend training / education to bring awareness to improve teaching and learning for students. The learning, A reading habit Writing and Listening Know the questions to find out why Have the ability to learn on their own. Learn continuously communicate using their knowledge and understanding of their own feelings and attitudes by talking and writing. The ability to think critically. Synthetic thought Creativity Critical Thinking The ability to anticipate. Set goals and guide the decision. Collaborate with others And is capable of using technology in learning.</p>	<p>Responsible for development, including teachers, school district offices of education. Office of the Basic Education. The Council Secretariat also promoted. Teachers, faculty and educational institutions. Commission officials, teachers and educational personnel. Office of the Secretary of Education, University College Union and private entities.</p>	<p>1. Development of self-consistently all year.</p> <p>2. Expert Advisor / learning / training / seminars throughout the academic year.</p>

## Manual for program evaluation model for teacher's roles to promote Lifelong Learning skills of students at the basic educational level

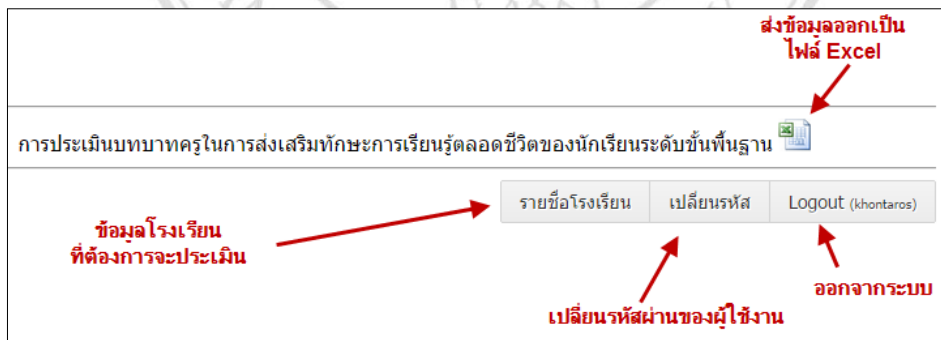
Open Browser : URL: <http://www.lllskill.com/>



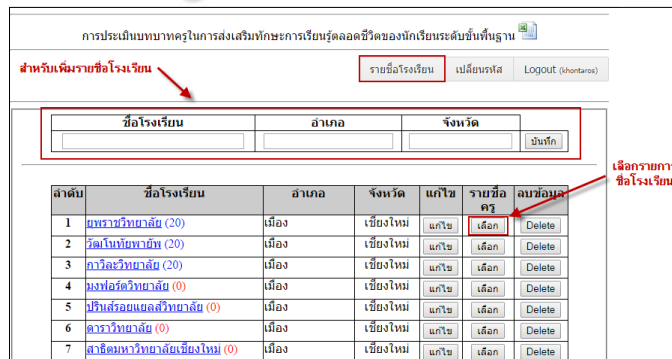
System for admin



Login



Manage for add, edit, delete school



## Group for assessment

การประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน

การประเมิน รายงานผลการประเมิน เกณฑ์การประเมิน แนวทางพัฒนาครูผู้สอน เป็ยียพรพิส Logout (user1)

จัดกลุ่มสำหรับการประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิต

No.	Mark	ครูผู้สอน (ประจำห้องเรียน)	หัวหน้ากลุ่มสาระการเรียนรู้ (ประจำชั้น/กลุ่ม)	หัวหน้างานวิชาการ (ประจำชั้น/กลุ่ม)	ผู้บริหาร (ประจำชั้น/กลุ่ม)
1	ประจักษ์ ศรีศรี 1	นางประจักษ์ ศรีศรี	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
2	ประจักษ์ ศรีศรี 2	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางประจักษ์ ศรีศรี	
3	ประจักษ์ ศรีศรี 3	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
4	ประจักษ์ ศรีศรี 4	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
5	ประจักษ์ ศรีศรี 5	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
6	ประจักษ์ ศรีศรี 6	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
7	ประจักษ์ ศรีศรี 7	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	
8	ประจักษ์ ศรีศรี 8	นางศุภมาส งามนาค	นางศุภมาส งามนาค	นางศุภมาส งามนาค	

เห็นกลุ่ม สำหรับ การประเมิน

สำหรับใช้และลบหรือเพิ่ม สำหรับประเมิน

## Select list of teacher to group

www.bkkil.com/assessment/index.php/link=grouping

การประเมิน รายงานผลการประเมิน เกณฑ์การประเมิน แนวทางพัฒนาครูผู้สอน เป็ยียพรพิส Logout (user1)

จัดกลุ่ม

เลือก 2. สำหรับครูผู้สอนที่จะจัดกลุ่ม

Save Cancel

ผู้บริหาร (ประจำชั้น/กลุ่ม)

1. เลือกครูที่จะจัดกลุ่ม

## Login

www.bkkil.com/assessment

www.bkkil.com/assessment/index.php/name=admindb/role=main

แบบประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน

Username: user1

Password: 12345678

Login

## Recording

แบบประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน

แบบประเมินฉบับนี้ มีจุดมุ่งหมายเพื่อประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน แบบประเมินฉบับนี้แบ่งเป็น 4 ตอน คือ

ตอนที่ 1 ข้อมูลทั่วไป

ตอนที่ 2 บทบาทครูในการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน

ตอนที่ 3 ระยะเวลาการเรียนรู้ตลอดชีวิตของนักเรียน

ตอนที่ 4 แนวทางการพัฒนาแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน และรายงานผลการประเมินการเรียนรู้ตลอดชีวิตของนักเรียน

