



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved

APPENDIX A

Experts Directory

Experts Directory

Displayed as a source to content validity checking, Includes full coverage and consistency of standards and indicators of Internal Educational Quality Assurance for Bilingual schools in Early Childhood Education Level

Experts specialized in Bilingual Education in early childhood

1. Lecturer Sakawnaet Wongkammuen
Pracharat Lampang school director
2. Dr. Amphaiwan Thonavanik
Siripen Bilingual School department, Research upon elementary education in Bilingual schools in Thailand.
3. Dr. Vilailuk Decha
Nawamintrachutit intermediate Nakhon Sawan, Research upon Comparative analysis of English teaching in secondary section both Bilingual and non-bilingual schools in Thailand.
4. Lecturer Raneenart Chaiwong
School director of Wichai Wittaya school.
5. Lecturer Walaiporn Panya
Head of academic section Wichai Wittaya school.

Experts specialized in Measurement and evaluation of Educational Quality

1. Assoc. Prof. Dr. Somsak Phoowipadawat
Lecturer in Faculty of Education Chiang Mai university.
2. Dr. Somkid Promjuy
Lecturer in school of Education SukhoThai Thammatirat university.
3. Dr. Sangworn kudkratoung
Lecturer in school of Education SukhoThai Thammatirat university.
4. Dr. Jitwimon Khaysoobun
Lecturer in faculty of Education Suan Dusit University.
5. Asst. Prof. Uthen Panyo
Lecturer in faculty of Education North Chiang Mai university.

Experts specialized in Educational Quality Assurances

1. Dr.Tipawan Lekawattana
Specialist in Ban Mounghom school Chaibadan district, Lopburi Research upon development of Internal education of basic education commission by benchmarking.
2. Dr.Chonchakorn Worain
Lecturer in faculty of education PSRU,
Research upon the development of Quality Assurance model in primary school : An Empowerment Approach.
3. Dr.Khak Moonded
Lecturer in faculty of Education PCRU,
Research upon the development of training course curriculum in Evaluation and Measurement of Learning outcomes.
4. Asst. Prof. Dr. Songsak Phuseeon
Lecturer in Faculty of Education MSU,
Research upon development of quality evaluation of evaluators for basic education commission.
5. Aj.Srimanee Senakul
Specialist Head of academic section responsible in Educational Quality Assurance Anubarn Chiang Mai School.

Representatives of Parents

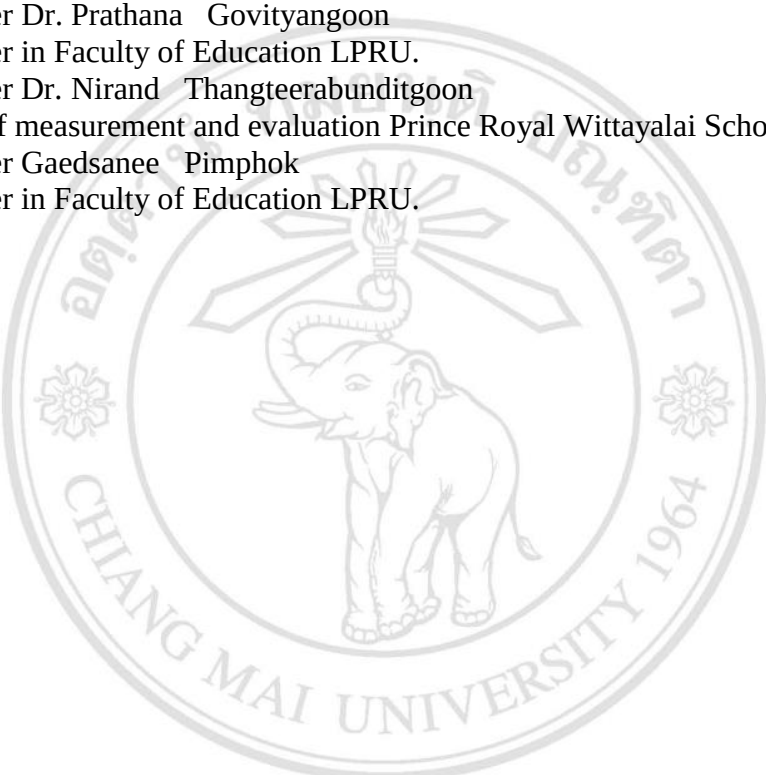
1. Jaenjitt Rungrojsathaporn
Entrepreneur.
2. Dr. Sriprapai Intarachaithep
Lecturer in Faculty of Nursing,
Boromarajonani College of Nursing, Lampang.
3. Janthavan Phophakdee
Secretary of director in Wichai Wittaya School.
4. Orathai Inthasarn
Thai cultural dance teacher Wichai Wittaya.
5. Chathree Namkhun
Director of Banhong school, Lumphun.

Copyright© by Chiang Mai University
All rights reserved

Expert Directory
**Quality Monitoring Questionnaires for evaluation of Internal Quality Assurance
model for Bilingual school in Early Childhood Education Level**

Experts specialized in evaluation and measurement of Education with computer programming skills

1. Asst. Prof. Dr. Sunthorapoj Dumrongpanij
Lecturer in Faculty of Education CMU.
2. Asst. Prof. Dr. Veeravun Wongneenpetch
Lecturer in Faculty of Humanities CMU.
3. Lecturer Dr. Prathana Govityangoon
Lecturer in Faculty of Education LPRU.
4. Lecturer Dr. Nirand Thangteerabunditgoon
Head of measurement and evaluation Prince Royal Wittayalai School.
5. Lecturer Gaedsanee Pimpbok
Lecturer in Faculty of Education LPRU.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Expert Directory
Model Quality assessment and Internal Quality Assurance for
Bilingual School in Early Childhood Education Level

Experts specialized in measurement and evaluation

1. Assoc. Prof. Dr. Boonsong Nilkaew
Renown chancellor Far Eastern University,
Former Lecturer of department of Education Research and evaluation, Faculty of
Education Chiang Mai University.
Portfolio : Evaluation System and Quality Assurance Mechanism (2539).
2. Assoc. Prof. Daroon Harntrakool
Chief Executive of Accreditation Bureau Network center, Chiang Mai
University.
Former Lecturer of department of Education Research and Evaluation, Faculty
of Education Chiang Mai University.
3. Assoc. Prof. Uthen Panyo
Chief Executive syllabus of department of management and evaluation , North
Chiang Mai University. Former Lecturer of department of Education Research
and evaluation, Faculty of Education, Chiang Mai University.

Experts specialized in Education Quality Assurance

1. Lecturer Nongkran Ratanavanich
Partnership Manager of Rawadee research and evaluation
2. Lecturer Pornpunnee Rodthongkha
Specialist of Ban Pong Yaeng nok School, Chiang Mai Province.
Committee of Standards and indicators evaluation according to primary
education level for Internal Quality Assurance in Institute. Office of the Basic
Education Commission.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Experts specialized in Bilingual teachings

1. Lecturer Chuleekorn Mhaikeaw
Specialist Supervisor of Primary Educational Service Area office, Area 2, Lamphun.
Responsible for Education Quality Assurance.
2. Lecturer Bircan Yavus
Head of primary section Wichai Wittaya School.
3. Lecturer Siriphanan Radchata
Ceif deputy of primary section and Head of Education Quality Assurance.
Highest Education: Master's Degree in Early Childhood Education, Chiang Mai Univeristy.

Representatives of Parents with child currently studying in Bilingual school

1. Lecturer Dr. Sripapai Inchaitep
Lecturer in Boromarajonnai College of Nursing, Lampang. Highest Education: PhD in research and development of evaluation system supervision, monitoring and evaluating education management Faculty of Education, Chiang Mai University.