จุดประสงค์ในการใช้แบบประเมินฉบับนี้ไปคือ วัตถุประสงค์ในการใช้แบบประเมินฉบับนี้

ตอนที่ 1 ข้อมูลทั่วไป

- ชื่อผู้เข้ารับการประเมิน นางศุภมาส งามนาค
- กลุ่มสาระวิชา \* ศึกษาศาสตร์ \* สังคมศาสตร์ \* ศิลปะ \* ภาษาไทย \* ภาษาต่างประเทศ \* การงานอาชีพและเทคโนโลยี \* สุขศึกษาและพลศึกษา
- ชั้นที่สอน \* ปี 1 \* ปี 2 \* ปี 3 \* ปี 4 \* ปี 5 \* ปี 6
- ชื่อผู้ประเมิน นางศุภมาส งามนาค
- สถานภาพการประเมิน \* ครูผู้สอน (ประเมินตนเอง) \* หัวหน้ากลุ่มสาระการเรียนรู้ (ประเมินครูผู้สอน) \* หัวหน้างานวิชาการ (ประเมินครูผู้สอน) \* ผู้บริหาร (ประเมินครูผู้สอน)
- ระยะเวลาการประเมิน ภาคเรียนที่ 1 ปีการศึกษา 2557

บันทึก

## Evaluation Criteria

การประเมิน รายงานผลการประเมิน เกณฑ์การประเมิน แนวทางพัฒนาครูผู้สอน เป็ยียพรพิส Logout (user1)

แบบประเมิน

แบบประเมินฉบับนี้ มีจุดมุ่งหมายเพื่อประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน แบบประเมินฉบับนี้แบ่งเป็น 4 ตอน คือ

ตอนที่ 1 ข้อมูลทั่วไป

ตอนที่ 2 บทบาทครูในการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน

ตอนที่ 3 ระยะเวลาการเรียนรู้ตลอดชีวิตของนักเรียน

ตอนที่ 4 แนวทางการพัฒนาแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน

จุดประสงค์ในการใช้แบบประเมินฉบับนี้ไปคือ วัตถุประสงค์ในการใช้แบบประเมินฉบับนี้

ตอนที่ 2 บทบาทครูในการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน

ตัวบ่งชี้	ระดับความคิดเห็น		
	4	3	2
1.บทบาทครูด้านการจัดการเรียนการสอน			
1.1.จัดการเรียนการสอนที่ส่งเสริมให้นักเรียนเกิดการเรียนรู้ด้วยตนเอง			
1.2.จัดการเรียนการสอนที่ส่งเสริมให้นักเรียนเกิดการเรียนรู้จากกลุ่มเพื่อน			
1.3.จัดการเรียนการสอนโดยบูรณาการเนื้อหาและทักษะที่หลากหลาย			

## Report of evaluation result of each indicator

การประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน

การประเมิน รายงานผลการประเมิน เกณฑ์การประเมิน แนวทางพัฒนาครูผู้สอน เป็ยียพรพิส Logout (user1)

แบบรายงานผลการประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียนระดับชั้นพื้นฐาน

- ชื่อผู้เข้ารับการประเมิน นางศุภมาส งามนาค
- กลุ่มสาระวิชา สุขศึกษาและพลศึกษา
- ระยะเวลาการประเมิน ภาคเรียนที่ 1 ปีการศึกษา 2557
- วัน/เดือน/ปี ที่ทำการประเมิน 11-12-2557

ผลการประเมินแบบมาตรฐานการส่งเสริมทักษะการเรียนรู้ตลอดชีวิตของนักเรียน จำนวน 5 องค์ประกอบ

องค์ประกอบที่ 1 บทบาทครูด้านการจัดการเรียนการสอน

ตัวบ่งชี้	ผู้ประเมิน	คะแนนจากครูผู้ประเมิน			คะแนนรวม (คะแนนเฉลี่ยจากครูผู้ประเมิน)	ผลการประเมินภาพรวม
		1 (คะแนนต่ำสุด)	2 (ผู้ประเมิน)	3 (ผู้ประเมิน)		
1.1.จัดการเรียนการสอนที่ส่งเสริมให้นักเรียนเกิดการเรียนรู้ด้วยตนเอง	8	3	4	3	3.33	26.67 (326.68/100) = 3.27
1.2.จัดการเรียนการสอนที่ส่งเสริมให้นักเรียนเกิดการเรียนรู้จากกลุ่มเพื่อน	7	4	4	3	3.67	25.67
1.3.จัดการเรียนการสอนโดยบูรณาการเนื้อหาและทักษะที่หลากหลาย	9	3	4	3	3.33	30.00



# APPENDIX D

## Sample analysis Model of relationship teachers' roles to promote Lifelong Learning skills of students at the basic educational level

DATE: 4/30/2014  
 TIME: 13:33  
 LISREL 8.72  
 BY

Karl G. Joreskog & Dag Sörbom

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The following lines were read from file E:\CFA5\Path LLL Model 30April2014.LPJ:

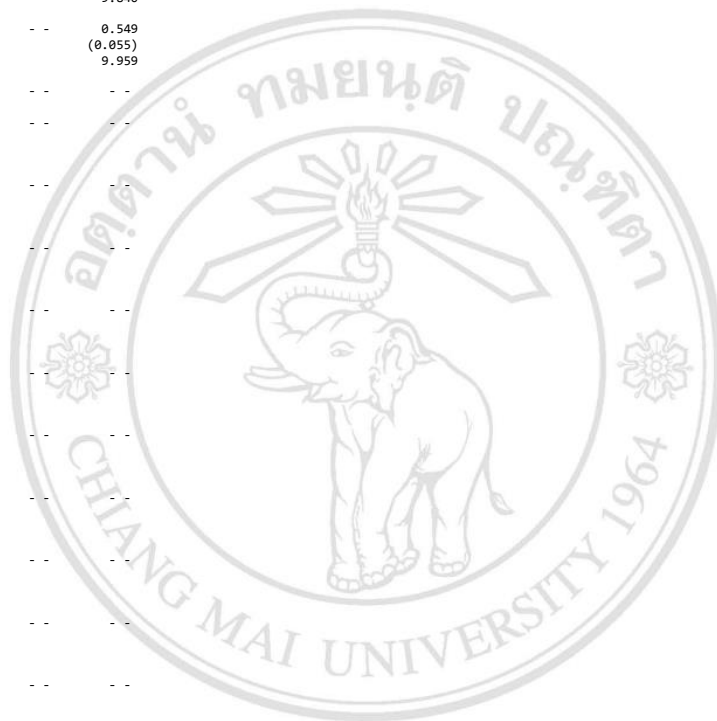
TI Path Analysis of Model Lifelong Learning  
 Teachers' Roles to Promote Lifelong Learning Skills of Students at the Basic Education Level  
 !DA NI=53 NO=550 MA=CH  
 SY='E:\CFA5\data CFA LLL.dsf' NG=1  
 SE  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  
 19 20 21 22 41 42 43 44 45 46 47 48 49 50 51 52 53 23  
 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 /  
 MO NX=18 NY=35 NK=3 NE=3 BE=FU GA=FI PS=SY TE=SY TD=SY  
 LE  
 Life Instru SupportA  
 LK  
 Manage Assess Teacher  
 FR LY(2,2) LY(3,2) LY(4,2) LY(5,2) LY(6,2) LY(7,2) LY(8,2) LY(9,2) LY(10,2)  
 FR LY(11,2) LY(13,3) LY(14,3) LY(15,3) LY(16,3) LY(17,3) LY(18,3) LY(19,3) LY(20,3)  
 FR LY(21,3) LY(22,3) LY(24,1) LY(25,1) LY(26,1) LY(27,1) LY(28,1) LY(29,1) LY(30,1)  
 FR LY(31,1) LY(32,1) LY(33,1) LY(34,1) LY(35,1) LX(1,1) LX(2,1) LX(3,1) LX(4,1)  
 FR LX(5,2) LX(6,2) LX(7,2) LX(8,2) LX(9,2) LX(10,3) LX(11,3) LX(12,3) LX(13,3)  
 FR LX(14,3) LX(15,3) LX(16,3) LX(17,3) LX(18,3) BE(1,2) BE(2,3) GA(3,1) GA(3,2)  
 FR GA(3,3) TE(2,1) TE(7,6) TE(11,10) TE(15,14) TE(19,18) TE(20,19) TE(21,20) TE(24,23)  
 FR TD(4,3) TD(11,10) TD(13,12)  
 VA 0.376 LY(1,2)  
 VA 0.716 LY(12,3)  
 VA 0.629 LY(23,1)  
 PD  
 OU AM PC RS EF FS SS SC ND=3 MI

TI Path Analysis of Model Lifelong Learning  
 Number of Input Variables 53  
 Number of Y - Variables 35  
 Number of X - Variables 18  
 Number of ETA - Variables 3  
 Number of KSI - Variables 3  
 Number of Observations 550

TI Path Analysis of Model Lifelong Learning  
 Number of Iterations = 27  
 LISREL Estimates (Maximum Likelihood)

LAMBDA-Y			
	Life	Instru	SupportA
Instru1	-. -	0.376	-. -
Instru2	-. -	0.343 (0.035) 9.772	-. -
Instru3	-. -	0.428 (0.043) 9.916	-. -
Instru4	-. -	0.447 (0.046) 9.715	-. -
Instru5	-. -	0.454 (0.047) 9.664	-. -
Instru6	-. -	0.514 (0.050) 10.272	-. -
Instru7	-. -	0.475 (0.050) 9.555	-. -
Instru8	-. -	0.573 (0.059) 9.709	-. -
Instru9	-. -	0.489 (0.047) 10.444	-. -
Instru10	-. -	0.379 (0.040) 9.527	-. -
Instru11	-. -	0.368 (0.036) 10.099	-. -
Support1	-. -	-. -	0.716
Support2	-. -	-. -	0.453 (0.045) 10.096
Support3	-. -	-. -	0.378 (0.042) 8.991

Support4	-	-	-	0.340 (0.037) 9.258
Support5	-	-	-	0.423 (0.045) 9.475
Support6	-	-	-	0.410 (0.042) 9.652
Atmos1	-	-	-	0.417 (0.046) 9.125
Atmos2	-	-	-	0.459 (0.046) 10.027
Atmos3	-	-	-	0.481 (0.051) 9.421
Atmos4	-	-	-	0.468 (0.048) 9.840
Atmos5	-	-	-	0.549 (0.055) 9.959
Life1	0.629	-	-	-
Life2	0.727 (0.057) 12.674	-	-	-
Life3	0.606 (0.052) 11.682	-	-	-
Life4	0.585 (0.049) 11.942	-	-	-
Life5	0.654 (0.054) 12.021	-	-	-
Life6	0.722 (0.057) 12.664	-	-	-
Life7	0.747 (0.059) 12.683	-	-	-
Life8	0.695 (0.056) 12.446	-	-	-
Life9	0.776 (0.060) 12.913	-	-	-
Life10	0.615 (0.051) 12.155	-	-	-
Life11	0.669 (0.054) 12.451	-	-	-
Life12	0.459 (0.041) 11.134	-	-	-
Life13	0.446 (0.042) 10.653	-	-	-
LAMBDA-X				
	Manage	Assess	Teacher	
Manage1	0.406 (0.031) 12.966	-	-	-
Manage2	0.487 (0.037) 13.114	-	-	-
Manage3	0.480 (0.041) 11.765	-	-	-
Manage4	0.375 (0.038) 9.821	-	-	-
Assess1	-	-	-	0.822 (0.061) 13.572
Assess2	-	-	-	0.410 (0.032) 12.814
Assess3	-	-	-	0.540 (0.038) 14.324
Assess4	-	-	-	0.503 (0.039) 12.737