Committees of Internal Education Quality Assessment Directory
Trial and model evaluation of Internal Education Quality Assurance for
Bilingual School in Early Childhood Education Level

1st Model Trial on Wichai Wittaya School which represents Medium size School

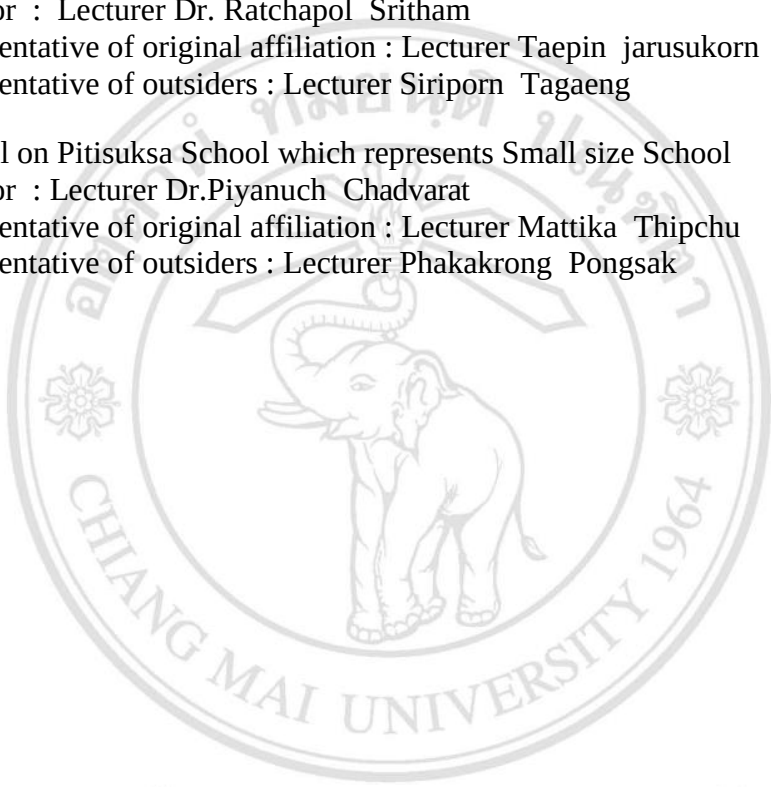
1. Director : Lecturer Raneenart Chaiwong
2. Representative of original affiliation : Lecturer Chanathip Thipbumroong
3. Representative of outsiders : Lecturer Amara Sinthuboon

2nd Model Trial on Piyaporn Pornpikul Pittaya School which represents Large School

1. Director : Lecturer Dr. Ratchapol Sritham
2. Representative of original affiliation : Lecturer Taepin jarusukorn
3. Representative of outsiders : Lecturer Siriporn Tagaeng

3rd Model Trial on Pitisuksa School which represents Small size School

1. Director : Lecturer Dr. Piyanuch Chadvarat
2. Representative of original affiliation : Lecturer Mattika Thipchu
3. Representative of outsiders : Lecturer Phakakrong Pongsak



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

APPENDIX B

The Example of Research Tools

Questionnaires distribution to experts in order to examine content validity, coverage of the content and Clarity of Language used in the Internal Education Quality Assurance for Bilingual Schools in Early Childhood Education Level

Instructions

1. The objective of this questionnaires is to examine content validity, Coverage of the content and Clarity of Language used which was provided for the Internal Education Quality Assurance for Bilingual Schools in Early Childhood Education Level.

2. The Questionnaires include 2 specific parts,

1st part demands opinion upon concordance of standards and indicators displayed in the Internal Education Quality Assurance for Early Childhood Education Level in Bilingual School.

2nd part demands opinion upon evidence and resources that represent the process of each individual indicators.

3. Please suggest the guideline Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level by using in the level that suit your opinion.

-1 means it is not suitable.

0 means it is uncertain.

1 means it is suitable.

The data you are given will be analyzed for education improvement and will not be get bad effect to you.

Thank you very much for your participation.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved
Mrs.Yaowatiwa Namkhun
PhD Student Department of Research and Development
Faculty of Education Chiang Mai University
E-mail : yaowatiwa1111@gmail.com
Tel. 089-4297385

Standards	Definition of standards	Indicators		Opinion of Expert			
				-1	0	1	Suggestion
1. Physical and intellectual development of students	The students have hygiene in their health care, standard weight and height, movement skills according to their ages and avoid conditions that have risks about diseases, accidents, and drugs.	1.1	Students have standard weight and height				
		1.2	Students have movement skills according to their ages				
		1.3	Students have hygiene in their health care				
		1.4	Students avoid conditions that have risks about diseases, accidents, and drugs				
		1.5	Others				

Questionnaire on the propriety of using standards and indicators internal educational quality assurance for bilingual schools in early childhood education level. It used to check structure validity and consistency between standards and indicators model with empirical data

(director, head of academic affair, staff who are responsible for internal assurance and teachers)

Instructions

1. Questionnaire on the propriety of using standards and indicators internal educational quality assurance for bilingual schools in early childhood education level. It used to check structure validity and consistency between standards and indicators model with empirical data

2. The standards and indicators internal education quality in Bilingual Schools on Early Childhood Education Level which synthesis from 10 countries that expose top score on PISA'2009 (including Finland, Korea, Shanghai China, Hong Kong China, Singapore, Canada, New Zealand, Japan, Australia and Netherlands), UNESCO bilingual school, World Class bilingual school, ONESQA and OBEC of Thailand and researches found 13 standards and 76 indicators.

3. Please check ✓ according to your opinion and the meaning of value have detail as the followings.

Score	1	mean	the evaluation at the “least” level
Score	2	mean	the evaluation in “little” level
Score	3	mean	the evaluation in “moderate” level
Score	4	mean	the evaluation in “high” level
Score	5	mean	the evaluation in “highest” level

Be advised that suggestions and opinion provided will be greatly crucial and valuable for this research to proceed, furthermore researcher acknowledges and appreciates all the time sacrifices with hope of efficient continuation of the research.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved
Mrs.Yaowatiwa Namkhun
PhD Student Department of Research and Development
Faculty of Education Chiang Mai University
E-mail : yaowatiwa1111@gmail.com
Tel. 089-4297385

Part 1 Basic Information

1. Status ☐ Director ☐ Head of academic affair ☐ Staff who take responsibility in internal assurance ☐ Teacher
2. Sex ☐ Male ☐ Female
3. Age ☐ 20-30 years old ☐ 31-40 years old ☐ 41-50 years old ☐ more than 51 years old
4. Highest degree ☐ Under Bachelor degree ☐ Bachelor degree ☐ Masters degree ☐ Doctorate
5. Work Experience ☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ 15-20 years ☐ more than 20 years

Part 2 The opinion on the propriety of using standards and indicators internal educational quality assurance for bilingual schools in early childhood education level

In early childhood education level								
Standards	Definition of standards	Indicators		The propriety of using				
				5	4	3	2	1
1. Physical and intellectual development of students	The students have hygiene in their health care, standard weight and height, movement skills according to their ages and avoid conditions that have risks about diseases, accidents, and drugs.	1.1	Students have standard weight and height					
		1.2	Students have movement skills according to their ages					
		1.3	Students have hygiene in their health care					
		1.4	Students avoid conditions that have risks about diseases, accidents, and drugs					
		1.5	No illness / condition that affects development.					

**Questionnaire : The expert's opinion on quality of Internal Educational
Quality Assurance Model for Bilingual schools in Early childhood Education
Level (Before Brain Storming)**

Notice:

1. This questionnaire objects to collect the experts of Internal Educational Quality Assurance for Bilingual schools in Early childhood Education Level before brainstorming.

2. There are 2 sections in this questionnaire these are;

Section 1 The opinion on the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school in 4 parts; Utility, Feasibility, Propriety, and Accuracy and other suggestions..

Section 2 Any other suggestions.

3. Please suggest the guideline of Internal Educational Quality Assurance Model for kindergarten in bilingual school by using in the level that suit your opinion.

5 means it is suitable in the highest levels.

4 means it is suitable in high levels.

3 means it is suitable in medium levels.

2 means it is suitable in low levels.

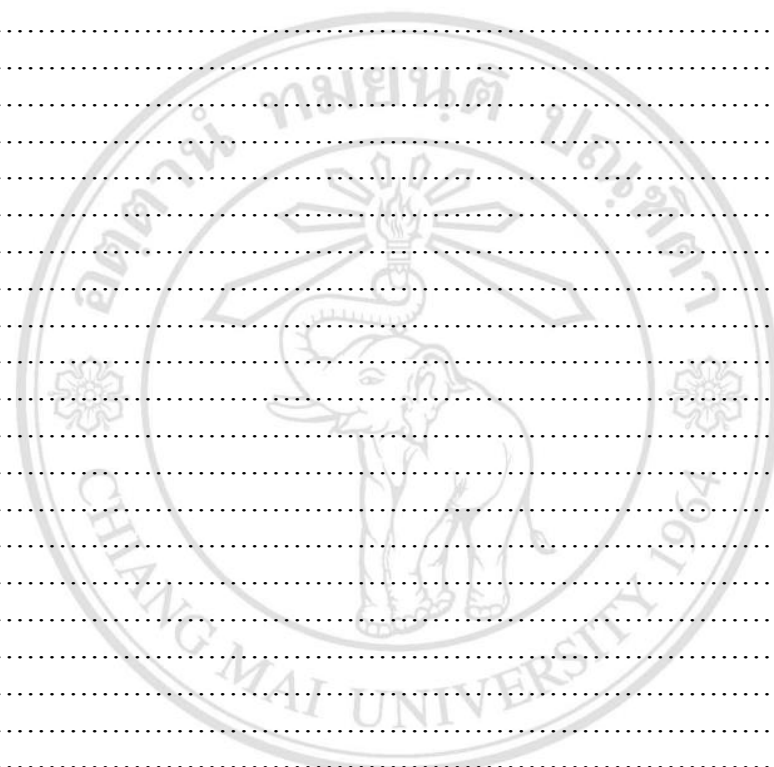
1 means it is suitable in the lowest levels.

The data you are given will be analyzed for education improvement and will not be get bad effect to you.

Thank you very much for your participation.

Yaowatiwa Nammakhun
Ph.Ed. (Research and Development in Education), Conditate
Faculty of Education, Chiang Mai University
E-mail : yaowatiwa1111@gmail.com
Tel. 089-4297385

1. In your opinion , the elements of the draft format comprises 1) the goal of the model, 2) standards and indicators, 3) the proceed of assurance including quality control, quality audit and quality assessment. Are appropriate or not ? and How about a suggestion for improvement ?



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Section 2 The opinion on the detail of Internal Educational Quality Assurance Model for kindergarten in bilingual school.

List	Rate of opinion level				
	5	4	3	2	1
Utility Part: Please give us the opinion concern about that will the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school suit the need of administrators, teachers, parents, stakeholder, and other and will it be useful in implementation in school, or not?					
1. The data that we got from evaluation system was cover and met the user's demand.					
2. The result of evaluation was useful and can apply to develop school's management.					
3. The result of evaluation was worth.					
4. The model is useful for internal educational quality assurance system for kindergarten in bilingual school.					
5. The model can stimulate the stakeholders to understand the useful of internal educational quality assurance system and use it for improving school management.					
Feasibility Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used for present situation and got acceptance from stakeholders.					
1. The model is appropriate to school's context.					
2. The model is appropriate to stakeholder's context.					
3. The model is regarded for individuality of the person who were given the data and who ran the internal educational quality assurance system in school.					
4. The model is appropriate for the implementation of bilingual school.					
5. The model has clear criterion of evaluation that show the transparency of implementation.					
6. The model is appropriate for improving internal educational quality assurance model for kindergarten in bilingual school					
7. The data processing programed is easy to use in school system.					
8. The model manual is easy to understand and easy to use.					
Accuracy Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used measured with clear evaluation.					
9. The model is improved from the base of believable theories.					

List	Rate of opinion level				
	5	4	3	2	1
10. The model specified the objectives of controlling, monitoring, and evaluating clearly.					
11. The model specified the stakeholders, data resource, and implementation clearly.					
12. The standards and indicators in controlling system is appropriate, and clear.					
13. The standards and indicators in monitoring system is appropriate, and clear.					
14. The standards and indicators in evaluating system is appropriate, and clear.					
15. Criterion of evaluation is clear and easy to use in evaluation system.					
16. The guidelines of using the evaluation result of internal educational quality assurance model can be used for improving school management.					
17. The data processing programed is accuracy.					
18. The model manual has enough clearly detail, comprehensively and clearly.					

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

The recording of synthesis document of Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level

Standards	Indicator		UNESCO	Australia	Singapore	Canada	Netherlands	Finland	Japan	Korea	Shanghai	Hong Kong	New Zealand	World class	สหรัฐ.	มต.
1. Physical and intellectual development of students	1.1	Students have standard weight and height							✓	✓					✓	✓
	1.2	Students have movement skills according to their ages			✓										✓	✓
	1.3	Students have hygiene in their health care	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓
	1.4	Students avoid conditions that have risks about diseases, accidents, and drugs		✓					✓							

Questionnaire : The expert's opinion on consistency between questionnaire and definition of quality of Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level

Notice:

1. This questionnaire objects to collect data about **consistency between** questionnaire and definition of quality of Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level by experts.

2. There are 2 sections in this questionnaire these are;

Section 1 The opinion on the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school in 4 parts; Utility, Feasibility, Propriety, and Accuracy .

Section 2 Any other suggestions.

3. Please suggest the guideline Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level by using in the level that suit your opinion.

-1 means it is not suitable.

0 means it is uncertain.

1 means it is suitable.

The data you are given will be analyzed for education improvement and will not be get bad effect to you.

Thank you very much for your participation.

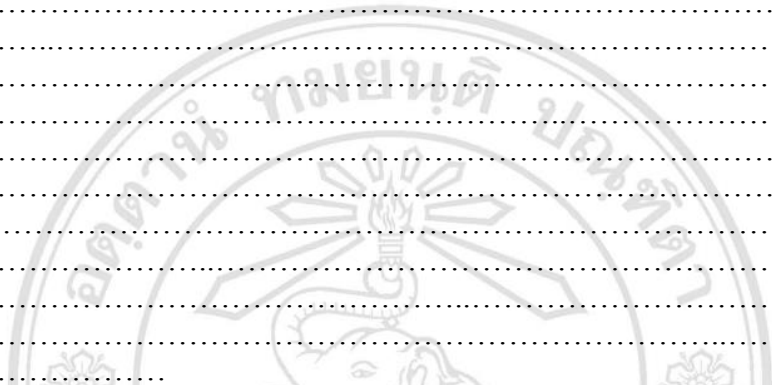
Yaowatiwa Nammakhun
Ph.Ed. (Research and Development in Education), Conditate
Faculty of Education, Chiang Mai University
E-mail : yaowatiwa1111@gmail.com
Tel. 089-4297385

Section 1 The opinion on the detail of Internal Educational Quality Assurance Model for kindergarten in bilingual school.

List	Rate of opinion level		
	-1	0	1
Utility Part: Please give us the opinion concern about that will the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school suit the need of administrators, teachers, parents, stakeholder, and other and will it be useful in implementation in school, or not?			
6. The data that we got from evaluation system was cover and met the user's demand.			
7. The result of evaluation was useful and can apply to develop school's management.			
8. The result of evaluation was worth.			
9. The model is useful for internal educational quality assurance system for kindergarten in bilingual school.			
10. The model can stimulate the stakeholders to understand the useful of internal educational quality assurance system and use it for improving school management.			
Feasibility Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used for present situation and got acceptance from stakeholders.			
19. The model is appropriate to school's context.			
20. The model is appropriate to stakeholder's context.			
21. The model is regarded for individuality of the person who were given the data and who ran the internal educational quality assurance system in school.			
22. The model is appropriate for the implementation of bilingual school.			
23. The model has clear criterion of evaluation that show the transparency of implementation.			
24. The model is appropriate for improving internal educational quality assurance model for kindergarten in bilingual school			
25. The data processing programed is easy to use in school system.			
26. The model manual is easy to understand and easy to use.			
Accuracy Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used measured with clear evaluation.			
27. The model is improved from the base of believable theories.			

List	Rate of opinion level		
	-1	0	1
28. The model specified the objectives of controlling, monitoring, and evaluating clearly.			
29. The model specified the stakeholders, data resource, and implementation clearly.			
30. The standards and indicators in controlling system is appropriate, and clear.			
31. The standards and indicators in monitoring system is appropriate, and clear.			
32. The standards and indicators in evaluating system is appropriate, and clear.			
33. Criterion of evaluation is clear and easy to use in evaluation system.			
34. The guidelines of using the evaluation result of internal educational quality assurance model can be used for improving school management.			
35. The data processing programed is accuracy.			
36. The model manual has enough clearly detail, comprehensively and clearly.			

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved



Thank you very much for your participation

Signature (Expense)

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright © by Chiang Mai University
All rights reserved

Questionnaire : The user opinion on quality of Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level (After trial the model)

Notice:

1. This questionnaire objects to collect the experts of Internal Educational Quality Assurance for Bilingual schools in Early childhood Education Level before brainstorming.

2. There are 2 sections in this questionnaire these are;

Section 1 The opinion on the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school in 4 parts; Utility, Feasibility, Propriety, and Accuracy .

Section 2 Any other suggestions.

3. Please suggest the guideline of Internal Educational Quality Assurance Model for kindergarten in bilingual school by using in the level that suit your opinion.

5 means it is suitable in the highest levels.

4 means it is suitable in high levels.

3 means it is suitable in medium levels.

2 means it is suitable in low levels.

1 means it is suitable in the lowest levels.

The data you are given will be analyzed for education improvement and will not be get bad effect to you.

Thank you very much for your participation.

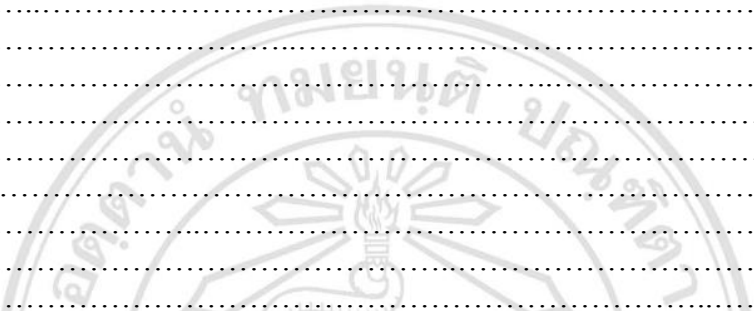
Yaowatiwa Nammakhun
Ph.Ed. (Research and Development in Education), Conditate
Faculty of Education, Chiang Mai University
E-mail : yaowatiwa1111@gmail.com
Tel. 089-4297385

Section 1 The opinion on the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school in 4 parts; Utility, Feasibility, Propriety, and Accuracy .