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Assess5	--	0.562 (0.040) 13.912	--			
Teacher1	--	--	0.434 (0.032) 13.606			
Teacher2	--	--	0.412 (0.032) 13.012			
Teacher3	--	--	0.830 (0.059) 14.002			
Teacher4	--	--	0.866 (0.059) 14.768			
Teacher5	--	--	0.446 (0.033) 13.559			
Teacher6	--	--	0.403 (0.028) 14.464			
Teacher7	--	--	0.481 (0.033) 14.538			
Teacher8	--	--	0.364 (0.029) 12.493			
Teacher9	--	--	0.477 (0.033) 14.381			
BETA	Life	Instru	SupportA			
Life	--	0.637 (0.071) 8.933	--			
Instru	--	--	0.868 (0.096) 9.086			
SupportA	--	--	--			
GAMMA	Manage	Assess	Teacher			
Life	--	--	--			
Instru	--	--	--			
SupportA	0.480 (0.112) 4.305	0.300 (0.105) 2.860	0.204 (0.092) 2.210			
Covariance Matrix of ETA and KSI						
	Life	Instru	SupportA	Manage	Assess	Teacher
Life	0.967					
Instru	0.612	0.962				
SupportA	0.558	0.876	1.009			
Manage	0.483	0.759	0.874	1.000		
Assess	0.466	0.731	0.842	0.789	1.000	
Teacher	0.451	0.708	0.816	0.774	0.804	1.000
PHI	Manage	Assess	Teacher			
Manage	1.000					
Assess	0.789 (0.043) 18.149	1.000				
Teacher	0.774 (0.040) 19.572	0.804 (0.031) 26.057	1.000			
PSI	Note: This matrix is diagonal.					
	Life	Instru	SupportA			
Life	0.577 (0.080) 7.213	0.202 (0.043) 4.731	0.171 (0.042) 4.110			
Squared Multiple Correlations for Structural Equations						
	Life	Instru	SupportA			
	0.403	0.790	0.831			
Squared Multiple Correlations for Reduced Form						
	Life	Instru	SupportA			
	0.265	0.657	0.831			
Reduced Form	Manage	Assess	Teacher			
Life	0.265 (0.063) 4.234	0.166 (0.058) 2.839	0.113 (0.051) 2.201			
Instru	0.417 (0.097) 4.293	0.260 (0.091) 2.856	0.177 (0.080) 2.209			
SupportA	0.480 (0.112) 4.305	0.300 (0.105) 2.860	0.204 (0.092) 2.210			
Squared Multiple Correlations for Y - Variables						
	Instru1	Instru2	Instru3	Instru4	Instru5	Instru6
	0.278	0.218	0.312	0.293	0.289	0.350

Squared Multiple Correlations for Y - Variables					
Instru7	Instru8	Instru9	Instru10	Instru11	Support1
0.281	0.293	0.367	0.278	0.331	0.259
Squared Multiple Correlations for Y - Variables					
Support2	Support3	Support4	Support5	Support6	Atmos1
0.345	0.241	0.263	0.282	0.298	0.252
Squared Multiple Correlations for Y - Variables					
Atmos2	Atmos3	Atmos4	Atmos5	Life1	Life2
0.339	0.279	0.318	0.330	0.374	0.359
Squared Multiple Correlations for Y - Variables					
Life3	Life4	Life5	Life6	Life7	Life8
0.350	0.370	0.376	0.431	0.433	0.412
Squared Multiple Correlations for Y - Variables					
Life9	Life10	Life11	Life12	Life13	
0.454	0.387	0.412	0.310	0.279	
Squared Multiple Correlations for X - Variables					
Manage1	Manage2	Manage3	Manage4	Assess1	Assess2
0.332	0.339	0.283	0.205	0.338	0.307
Squared Multiple Correlations for X - Variables					
Assess3	Assess4	Assess5	Teacher1	Teacher2	Teacher3
0.370	0.303	0.352	0.327	0.304	0.344
Squared Multiple Correlations for X - Variables					
Teacher4	Teacher5	Teacher6	Teacher7	Teacher8	Teacher9
0.375	0.323	0.359	0.362	0.281	0.356

Goodness of Fit Statistics  
Degrees of Freedom = 1306  
Minimum Fit Function Chi-Square = 899.668 (P = 1.000)  
Normal Theory Weighted Least Squares Chi-Square = 954.927 (P = 1.000)  
Estimated Non-centrality Parameter (NCP) = 0.0  
90 Percent Confidence Interval for NCP = (0.0 ; 0.0)

Minimum Fit Function Value = 1.639  
Population Discrepancy Function Value (F0) = 0.0  
90 Percent Confidence Interval for F0 = (0.0 ; 0.0)  
Root Mean Square Error of Approximation (RMSEA) = 0.0  
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.0)  
P-Value for Test of Close Fit (RMSEA < 0.05) = 1.000

Expected Cross-Validation Index (ECVI) = 2.834  
90 Percent Confidence Interval for ECVI = (2.834 ; 2.834)  
ECVI for Saturated Model = 5.213  
ECVI for Independence Model = 89.429  
Chi-Square for Independence Model with 1378 Degrees of Freedom = 48990.250  
Independence AIC = 49096.250  
Model AIC = 1204.927  
Saturated AIC = 2862.000  
Independence CAIC = 49377.676  
Model CAIC = 1868.667  
Saturated CAIC = 10460.493  
Normed Fit Index (NFI) = 0.982  
Non-Normed Fit Index (NNFI) = 1.009  
Parsimony Normed Fit Index (PNFI) = 0.930  
Comparative Fit Index (CFI) = 1.000  
Incremental Fit Index (IFI) = 1.009  
Relative Fit Index (RFI) = 0.981  
Critical N (CN) = 872.296  
Root Mean Square Residual (RMR) = 0.0323  
Standardized RMR = 0.0373  
Goodness of Fit Index (GFI) = 0.938  
Adjusted Goodness of Fit Index (AGFI) = 0.933  
Parsimony Goodness of Fit Index (PGFI) = 0.856