List	Rate of opinion level				
	5	4	3	2	1
Utility Part: Please give us the opinion concern about that will the quality of Internal Educational Quality Assurance Model for kindergarten in bilingual school suit the need of administrators, teachers, parents, stakeholder, and other and will it be useful in implementation in school, or not?					
11. The data that we got from evaluation system was cover and met the user's demand.					
12. The result of evaluation was useful and can apply to develop school's management.					
13. The result of evaluation was worth.					
14. The model is useful for internal educational quality assurance system for kindergarten in bilingual school.					
15. The model can stimulate the stakeholders to understand the useful of internal educational quality assurance system and use it for improving school management.					
Feasibility Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used for present situation and got acceptance from stakeholders.					
37. The model is appropriate to school's context.					
38. The model is appropriate to stakeholder's context.					
39. The model is regarded for individuality of the person who were given the data and who ran the internal educational quality assurance system in school.					
40. The model is appropriate for the implementation of bilingual school.					
41. The model has clear criterion of evaluation that show the transparency of implementation.					
42. The model is appropriate for improving internal educational quality assurance model for kindergarten in bilingual school					
43. The data processing programed is easy to use in school system.					
44. The model manual is easy to understand and easy to use.					
Accuracy Part: Please give us the opinion concern about that will the quality of internal educational quality assurance model for kindergarten in bilingual school can be used measured with clear evaluation.					
45. The model is improved from the base of believable theories.					

List	Rate of opinion level				
	5	4	3	2	1
46. The model specified the objectives of controlling, monitoring, and evaluating clearly.					
47. The model specified the stakeholders, data resource, and implementation clearly.					
48. The standards and indicators in controlling system is appropriate, and clear.					
49. The standards and indicators in monitoring system is appropriate, and clear.					
50. The standards and indicators in evaluating system is appropriate, and clear.					
51. Criterion of evaluation is clear and easy to use in evaluation system.					
52. The guidelines of using the evaluation result of internal educational quality assurance model can be used for improving school management.					
53. The data processing programed is accuracy.					
54. The model manual has enough clearly detail, comprehensively and clearly.					

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved



Thank you very much for your participation

Signature(User)

(.....)

(.....)

Date/...../.....

Copyright© by Chiang Mai University
All rights reserved

Appendix C

The result of quality analysis of research tools

Table 37 Item Objective Congruence Index (IOC) between standards and indicators on assurance internal educational quality in Bilingual Schools on Early Childhood Education Level. (20 experts)

Standard 1		Standard 2		Standard 3		Standard 4		Standard 5	
Indicator	IOC	Indicator	IOC	Indicator	IOC	Indicator	IOC	Indicator	IOC
1.1	1	2.1	0.95	3.1	1	4.1	1	5.1	1
1.2	1	2.2	1	3.2	1	4.2	1	5.2	1
1.3	1	2.3	1	3.3	1	4.3	0.95	5.3	1
1.4	1	2.4	1	3.4	1	4.4	1	5.4	1
Standard 6		Standard 7		Standard 8		4.5	1	5.5	0.95
6.1	1	7.1	1	8.1	0.95	Standard 9		5.6	0.95
6.2	1	7.2	1	8.2	1	9.1	0.8	5.7	1
6.3	0.95	7.3	1	8.3	0.95	9.2	0.95	5.8	0.95
6.4	1	7.4	1	8.4	0.9			5.9	1
6.5	0.95			8.5	0.9			5.1	0.95
6.6	1			8.6	0.9			5.11	0.95
6.7	0.95							5.12	1
Standard 10		Standard 11		Standard 12		Standard 13			
10.1	0.95	11.1	0.95	12.1	0.95	13.1	1		
10.2	0.85	11.2	0.8			13.2	1		
						13.3	1		
						13.4	1		

Table 38 Item Objective Congruence Index (IOC) between indicator and resource which show progress according to indicators on assurance internal educational quality in Bilingual Schools on Early Childhood Education Level. (4 experts per 1 standard)

Indicator		Indicator		Indicator		Indicator		Indicator	
resource	IOC	resource	IOC	resource	IOC	resource	IOC	resource	IOC
1.1.1	0.75	3.1.1	1	4.2.2	1	5.4.1	1	5.12.1	1
1.1.2	1	3.1.2	1	4.2.3	1	5.5.1	1	6.1.1	1
1.2.1	1	3.1.3	1	4.2.4	1	5.5.2	1	6.2.1	1
1.2.2	1	3.2.1	1	4.3.1	1	5.6.1	1	6.2.2	1
1.2.3	1	3.2.2	1	4.3.2	1	5.6.2	1	6.2.3	1
1.3.1	1	3.3.1	0.75	4.4.1	1	5.7.1	1	6.2.4	1
1.3.2	1	3.3.2	0.75	4.4.2	1	5.7.2	1	6.3.1	1
1.3.3	1	3.3.3	0.75	4.5.1	0.75	5.8.1	1	6.3.2	1
1.3.4	1	3.3.4	0.75	4.5.2	1	5.8.2	1	6.4.1	1
1.4.1	1	3.4.1	1	5.1.1	1	5.8.3	0.75	6.5.1	1
1.4.2	1	3.4.2	1	5.1.2	1	5.8.4	0.75	6.5.2	1
1.4.3	1	3.4.3	1	5.2.1	1	5.8.5	1	6.5.3	1
2.1.1	1	3.5.1	1	5.2.2	1	5.9.1	1	6.6.1	1
2.1.2	1	3.5.2	1	5.2.3	1	5.9.2	1	6.6.2	1
2.2.1	1	3.5.3	1	5.2.4	1	5.9.3	1	6.6.3	1
2.2.2	1	3.5.4	1	5.3.1	1	5.10.1	1	6.7.1	1
2.3.1	1	4.1.1	1	5.3.2	1	5.10.2	1	6.7.2	1
2.4.1	1	4.1.2	1	5.3.3	1	5.10.3	1	6.7.3	1
2.4.2	1	4.1.3	1	5.3.4	1	5.10.4	1	6.7.4	1
2.4.3	1	4.2.1	1	5.3.5	1	5.11.1	1	6.7.5	1
6.7.6	1	8.2.3	1	8.4.1	1	10.1.3	1	12.1.4	1
7.1.1	1	8.2.4	1	8.4.2	1	10.1.4	1	13.1.1	1
7.1.2	1	8.2.5	1	8.5.1	1	10.1.5	1	13.1.2	1
7.1.3	0.75	8.2.6	1	8.6.1	1	10.2.1	1	13.1.3	1
7.1.4	1	8.2.7	1	8.6.2	1	11.1.1	1	13.1.4	1

Table 38 (Continue)

Indicator		Indicator		Indicator		Indicator		Indicator	
resource	IOC	resource	IOC	resource	IOC	resource	IOC	resource	IOC
7.1.5	1	8.2.8	1	8.6.3	1	11.1.2	1	13.1.5	1
7.2.1	1	8.2.9	1	9.1.1	1	11.1.3	1	13.2.1	1
7.2.2	1	8.2.10	1	9.1.2	1	11.1.4	1	13.2.2	1
7.3.1	1	8.2.11	1	9.1.3	1	11.1.5	1	13.2.3	1
7.3.2	1	8.2.12	1	9.1.4	1	11.1.6	1	13.2.4	1
7.3.3	1	8.2.13	1	9.1.5	1	11.1.7	1	13.2.5	1
7.4.1	1	8.2.14	1	9.2.1	1	11.2.1	1	13.3.1	1
7.4.2	1	8.2.15	1	9.2.2	1	11.2.2	1	13.3.2	1
7.4.3	1	8.2.16	1	9.2.3	1	11.2.3	1	13.4.1	0.75
8.1.1	1	8.2.17	1	9.2.4	1	12.1.1	1		
8.2.1	1	8.3.1	1	10.1.1	1	12.1.2	1		
8.2.2	1	8.3.2	1	10.1.2	1	12.1.3	1		

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

Table 39 Item Objective Congruence Index (IOC) between questions and required measurement of questionnaire on quality of Internal Educational Quality Assurance Model for Bilingual schools in Early childhood Education Level. (5 experts)

Required measurement		Required measurement		Required measurement		Required measurement		Required measurement	
Question	IOC	Question	IOC	Question	IOC	Question	IOC	Question	IOC
1	1	7	1	13	1	19	1	25	1
2	1	8	0.8	14	1	20	1	26	1
3	1	9	0.8	15	1	21	1	27	0.8
4	1	10	1	16	1	22	1		
5	1	11	0.8	17	1	23	1		
6	1	12	1	18	1	24	1		

Table 40 Reliability of questionnaire on the propriety of using standards and indicators internal educational quality assurance for bilingual schools in early childhood education level.

Reliability

Case Processing Summary			
		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.952	76

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Table 41 Reliability of questionnaires on the result of using the internal educational quality assurance model for bilingual schools in early childhood education level.

Reliability

Case Processing Summary			
		N	%
Cases	Valid	30	100.0
	Excluded ^a	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.910	27

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Appendix D

The result of research analysis

1. Exploratory Factor Analysis

GET

FILE='C:\Users\Sony\Desktop\รูปเล่มวิทยานิพนธ์\ผลการวิเคราะห์ cfa1\cfa วันที่ 8 ตุลาคม 57.sav'.

DATASET NAME DataSet1 WINDOW=FRONT.

FACTOR

/VARIABLES st1.1 st1.2 st1.3 st1.4 st1.5 sb2.1 sb2.2 sb2.3 sb2.4
sb2.5 ss3.1 ss3.2 ss3.3 ss3.4 ss3.5 ss3.6 ss3.7 ss3.8 sr4.1 sr4.2
sr4.3 sr4.4 sr4.5 sr4.6 sr4.7 t5.1 t5.2 t5.3 t5.4 t5.5 t5.6 t5.7
t5.8 t5.9 t5.10 t5.11 t5.12 t5.13 t5.14 m6.1 m6.2 m6.3
m6.4 m6.5 m6.6 m6.7 e7.1 e7.2 e7.3 e7.4 a8.1 a8.2 a8.3 a8.4 a8.5
a8.6 sc9.1 sc9.2 sc9.3 ob10.1 ob10.2 ob10.3 ec11.1 ec11.2 ec11.3
ec11.4 ec11.5 sv12.1 sv12.2 sv12.3 sv12.4 sv12.5 ma13.1 ma13.2
ma13.3 ma13.4

/MISSING LISTWISE

/ANALYSIS st1.1 st1.2 st1.3 st1.4 st1.5 sb2.1 sb2.2 sb2.3 sb2.4
sb2.5 ss3.1 ss3.2 ss3.3 ss3.4 ss3.5 ss3.6 ss3.7 ss3.8 sr4.1 sr4.2
sr4.3 sr4.4 sr4.5 sr4.6 sr4.7 t5.1 t5.2 t5.3 t5.4 t5.5 t5.6 t5.7
t5.8 t5.9 t5.10 t5.11 t5.12 t5.13 t5.14 m6.1 m6.2 m6.3
m6.4 m6.5 m6.6 m6.7 e7.1 e7.2 e7.3 e7.4 a8.1 a8.2 a8.3 a8.4 a8.5
a8.6 sc9.1 sc9.2 sc9.3 ob10.1 ob10.2 ob10.3 ec11.1 ec11.2 ec11.3
ec11.4 ec11.5 sv12.1 sv12.2 sv12.3 sv12.4 sv12.5 ma13.1 ma13.2
ma13.3 ma13.4

/PRINT UNIVARIATE INITIAL CORRELATION SIG KMO EXTRACTION ROTATION
FSCORE

/FORMAT SORT BLANK(.2)

/PLOT EIGEN ROTATION

/CRITERIA MINEIGEN(1) ITERATE(25)

/EXTRACTION PC

/CRITERIA ITERATE(25)

/ROTATION VARIMAX

/SAVE REG(ALL)

/METHOD=CORRELATION.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
st1.1	4.5204	.57601	380
st1.2	4.5981	.55408	380
st1.3	4.4874	.62170	380
st1.4	4.4097	.68977	380
st1.5	4.3825	.69411	380
sb2.1	4.7883	.44532	380
sb2.2	4.6660	.54835	380
sb2.3	4.5612	.59965	380
sb2.4	4.3495	.65880	380
sb2.5	4.6194	.57069	380
ss3.1	4.3515	.62904	380
ss3.2	4.4777	.60878	380
ss3.3	4.5456	.59452	380
ss3.4	4.5107	.62174	380
ss3.5	4.5864	.56297	380
ss3.6	4.3437	.69764	380
ss3.7	4.3398	.71332	380
ss3.8	4.4971	.65236	380
sr4.1	4.5243	.63987	380
sr4.2	4.3301	.65702	380
sr4.3	4.4369	.66118	380
sr4.4	4.3825	.68849	380
sr4.5	4.2893	.70004	380
sr4.6	4.4816	.64912	380
sr4.7	4.2466	.68854	380
t5.1	4.4621	.63615	380
t5.2	4.4854	.65518	380
t5.3	4.5087	.64027	380
t5.4	4.5087	.62800	380
t5.5	4.5204	.63696	380
t5.6	4.5087	.64932	380
t5.7	4.3961	.67356	380
t5.8	4.4990	.65830	380
t5.9	4.6505	.57355	380
t5.10	4.5534	.60684	380
t5.11	4.6660	.56237	380
t5.12	4.5864	.61262	380
t5.13	4.4330	.70633	380
t5.14	4.3456	.70363	380

m6.1	4.5592	.60308	380
m6.2	4.5922	.60858	380
m6.3	4.5534	.62266	380
m6.4	4.5592	.62213	380
m6.5	4.5767	.62956	380
m6.6	4.5340	.66038	380
m6.7	4.5417	.62042	380
e7.1	4.5922	.62123	380
e7.2	4.5243	.63987	380
e7.3	4.5398	.62055	380
e7.4	4.5398	.62679	380
a8.1	4.5845	.61606	380
a8.2	4.5845	.60329	380
a8.3	4.5243	.62448	380
a8.4	4.5670	.63067	380
a8.5	4.5534	.63504	380
a8.6	4.6330	.59772	380
sc9.1	4.5573	.61603	380
sc9.2	4.5553	.60986	380
sc9.3	4.4913	.63416	380
ob10.1	4.5515	.59076	380
ob10.2	4.5786	.61367	380
ob10.3	4.5359	.62079	380
ec11.1	4.5456	.61067	380
ec11.2	4.5553	.62561	380
ec11.3	4.5165	.62784	380
ec11.4	4.5767	.62335	380
ec11.5	4.5942	.58213	380
sv12.1	4.6388	.54883	380
sv12.2	4.6000	.56761	380
sv12.3	4.6194	.56728	380
sv12.4	4.5379	.60801	380
sv12.5	4.6019	.55337	380
ma13.1	4.5650	.60248	380
ma13.2	4.5437	.60118	380
ma13.3	4.5825	.59708	380
ma13.4	4.5864	.60623	380



มหาวิทยาลัยเชียงใหม่
Chiang Mai University
reserved

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	38.740	50.974	50.974	38.740	50.974	50.974	15.393	20.254	20.254
2	4.577	6.022	56.996	4.577	6.022	56.996	9.924	13.058	33.312
3	2.135	2.809	59.805	2.135	2.809	59.805	7.581	9.976	43.287
4	2.094	2.755	62.560	2.094	2.755	62.560	6.018	7.919	51.206
5	1.709	2.249	64.809	1.709	2.249	64.809	4.748	6.248	57.454
6	1.513	1.991	66.800	1.513	1.991	66.800	3.711	4.882	62.336
7	1.320	1.737	68.537	1.320	1.737	68.537	3.162	4.160	66.496
8	1.201	1.581	70.117	1.201	1.581	70.117	2.600	3.421	69.917
9	1.030	1.356	71.473	1.030	1.356	71.473	1.183	1.556	71.473
10	.961	1.264	72.737						
11	.922	1.213	73.951						
12	.829	1.090	75.041						
13	.796	1.047	76.089						
14	.747	.983	77.072						
15	.696	.916	77.988						
16	.656	.863	78.850						
17	.632	.832	79.682						
18	.597	.785	80.467						
19	.575	.757	81.224						
20	.564	.742	81.966						
21	.530	.698	82.664						

22	.521	.685	83.350						
23	.493	.649	83.998						
24	.473	.623	84.621						
25	.464	.610	85.231						
26	.448	.589	85.820						
27	.434	.570	86.391						
28	.420	.553	86.943						
29	.407	.535	87.479						
30	.387	.509	87.988						
31	.371	.488	88.476						
32	.368	.484	88.960						
33	.349	.459	89.419						
34	.340	.448	89.867						
35	.330	.434	90.301						
36	.312	.411	90.712						
37	.310	.408	91.120						
38	.299	.394	91.514						
39	.291	.382	91.897						
40	.275	.362	92.259						
41	.274	.360	92.619						
42	.264	.347	92.966						
43	.260	.342	93.308						
44	.252	.332	93.640						
45	.242	.319	93.959						

46	.233	.307	94.265						
47	.226	.297	94.562						
48	.219	.288	94.850						
49	.209	.275	95.125						
50	.206	.272	95.397						
51	.196	.258	95.655						
52	.194	.256	95.911						
53	.186	.245	96.156						
54	.179	.236	96.391						
55	.176	.232	96.623						
56	.170	.224	96.847						
57	.167	.220	97.067						
58	.161	.212	97.279						
59	.153	.201	97.480						
60	.151	.199	97.679						
61	.147	.193	97.872						
62	.145	.190	98.062						
63	.137	.180	98.243						
64	.134	.176	98.419						
65	.129	.170	98.589						
66	.125	.165	98.754						
67	.119	.157	98.911						
68	.118	.155	99.066						
69	.114	.150	99.215						