Modification Indices for BETA

	Life	Instru	SupportA
Life	-	-	29.313
Instru	29.313	-	-
SupportA	18.637	2.734	-

Expected Change for BETA

	Life	Instru	SupportA
Life	-	-	0.735
Instru	-0.296	-	-
SupportA	-0.209	-0.233	-

Standardized Expected Change for BETA

	Life	Instru	SupportA
Life	-	-	0.744
Instru	-0.307	-	-
SupportA	-0.211	-0.236	-

Modification Indices for GAMMA

	Manage	Assess	Teacher
Life	17.588	42.651	46.054
Instru	1.370	2.110	0.593
SupportA	-	-	-

Expected Change for GAMMA

	Manage	Assess	Teacher
Life	0.405	0.533	0.485
Instru	0.167	0.152	0.065
SupportA	-	-	-

Standardized Expected Change for GAMMA

	Manage	Assess	Teacher
Life	0.412	0.543	0.493
Instru	0.171	0.155	0.066
SupportA	-	-	-

No Non-Zero Modification Indices for PHI

Modification Indices for PSI			
	Life	Instru	SupportA
Life	- -	- -	- -
Instru	29.313	- -	- -
SupportA	17.864	2.734	- -

Expected Change for PSI			
	Life	Instru	SupportA
Life	- -	- -	- -
Instru	-0.171	- -	- -
SupportA	-0.126	-0.047	- -

Standardized Expected Change for PSI			
	Life	Instru	SupportA
Life	- -	- -	- -
Instru	-0.177	- -	- -
SupportA	-0.127	-0.048	- -

II Path Analysis of Model Lifelong Learning Factor Scores Regressions

ETA	Instru1	Instru2	Instru3	Instru4	Instru5	Instru6
Life	0.012	0.009	0.014	0.013	0.012	0.013
Instru	0.109	0.080	0.130	0.114	0.110	0.117
SupportA	0.042	0.031	0.050	0.044	0.042	0.045

ETA	Instru7	Instru8	Instru9	Instru10	Instru11	Support1
Life	0.010	0.010	0.016	0.011	0.016	0.002
Instru	0.087	0.089	0.146	0.100	0.141	0.022
SupportA	0.033	0.034	0.056	0.038	0.054	0.051

ETA	Support2	Support3	Support4	Support5	Support6	Atmos1
Life	0.006	0.003	0.004	0.005	0.005	0.003
Instru	0.052	0.032	0.040	0.042	0.047	0.031
SupportA	0.123	0.074	0.095	0.098	0.109	0.072

ETA	Atmos2	Atmos3	Atmos4	Atmos5	Life1	Life2
Life	0.004	0.003	0.004	0.004	0.089	0.071
Instru	0.041	0.025	0.040	0.040	0.011	0.009
SupportA	0.095	0.058	0.093	0.095	0.004	0.004

ETA	Life3	Life4	Life5	Life6	Life7	Life8
Life	0.093	0.105	0.097	0.110	0.107	0.106
Instru	0.012	0.014	0.012	0.014	0.014	0.014
SupportA	0.005	0.005	0.005	0.005	0.005	0.005

ETA	Life9	Life10	Life11	Life12	Life13	Manage1
Life	0.113	0.108	0.110	0.103	0.091	0.003
Instru	0.015	0.014	0.014	0.013	0.012	0.030
SupportA	0.006	0.005	0.005	0.005	0.004	0.070

ETA	Manage2	Manage3	Manage4	Assess1	Assess2	Assess3
Life	0.003	0.002	0.001	0.001	0.002	0.002
Instru	0.026	0.018	0.013	0.010	0.018	0.018
SupportA	0.060	0.041	0.032	0.024	0.043	0.043

ETA	Assess4	Assess5	Teacher1	Teacher2	Teacher3	Teacher4
Life	0.002	0.002	0.001	0.001	0.001	0.001
Instru	0.015	0.016	0.011	0.011	0.006	0.007
SupportA	0.034	0.038	0.027	0.025	0.015	0.017

ETA	Teacher5	Teacher6	Teacher7	Teacher8	Teacher9
Life	0.001	0.002	0.002	0.001	0.001
Instru	0.013	0.016	0.014	0.013	0.014
SupportA	0.029	0.038	0.032	0.030	0.032

KSI	Instru1	Instru2	Instru3	Instru4	Instru5	Instru6
Manage	0.022	0.016	0.027	0.023	0.022	0.024
Assess	0.016	0.011	0.019	0.016	0.016	0.017
Teacher	0.011	0.008	0.013	0.011	0.011	0.012

KSI	Instru7	Instru8	Instru9	Instru10	Instru11	Support1
Manage	0.018	0.018	0.030	0.020	0.029	0.027
Assess	0.012	0.013	0.021	0.014	0.020	0.019
Teacher	0.009	0.009	0.014	0.010	0.014	0.013

KSI	Support2	Support3	Support4	Support5	Support6	Atmos1
Manage	0.065	0.039	0.050	0.052	0.058	0.038
Assess	0.045	0.027	0.035	0.036	0.041	0.027
Teacher	0.032	0.019	0.024	0.025	0.028	0.018

KSI	Atmos2	Atmos3	Atmos4	Atmos5	Life1	Life2
Manage	0.051	0.031	0.049	0.050	0.002	0.002
Assess	0.035	0.021	0.034	0.035	0.002	0.001
Teacher	0.024	0.015	0.024	0.024	0.001	0.001