70	.102	.134	99.349						
71	.099	.130	99.480						
72	.092	.122	99.601						
73	.088	.116	99.717						
74	.078	.102	99.819						
75	.073	.096	99.916						
76	.064	.084	100.000						

Extraction Method: Principal Component Analysis.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Rotated Component Matrix^a

	Component								
	1	2	3	4	5	6	7	8	9
a8.4	.755	.212			.262		.214		
sc9.1	.753	.226							
a8.3	.737	.204			.255				
ec11.3	.735		.294	.240					
ob10.3	.734	.235	.315						
a8.6	.727	.239		.245			.226		
ec11.2	.727		.325	.242					
a8.5	.720	.230	.202		.201		.255		
ec11.1	.716		.364	.219					
ob10.1	.704	.203	.331						
ob10.2	.702		.339	.224					
sc9.3	.700								
sc9.2	.699	.260							
a8.2	.695	.239		.228	.310		.227		
ec11.4	.688		.287			.237			
ec11.5	.680		.393						
a8.1	.644	.231			.347				
e7.4	.582	.229	.293	.223	.364				
e7.2	.550	.213	.295		.455	.211			
e7.1	.550	.272	.290	.232	.447				
e7.3	.494	.226	.343	.249	.459				

sr4.7	.205	.738						.268	
ss3.1		.722							
sr4.5	.340	.713						.229	
sr4.2	.212	.703		.230					
sr4.6	.284	.701		.228					
ss3.2	.210	.689				.215			.241
sr4.4		.688							
sr4.3	.375	.648							
ss3.4		.629	.237	.216	.252	.241	.208		
ss3.5		.578	.209		.205	.259	.261		
ss3.3		.573		.308		.361			
sb2.4	.248	.549				.233	.392		
sr4.1	.278	.532		.349					-.208
st1.1	.278	.480					.381		.300
st1.2	.207	.450		.256	.219		.409		.218
sv12.5	.290	.208	.725						
sv12.4	.323	.202	.717						
ma13.2	.385	.223	.682						
sv12.3	.316		.676	.293					
sv12.2	.343		.668	.245	.251				
sv12.1	.305		.663	.280					
ma13.4	.396	.228	.651		.256				
ma13.3	.409	.221	.638		.255				
ma13.1	.456	.263	.589					.231	

t5.11	.360	.215	.231	.677						
t5.10	.347	.337		.661						
t5.9	.344	.204	.291	.605	.227					
t5.4	.423	.267	.234	.558					.241	
t5.12	.343		.264	.552		.268				
t5.8	.280	.278		.540	.265				.281	
t5.6	.438	.237	.261	.521			.245		.346	
t5.5	.401	.283	.265	.519					.339	
t5.3	.405	.295	.203	.509					.281	.220
t5.2	.304	.257	.244	.461	.250				.255	.317
t5.1	.337	.258		.440					.214	.417
m6.7	.404	.215	.368		.595				.216	
m6.5	.476		.308	.230	.573					
m6.3	.441		.297	.279	.561					
m6.6	.460	.205	.374	.222	.549					
m6.2	.436	.261	.280	.291	.535					
m6.1	.449	.312	.221	.291	.517					
m6.4	.499		.282	.234	.515				.233	
st1.4						.720	.203			
st1.5						.668	.321			
ss3.7		.453				.649				
ss3.6		.490				.578				-.204
ss3.8	.249	.442			.234	.545				
st1.3	.275	.406				.423	.416			.209

sb2.3	.249	.422					.603	.201
sb2.1	.210		.224	.285		.244	.591	
sb2.2	.230	.292		.210		.374	.560	
sb2.5	.244	.400	.228			.225	.463	
t5.14	.215	.266		.246	.207			.670
t5.13			.230	.235	.222			.561
t5.7	.366	.287		.336				.472

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

2. Second-Order Confirmatory Factor Analysis (2nd. Order CFA)

Mplus VERSION 7
MUTHEN & MUTHEN
07/01/2015 11:57 AM

INPUT INSTRUCTIONS

TITLE: SecOrder

DATA:

FILE IS "C:\Users\Sony\Desktop\1111.dat";

VARIABLE:

NAMES ARE ST11 ST12 ST13 ST14 ST15 SB21 SB22 SB23 SB24 SB25 SS31
SS32
SS33 SS34 SS35 SS36 SS37 SS38 SR41 SR42 SR43 SR44 SR45 SR46 SR47
T1-T14 M1-M7 E1-E4 A1-A6 SC1-SC3 OB1-OB3 EC1-EC5 SV1-SV5 MA1-MA4;
USEVARIABLES ARE ST11 ST12 ST13 ST14 ST15 SB21 SB22 SB23 SB24 SB25
SS31 SS32 SS33 SS34 SS35 SS36 SS37 SS38 SR41 SR42 SR43 SR44 SR45 SR46
SR47 T1-T14 M1-M7 E1-E4 A1-A6 SC1-SC3 OB1-OB3 EC1-EC5 SV1-SV5 MA1-
MA4;

ANALYSIS:

TYPE IS GENERAL;
ESTIMATOR IS ML;
ITERATIONS = 1000;
CONVERGENCE = 0.00005;

MODEL:

F1 BY a4 a3 a6 a5 a2 a1 sc1 sc3 sc2 ec3 ec2 ec1 ec4 ec5 ob3 ob1 ob2 e4 e2 e1 e3;
F2 BY sr47 sr45 sr42 sr46 sr44 sr43 sr41 ss31 ss32 ss34 ss35 ss33 sb24 st11 st12;
F3 BY sv5 sv4 sv3 sv1 sv2 ma2 ma4 ma3 ma1;
F4 BY t11 t10 t9 t4 t12 t8 t6 t5 t3 t2 t1;
F5 BY m7 m5 m3 m6 m2 m1 m4;
F6 BY st14 st15 st13 ss37 ss36 ss38;
F7 BY sb21 sb23 sb22 sb25;
F8 BY t14 t13 t7;
FASSUR BY F1-F8;

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 236

Loglikelihood

H0 Value	-17505.666
H1 Value	-16075.648

Information Criteria

Akaike (AIC)	35483.331
Bayesian (BIC)	36487.235
Sample-Size Adjusted BIC	35738.120
$(n^* = (n + 2) / 24)$	

Chi-Square Test of Model Fit

Value	2860.034
Degrees of Freedom	2766
P-Value	0.1040

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.008
90 Percent C.I.	0.000 0.012
Probability RMSEA $\leq$.05	1.000

CFI/TLI

CFI	0.998
TLI	0.998

Chi-Square Test of Model Fit for the Baseline Model

Value	42424.744
Degrees of Freedom	2850
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.051
-------	-------

3. The result of concurrent validity of model

Table 40 Pearson Product Moment Correlation Coefficient between score of model and original affiliation

Correlations		ผลการประเมินโดยต้นสังกัด	ผลการประเมินโดยรูปแบบ
ผลการประเมินโดยต้นสังกัด	Pearson Correlation	1	.999**
	Sig. (2-tailed)		.000
	N	27	27
ผลการประเมินโดยรูปแบบ	Pearson Correlation	.999**	1
	Sig. (2-tailed)	.000	
	N	27	27

** . Correlation is significant at the 0.01 level (2-tailed).



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

Table 41 The score of internal educational administrator quality assessment of sample group by original affiliation compare with model according to total score and each simulate indicator.

Items	Total Score	Sore of original affiliation	Sore of Model
1. Total score of Piti Suksa school	100	90.5	89.98
2. Total score of Pornpikhun school	100	98.5	94.75
3. Total score of Wichai Wittaya school	100	93	91.95
4. Pornpikhun school sets standards of education for Childhood education	10	9	8
5. Pornpikhun school prepares educational development plan to meet standards of education.	20	18.5	16
6. Pornpikhun school proceeds educational development plan to meet standards of education.	11	10	8.8
7. Pornpikhun school prepares an information system and uses it in management	11	10	8.8
8. Pornpikhun school monitors the internal quality assessment results based on standards of education.	10	9	8
9. Pornpikhun school evaluates the internal quality assessment results based on standards of education.	10	9	8
10. Pornpikhun school prepares annual reports on the internal quality assessment.	10	9	10
11. Pornpikhun school successively uses internal and external quality assessment results in improving the quality of education	8	7	4.8
12. Piti suksa school sets standards of education for Childhood education	10	10	8
13. Piti suksa school prepares educational development plan to meet standards of education.	20	19	20
14. Piti suksa school proceeds educational development plan to meet standards of education.	11	11	11
15. Piti suksa school prepares an information system and uses it in management	11	11	11
16. Piti suksa school monitors the internal quality assessment results based on standards of education.	10	10	10
17. Piti suksa school evaluates the internal quality assessment results based on standards of education.	10	9.5	10
18. Piti suksa school prepares annual reports on the internal quality assessment.	10	10	10