KSI	Life3	Life4	Life5	Life6	Life7	Life8
Manage	0.002	0.003	0.003	0.003	0.003	0.003
Assess	0.002	0.002	0.002	0.002	0.002	0.002
Teacher	0.001	0.001	0.001	0.001	0.001	0.001

KSI

	Life9	Life10	Life11	Life12	Life13	Manage1
Manage	0.003	0.003	0.003	0.003	0.002	0.245
Assess	0.002	0.002	0.002	0.002	0.002	0.050
Teacher	0.001	0.001	0.001	0.001	0.001	0.039

KSI

	Manage2	Manage3	Manage4	Assess1	Assess2	Assess3
Manage	0.211	0.146	0.111	0.025	0.044	0.044
Assess	0.043	0.030	0.023	0.108	0.188	0.190
Teacher	0.034	0.023	0.018	0.024	0.042	0.042

KSI

	Assess4	Assess5	Teacher1	Teacher2	Teacher3	Teacher4
Manage	0.035	0.039	0.031	0.029	0.018	0.020
Assess	0.151	0.169	0.038	0.035	0.022	0.024
Teacher	0.034	0.038	0.137	0.127	0.078	0.087

KSI

	Teacher5	Teacher6	Teacher7	Teacher8	Teacher9
Manage	0.034	0.044	0.038	0.034	0.037
Assess	0.042	0.054	0.046	0.042	0.045
Teacher	0.150	0.195	0.165	0.151	0.162

BETA

	Life	Instru	SupportA
Life	-	0.635	-
Instru	-	-	0.889
SupportA	-	-	-

GAMMA

	Manage	Assess	Teacher
Life	-	-	-
Instru	-	-	-
SupportA	0.478	0.298	0.203

Correlation Matrix of ETA and KSI

	Life	Instru	SupportA	Manage	Assess	Teacher
Life	1.000	-	-	-	-	-
Instru	0.635	1.000	-	-	-	-
SupportA	0.565	0.889	1.000	-	-	-
Manage	0.491	0.774	0.870	1.000	-	-
Assess	0.473	0.745	0.838	0.789	1.000	-
Teacher	0.459	0.722	0.812	0.774	0.804	1.000

PSI

Note: This matrix is diagonal.

	Life	Instru	SupportA
Life	0.597	0.210	0.169

Regression Matrix ETA on KSI (Standardized)

	Manage	Assess	Teacher
Life	0.270	0.168	0.115
Instru	0.425	0.265	0.180
SupportA	0.478	0.298	0.203

BETA

	Life	Instru	SupportA
Life	-	0.635	-
Instru	-	-	0.889
SupportA	-	-	-

GAMMA

	Manage	Assess	Teacher
Life	-	-	-
Instru	-	-	-
SupportA	0.478	0.298	0.203

Correlation Matrix of ETA and KSI

	Life	Instru	SupportA	Manage	Assess	Teacher
Life	1.000	-	-	-	-	-
Instru	0.635	1.000	-	-	-	-
SupportA	0.565	0.889	1.000	-	-	-
Manage	0.491	0.774	0.870	1.000	-	-
Assess	0.473	0.745	0.838	0.789	1.000	-
Teacher	0.459	0.722	0.812	0.774	0.804	1.000

PSI

Note: This matrix is diagonal.

	Life	Instru	SupportA
Life	0.597	0.210	0.169

Regression Matrix ETA on KSI (Standardized)

	Manage	Assess	Teacher
Life	0.270	0.168	0.115
Instru	0.425	0.265	0.180
SupportA	0.478	0.298	0.203

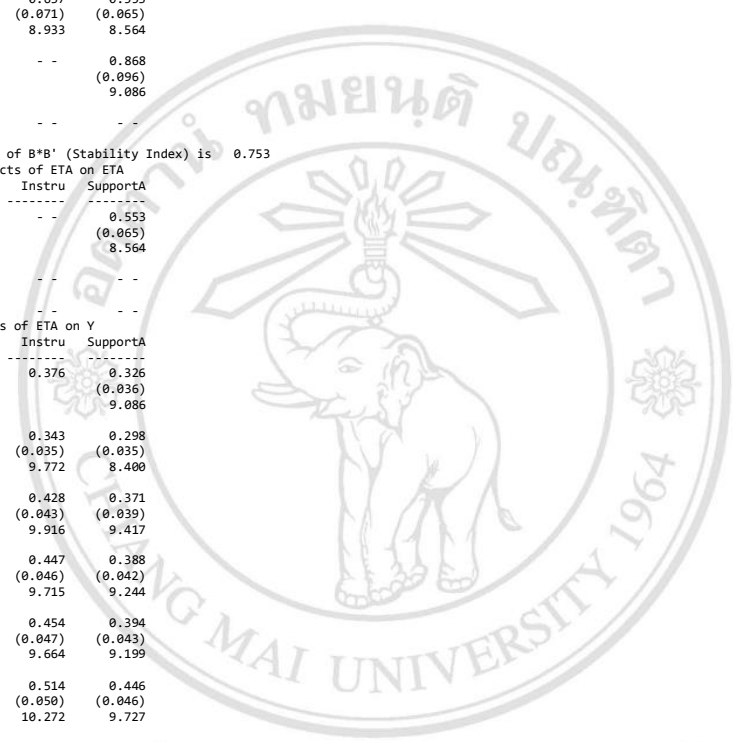
TI Path Analysis of Model Lifelong Learning

Total and Indirect Effects

Total Effects of KSI on ETA

	Manage	Assess	Teacher
Life	0.265 (0.063)	0.166 (0.058)	0.113 (0.051)