Table 41 (Continue)

Items	Total Score	Sore of original affiliation	Sore of Model
1. Piti suksa school successively uses internal and external quality assessment results in improving the quality of education	8	8	8
2. Wichai Wittaya school sets standards of education for Childhood education	10	10	8
3. Wichai Wittaya school prepares educational development plan to meet standards of education.	20	18.5	20
4. Wichai Wittaya school proceeds educational development plan to meet standards of education.	11	9	11
5. Wichai Wittaya school prepares an information system and uses it in management	11	11	11
6. Wichai Wittaya school monitors the internal quality assessment results based on standards of education.	10	7	10
7. Wichai Wittaya school evaluates the internal quality assessment results based on standards of education.	10	9.5	10
8. Wichai Wittaya school prepares annual reports on the internal quality assessment.	10	10	10
9. Wichai Wittaya school successively uses internal and external quality assessment results in improving the quality of education	8	8	8

Appendix E

Synthesized result, development of standards and indicators
in Internal Quality Assurance for Bilingual School in Early Childhood Education Level

The researcher synthesized standards and indicators for Internal educational assurance in Early Childhood Education Level for Bilingual Schools from 10 country that have Top score on PISA'2009 including Finland, Korea, Shanghai China, Hong Kong China, Singapore, Canada, New Zealand, Japan, Australia and Netherlands. And also from UNESCO bilingual school, World Class bilingual school and Educational Standards of Thailand including ONESQA and OBEC. The synthesis result have 5 part, 13 standards and 58 indicators as followings.

Standard 1 Physical and intellectual development of students

Indicator 1.1 Students have standard weight and height

Indicator 1.2 Students have movement skills according to their ages

Indicator 1.3 Students have hygiene in their health care

Indicator 1.4 Students avoid conditions that have risks about diseases, accidents, and drugs

Standard 2 Emotion and mentality development of students

Indicator 2.1 Students are cheerful and feel good about themselves

Indicator 2.2 Students are confident and assertive

Indicator 2.3 Students can appropriately control their emotion according to their ages

Indicator 2.4 Students appreciate art, music, movement, and nature

Standard 3 Social development of students

Indicator 3.1 Students have discipline, responsibility and obey to the instruction of parents and teachers

Indicator 3.2 Students are honest, generous and munificent

Indicator 3.3 Students can play and work with others in unity

Indicator 3.4 Students interact with others with equality and respect for cultural differences

Indicator 3.5 Students behave based on Thai cultures and their religions

Standard 4 Intellectual development of students

Indicator 4.1 Students have interest, eager and love learning

Indicator 4.2 Students have a concept from learning experience

Indicator 4.3 Students have appropriate language skills for their ages

Indicator 4.4 Students have science and mathematics processing skills

Indicator 4.5 Students have imagination and creativity

Standard 5 Teacher performance have efficient and effective

Indicator 5.1 Teachers understand the philosophy, principles, and nature of childhood education and can apply their experience in teaching

Indicator 5.2 Teachers make lesson plans according to the childhood bilingual curriculum and can provide various learning experiences corresponding to students differences

Indicator 5.3 Teachers manage classroom supporting positive discipline

Indicator 5.4 Teachers use media and technology appropriate to students' development

Indicator 5.5 Teachers assess students' development by a variety of measurement and evaluation, also write report and submit to parents of student.

Indicator 5.6 Teachers conducts researches and develops learning management
Indicator 5.7 Teachers provides a learning environment for all time
Indicator 5.8 Teachers have good interaction with students and parents
Indicator 5.9 Teachers are qualified and competent in the field of childhood education

Indicator 5.10 Teachers have ethics and responsibility in their duty, also accept cultural differences

Indicator 5.11 The number of teachers is sufficient to students

Indicator 5.12 Teachers can academically communicate in their native and second languages

Standard 6 Administrators performance have efficient and effective

Indicator 6.1 The administrator understands the philosophy and principles of childhood education

Indicator 6.2 The administrator has vision, leadership, and initiatives in developing childhood students

Indicator 6.3 The administrator uses the principle of participatory management and uses data evaluation or research as the basement of academics and management

Indicator 6.4 The administrator can manage education to achieve the goals of quality development plan

Indicator 6.5 The administrator supports and develops human resources to be effective

Indicator 6.6 The administrator gives academic suggestions and advices, and pays attention to childhood education with full potentials and time

Indicator 6.7 The administrator has leadership in creating an organization of cultures and learning

Standard 7 Educational management

Indicator 7.1 The school has a curriculum for childhood education that can lead to efficient practice

Indicator 7.2 The school has a system and a mechanism engaging all parties to understand educational management for childhood education

Indicator 7.3 The school has an effective management system in giving services

Indicator 7.4 The school supports participation and cooperation with parents, society and local

Standard 8 Internal assurance system of school follow Thai government policy

Indicator 8.1 The school sets standards of childhood education

Indicator 8.2 The school prepares and proceeds according to educational development plan to meet the standards of education

Indicator 8.3 The school prepares an information system and uses it in management

Indicator 8.4 The school monitors and evaluates the internal quality assessment results based on standards of education

Indicator 8.5 The school successively uses internal and external quality assessment results in improving the quality of education

Indicator 8.6 The school prepares annual reports on the internal quality assessment

Standard 9 The committee, parents and community performance have efficiency and effectiveness

Indicator 9.1 The school becomes a place to develop learning of students and personnel

Indicator 9.2 The school exchanges knowledge within the school, between families, communities, and related organizations

Standard 10 The school development achieve the goal which are philosophy, vision and identity of school

Indicator 10.1 The school organizes projects and activities to achieve the goal, philosophy, and vision of childhood education

Indicator 10.2 The school successfully achieves the goals

Standard 11 The school development follow the government policy and Educational change to increase educational quality.

Indicator 11.1 The school sets policy and developmental guideline according to the policy and educational reform guideline based on social context

Indicator 11.5 The school successfully achieves the goals

Standard 12 Safety of students

Indicator 12.1 The school has a plan concerning safety of students

Standard 13 General management

Indicator 13.1 The school arranges facilities for student development

Indicator 13.2 The school arranges the environment supporting the potential of self-discovery and learning through playing

Indicator 13.3 The school prepares activity and food that support the integrity of the body

Indicator 13.4 The school arranges the premises suitable for giving services

Appendix F

Handbook of of Internal Assurance model in Bilingual Schools on Early Childhood Education Level

by

Yaowatiwa Nammakhun

**Doctor of philosophy Department of Educational Research and Development
Clinical Research and Development and Monitoring System supervision and
evaluation of education. Faculty of Education Chiang Mai University**

**Asst. Prof. Dr. Ruetinan Samuttai
Assoc. Prof. Dr. Kiatsuda Srisuk
Dr. Sunee Nguenyuang**

**Major Advisor
Co-advisor
Co-advisor**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

**This document is part of the thesis of Internal Assurance model in Bilingual
Schools on Early Childhood Education Level
Funded by the Graduate school, Chiang Mai University in B.E. 2014**

The Standards and indicators of Internal Educational Quality Assurance for Bilingual Schools in Early Childhood Education Level

The synthesis and checking result of standards and indicators including structure validity result by experts and consistency result between standards and indicators model with empirical data by Exploratory Factor Analysis (EFA) and Second-Order Confirmatory Factor Analysis which found 76 indicators can separate into 8 factors, the cumulative percent of variance equal 70.117 from EFA, and Second-Order Confirmatory Factor Analysis result are $\chi^2= 2860.034$, $df = 2766$, $p\text{-value} = 0.1040$, $CFI= 0.998$, $TLI= 0.998$, $RMSEA=0.008$, $SRMR=0.051$

The detail of standards and indicators of the model were shown as the followings.

Standard 1: Educational management

Indicator 1: The school has a curriculum for kindergarten that can lead to efficient practice.

Indicator 2: The school has a system and a mechanism engaging all parties to understand educational management for kindergarten.

Indicator 3: The school has an effective management system in giving services.

Indicator 4: The school supports participation and cooperation with parents, society, and local.

Indicator 5: The school sets standards of education for kindergarten.

Indicator 6: The school prepares and proceeds according to educational development plan to meet the standards of education.

Indicator 7: The school prepares an information system and uses it in management.

Indicator 8: The school monitors and evaluates the internal quality assessment results based on standards of education.

Indicator 9: The school successively uses internal and external quality assessment results in improving the quality of education.

Indicator 10: The school prepares annual reports on the internal quality assessment.

Indicator 11: The school has a method/procedure to encourage participation in learning management.

Indicator 12: The school becomes a place to develop learning of students and personnel.

Indicator 13: The school exchanges knowledge within the school, between families, communities, and related organizations.

Indicator 14: The school sets educational management process.

Indicator 15: The school organizes projects and activities to achieve the goal, philosophy, and vision of kindergarten education.