	4.234	2.839	2.201
Instru	0.417 (0.097)	0.260 (0.091)	0.177 (0.080)
	4.293	2.856	2.209
SupportA	0.480 (0.112)	0.300 (0.105)	0.204 (0.092)
	4.305	2.860	2.210
Indirect Effects of KSI on ETA			
	Manage	Assess	Teacher
Life	0.265 (0.063)	0.166 (0.058)	0.113 (0.051)
	4.234	2.839	2.201
Instru	0.417 (0.097)	0.260 (0.091)	0.177 (0.080)
	4.293	2.856	2.209
SupportA	- -	- -	- -
Total Effects of ETA on ETA			
	Life	Instru	SupportA
Life	- -	0.637 (0.071)	0.553 (0.065)
		8.933	8.564
Instru	- -	- -	0.868 (0.096)
			9.086
SupportA	- -	- -	- -
Largest Eigenvalue of B*B' (Stability Index) is 0.753			
Indirect Effects of ETA on ETA			
	Life	Instru	SupportA
Life	- -	- -	0.553 (0.065)
			8.564
Instru	- -	- -	- -
			- -
SupportA	- -	- -	- -
Total Effects of ETA on Y			
	Life	Instru	SupportA
Instru1	- -	0.376 (0.036)	0.326 (0.036)
			9.086
Instru2	- -	0.343 (0.035)	0.298 (0.035)
		9.772	8.400
Instru3	- -	0.428 (0.043)	0.371 (0.039)
		9.916	9.417
Instru4	- -	0.447 (0.046)	0.388 (0.042)
		9.715	9.244
Instru5	- -	0.454 (0.047)	0.394 (0.043)
		9.664	9.199
Instru6	- -	0.514 (0.050)	0.446 (0.046)
		10.272	9.727
Instru7	- -	0.475 (0.050)	0.412 (0.045)
		9.555	9.112
Instru8	- -	0.573 (0.059)	0.497 (0.054)
		9.709	9.238
Instru9	- -	0.489 (0.047)	0.424 (0.043)
		10.444	9.868
Instru10	- -	0.379 (0.040)	0.329 (0.036)
		9.527	9.086
Instru11	- -	0.368 (0.036)	0.320 (0.033)
		10.099	9.578
Support1	- -	- -	0.716
Support2	- -	- -	0.453 (0.045)
			10.096
Support3	- -	- -	0.378 (0.042)
			8.991
Support4	- -	- -	0.340 (0.037)
			9.258
Support5	- -	- -	0.423 (0.045)
			9.475
Support6	- -	- -	0.410 (0.042)
			9.652



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Atmos1	-	-	-	0.417 (0.046) 9.125
Atmos2	-	-	-	0.459 (0.046) 10.027
Atmos3	-	-	-	0.481 (0.051) 9.421
Atmos4	-	-	-	0.468 (0.048) 9.840
Atmos5	-	-	-	0.549 (0.055) 9.959
Life1	0.629	0.401 (0.045) 8.933	0.348 (0.041) 8.564	
Life2	0.727 (0.057) 12.674	0.463 (0.052) 8.850	0.402 (0.047) 8.491	
Life3	0.606 (0.052) 11.682	0.386 (0.044) 8.809	0.335 (0.040) 8.454	
Life4	0.585 (0.049) 11.942	0.373 (0.042) 8.919	0.323 (0.038) 8.551	
Life5	0.654 (0.054) 12.021	0.417 (0.047) 8.952	0.362 (0.042) 8.581	
Life6	0.722 (0.057) 12.664	0.460 (0.050) 9.209	0.399 (0.045) 8.806	
Life7	0.747 (0.059) 12.683	0.476 (0.052) 9.216	0.413 (0.047) 8.813	
Life8	0.695 (0.056) 12.446	0.443 (0.049) 9.124	0.384 (0.044) 8.732	
Life9	0.776 (0.060) 12.913	0.494 (0.053) 9.304	0.429 (0.048) 8.890	
Life10	0.615 (0.051) 12.155	0.392 (0.043) 9.007	0.340 (0.039) 8.629	
Life11	0.669 (0.054) 12.451	0.426 (0.047) 9.126	0.370 (0.042) 8.734	
Life12	0.459 (0.041) 11.134	0.292 (0.034) 8.566	0.253 (0.031) 8.239	
Life13	0.446 (0.042) 10.653	0.284 (0.034) 8.341	0.247 (0.031) 8.038	

Indirect Effects of ETA on Y

Life	Instru	SupportA	
Instru1	-	-	0.326 (0.036) 9.086
Instru2	-	-	0.298 (0.035) 8.400
Instru3	-	-	0.371 (0.039) 9.417
Instru4	-	-	0.388 (0.042) 9.244
Instru5	-	-	0.394 (0.043) 9.199
Instru6	-	-	0.446 (0.046) 9.727
Instru7	-	-	0.412 (0.045) 9.112
Instru8	-	-	0.497 (0.054) 9.238
Instru9	-	-	0.424 (0.043) 9.868
Instru10	-	-	0.329 (0.036) 9.086
Instru11	-	-	0.320

			(0.033)
			9.578
Support1	--	--	--
Support2	--	--	--
Support3	--	--	--
Support4	--	--	--
Support5	--	--	--
Support6	--	--	--
Atmos1	--	--	--
Atmos2	--	--	--
Atmos3	--	--	--
Atmos4	--	--	--
Atmos5	--	--	--
Life1	--	0.401 (0.045) 8.933	0.348 (0.041) 8.564
Life2	--	0.463 (0.052) 8.850	0.402 (0.047) 8.491
Life3	--	0.386 (0.044) 8.809	0.335 (0.040) 8.454
Life4	--	0.373 (0.042) 8.919	0.323 (0.038) 8.551
Life5	--	0.417 (0.047) 8.952	0.362 (0.042) 8.581
Life6	--	0.460 (0.050) 9.209	0.399 (0.045) 8.806
Life7	--	0.476 (0.052) 9.216	0.413 (0.047) 8.813
Life8	--	0.443 (0.049) 9.124	0.384 (0.044) 8.732
Life9	--	0.494 (0.053) 9.304	0.429 (0.048) 8.890
Life10	--	0.392 (0.043) 9.007	0.340 (0.039) 8.629
Life11	--	0.426 (0.047) 9.126	0.370 (0.042) 8.734
Life12	--	0.292 (0.034) 8.566	0.253 (0.031) 8.239
Life13	--	0.284 (0.034) 8.341	0.247 (0.031) 8.038
Total Effects of KSI on Y			
	Manage	Assess	Teacher
Instru1	0.157 (0.036) 4.293	0.098 (0.034) 2.856	0.067 (0.030) 2.209
Instru2	0.143 (0.034) 4.214	0.089 (0.031) 2.833	0.061 (0.028) 2.198
Instru3	0.178 (0.041) 4.327	0.111 (0.039) 2.866	0.076 (0.034) 2.213
Instru4	0.186 (0.043) 4.310	0.116 (0.041) 2.861	0.079 (0.036) 2.211
Instru5	0.189 (0.044) 4.305	0.118 (0.041) 2.860	0.080 (0.036) 2.211
Instru6	0.214 (0.049) 4.356	0.133 (0.046) 2.875	0.091 (0.041) 2.217
Instru7	0.198 (0.046) 4.296	0.124 (0.043) 2.857	0.084 (0.038) 2.209
Instru8	0.239 (0.055) 4.309	0.149 (0.052) 2.861	0.101 (0.046) 2.211
Instru9	0.204 (0.047) 4.368	0.127 (0.044) 2.878	0.087 (0.039) 2.219
Instru10	0.158	0.099	0.067



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	(0.037)	(0.035)	(0.030)
	4.293	2.856	2.209
Instru11	0.154 (0.035) 4.342	0.096 (0.033) 2.871	0.065 (0.029) 2.216
Support1	0.344 (0.080) 4.305	0.214 (0.075) 2.860	0.146 (0.066) 2.210
Support2	0.217 (0.050) 4.385	0.136 (0.047) 2.883	0.092 (0.042) 2.221
Support3	0.182 (0.042) 4.281	0.113 (0.040) 2.853	0.077 (0.035) 2.207
Support4	0.163 (0.038) 4.309	0.102 (0.036) 2.861	0.069 (0.031) 2.211
Support5	0.203 (0.047) 4.330	0.127 (0.044) 2.867	0.086 (0.039) 2.214
Support6	0.197 (0.045) 4.347	0.123 (0.043) 2.872	0.084 (0.038) 2.216
Atmos1	0.200 (0.047) 4.296	0.125 (0.044) 2.857	0.085 (0.039) 2.209
Atmos2	0.220 (0.050) 4.380	0.137 (0.048) 2.882	0.093 (0.042) 2.221
Atmos3	0.231 (0.053) 4.326	0.144 (0.050) 2.866	0.098 (0.044) 2.213
Atmos4	0.225 (0.051) 4.364	0.140 (0.049) 2.877	0.095 (0.043) 2.218
Atmos5	0.264 (0.060) 4.374	0.165 (0.057) 2.880	0.112 (0.050) 2.220
Life1	0.167 (0.039) 4.234	0.104 (0.037) 2.839	0.071 (0.032) 2.201
Life2	0.193 (0.046) 4.225	0.120 (0.042) 2.836	0.082 (0.037) 2.200
Life3	0.161 (0.038) 4.221	0.100 (0.035) 2.835	0.068 (0.031) 2.199
Life4	0.155 (0.037) 4.233	0.097 (0.034) 2.838	0.066 (0.030) 2.201
Life5	0.174 (0.041) 4.236	0.108 (0.038) 2.839	0.074 (0.033) 2.201
Life6	0.192 (0.045) 4.263	0.120 (0.042) 2.847	0.081 (0.037) 2.205
Life7	0.198 (0.047) 4.263	0.124 (0.043) 2.848	0.084 (0.038) 2.205
Life8	0.184 (0.043) 4.254	0.115 (0.040) 2.845	0.078 (0.036) 2.204
Life9	0.206 (0.048) 4.272	0.129 (0.045) 2.850	0.087 (0.040) 2.206
Life10	0.163 (0.038) 4.242	0.102 (0.036) 2.841	0.069 (0.031) 2.202
Life11	0.178 (0.042) 4.254	0.111 (0.039) 2.845	0.075 (0.034) 2.204
Life12	0.122 (0.029) 4.193	0.076 (0.027) 2.826	0.052 (0.024) 2.195
Life13	0.118 (0.028) 4.166	0.074 (0.026) 2.818	0.050 (0.023) 2.191

TI Path Analysis of Model Lifelong Learning  
Standardized Total and Indirect Effects

	Standardized Total Effects of KSI on ETA	Manage	Assess	Teacher
Life	0.270	0.168	0.115	
Instru	0.425	0.265	0.180	
SupportA	0.478	0.298	0.203	

	Standardized Indirect Effects of KSI on ETA	Manage	Assess	Teacher
Life	0.270	0.168	0.115	







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1. Khontaros, Chaiyasut, (2013). *Characters of Thai children: with habits of eagerness for knowledge for the sake of society, intellect and studies in the era of second decade of educational reform*. Journal of Education. 37 (1). page 89-106.
  2. Khontaros, Chaiyasut, et al (2013). *Teachers' Roles to Promote Lifelong Learning Skills of Students in Basic Education Level of the Upper Northern Thailand*. Proceeding in "The 1th International Conference on Lifelong Learning for all 2013 "Sustainable Practices toward Lifelong Learning Society" on 18-19 July 2013 at Chulalongkorn University. page 214-220.
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