Indicator 16: The school successfully achieves the goals.

Indicator 17: The school sets policy and developmental guideline according to the policy and educational reform guideline based on social context.

Indicator 18: The school organizes projects and activities that support the policy of kindergarten education.

Indicator 19: The school gives an opportunity to related person in setting promoting standards.

Indicator 20: The school receives standard certification from the education committee.

Indicator 21: The school successfully achieves the goals.

Standard 2: Physical and intellectual development of students

Indicator 1: Students have standard weight and height.

Indicator 2: Students have movement skills according to their ages.

Indicator 3: Students can appropriately control their emotion for their ages.

Indicator 4: Students have discipline and responsibility for the assigned task.

Indicator 5: Students obey the instruction of parents and teachers.

Indicator 6: Students are honest.

Indicator 7: Students are generous and munificent.

Indicator 8: Students can play and work with others in harmony.

Indicator 9: Students have interest in learning, have eager in learning, and love learning.

Indicator 10: Students have a concept from learning experience.

Indicator 11: Students have Thai language skills appropriate for their ages.

Indicator 12: Students have English language skills appropriate for their ages.

Indicator 13: Students have skills in processing science and mathematics.

Indicator 14: Students have imagination and creativity.

Indicator 15: Students have appropriate problem solving skills.

Standard 3: General management

Indicator 1: The school has a plan concerning safety of students.

Indicator 2: The school has a process and management concerning safety and welfare of students.

Indicator 3: The school arranges location, tools, equipment, and materials based on the safety of students.

Indicator 4: School staffs have knowledge and skills to provide health services and security to students.

Indicator 5: Students are safe and/or students receive health services and security.

Indicator 6: The school arranges facilities for student development.

Indicator 7: The school arranges the environment supporting the potential of self-discovery and learning through playing.

Indicator 8: The school prepares activity and food that support the integrity of the body.

Indicator 9: The school arranges the premises suitable for giving services.

Standard 4: Efficient and effective performance of teachers

Indicator 1: Teachers understands the philosophy, principles, and nature of kindergarten education and can apply their experience in this field.

Indicator 2: Teachers make plans according to the kindergarten bilingual curriculum.

Indicator 3: Teachers can provide learning experience corresponding to the differences of students.

Indicator 4: Teachers manage classroom supporting positive discipline.

Indicator 5: Teachers uses media and technology appropriate to students' development.

Indicator 6: Teachers assess students' development by a variety of measurement and evaluation.

Indicator 7: Teachers provides a learning environment for all time.

Indicator 8: Teachers have good interaction with students and parents.

Indicator 9: Teachers are qualified and competent in the field of kindergarten education.

Indicator 10: Teachers have ethics and responsibility in their duty.

Indicator 11: Teachers accept cultural differences.

Standard 5: Efficient and effective performance of the administrator

Indicator 1: The administrator understands the philosophy and principles of kindergarten education.

Indicator 2: The administrator has vision, leadership, and initiatives in developing kindergarten students.

Indicator 3: The administrator uses the principle of participatory management and uses data evaluation or research as the basement of academics and management.

Indicator 4: The administrator can manage education to achieve the goals of quality development plan.

Indicator 5: The administrator supports and develops human resources to be effective.

Indicator 6: The administrator gives academic suggestions and advices, and pays attention to kindergarten education with full potentials and time.

Indicator 7: The administrator has leadership in creating an organization of cultures and learning.

Standard 6: Self-care and interaction in multicultural society of students

Indicator 1: Students have hygiene in their health care.

Indicator 2: Students avoid conditions that have risks about diseases, accidents, and drugs.

Indicator 3: Students have no illness/condition that affects their development.

Indicator 4: Students interact with each other with equality.

Indicator 5: Students have respect for cultural differences.

Indicator 6: Students behave based on Thai cultures and their religions.

Standard 7: Emotions and minds of students

Indicator 1: Students are cheerful.

Indicator 2: Students feel good about themselves.

Indicator 3: Students are confident and assertive.

Indicator 4: Students appreciate art, music, movement, and nature.

Standard 8: Quality of teaching promotion

Indicator 1: The school conducts researches and develops learning management.

Indicator 2: The number of Thai and foreign teachers is sufficient to students (The ratio is 1 Thai, foreign teacher: 20 students)

Indicator 3: Teachers can academically communicate in their native and second languages.

The process of Internal educational quality assurance according to standards, indicators, process of quality control, quality audit and quality assessment

The process of Internal Educational Quality Assurance for Bilingual Schools in Early Childhood Education Level including 1) determine role/duty of responsible person 2) The process are quality control, quality audit **and** quality assessment

1.1 To determine role/duty of responsible person

The main variable of the model including performers who follow the goal of internal assurance so the model determine role/duty of responsible person as the followings.

1) Principle and directors including school director and deputy director

Performance role and duty including

1.1) Study and understand how to use the model in detail and perform themselves as the main of educational quality assurance system of school.

1.2) Appoint 3 groups assurance committee including quality control committee (group 1) , Quality audit committee(group 2) and quality assessment committee(group 3).

2) Internal educational quality assurance committee have 3 group with different role/duty as the followings.

2.1) Quality control committee (group 1) including principle, director/deputy director, head of academic, representative of teacher and school.

Performance role and duty including

2.1.1) Plan the process of follow policy and the goal of school internal educational quality assurance.

2.1.2) Promote and support the process and development of internal educational quality assurance system.

2.1.3) Give comment and suggestion about the process of school internal educational quality assurance.

2.1.4) Collect data from other department.

2.1.5) Write the self - assessment report for internal educational quality assurance

2.1.4) Check document or evidence for quality assessment and coordinate with assessment committee and related people.

2.2) Quality audit committee(group 2) including head of academic and head of educational quality assurance

Performance role and duty including

2.2.1) Follow up, Check and assess internal educational quality in classroom level.

2.2.2) Give comment and suggestion to staffs.

2.2.3) Present the result of educational quality assessment to the president

2.2.4) Prepare self-assessment report

2.3) Quality assessment committee(group 3) including president or director, original affiliation representative (responsible on educational assurance) and stranger (who have knowledge and experiment about education management, education quality assessment and/or bilingual school management.

Performance role and duty including

2.3.1) Visit and check school to make better understanding and positive attitude about internal educational quality assessment for staffs and related people.

2.3.2) Collect data and check evidence to know real situation about school processing from SAR, observation, interview and other document from staffs and related people according to each standards and indicators.

2.3.3) Make internal educational quality assessment follow Internal Educational Quality Assurance Model for Bilingual Schools in Early Childhood Education Level

2.3.4) Give concept and suggestion from internal educational quality assessment result to school for concrete improvement and development

2.3.5) Prepare Self- assessment report and submit to school and original affiliation

3) Teachers including Thai teachers and foreign teachers.

Performance role and duty including

3.1) Teach by using child center and record after teaching then bring data to improve the lesson continuously.

3.2) Always assess each student development according to indicators and analyze perspective data for each level.

3.3) Perform project/activity

3.4) Analyze project/activity performance data and prepare project/activity report.

3.5) Present report of project/activity to principle or director.

4) Staffs including secretary of each department, Maintenance Department staffs, receptionist, financial staff and other.

Performance role and duty including

4.1) Give data to group 1 committee.

4.2) Arrange data from each level in category.

4.3) Perform project/activity by the order

4.4) Analyze project/activity performance data and prepare project/activity report.

4.5) Present report of project/activity to principle or director.

1.2 Internal educational quality assurance process on bilingual school in early childhood level have 3 steps as the following.

Step 1 Quality Control is to plan and set responsible section. In addition, to set the project /activity according to standards of educational quality which school and staff can use as a way and tool for performance. The procedure are shown as the following.

1) Appoint Internal Quality Assessment committee group 1

2) Develop staffs to have more knowledge, better understanding and positive attitude about internal educational quality assurance. The procedure are shown as the following.

2.1) Prepare Internal educational quality assurance staffs development project

2.2) Make activity according to the project to give knowledge and understanding about the process of educational assurance, standards, indicators, criteria of assessment, criteria of acceptance, relation between internal and external assurance and make awareness on value of educational assurance.

2.3) Evaluate project according to objective and write a report then submit to principle or director of school.

3) Cooperate to plan performance including setting project/activity, responsible person, duration and resource for achieve standards and indicators by having procedure as the following.

3.1) Synthesize SWOT for three years back from various place of resource for example SAR, external assessment result, government policy, satisfaction and suggestion of project or activity result.

3.2) Make action plan for each year which related with standards and indicators of school.

3.3) Present action plan to school committee for confirming then set it as a scope of school performance.

3.4) Plan to collect data of each department according to the given standards and indicators for collecting evidence, preparing SAR and preparing being checked and assured education quality.

3.5) Hold a meeting to explain action plan for each year to staff and appoint work according to education quality standards and indicators of school

Step 2 Quality Audit is the process of finding evidence and checking overall operation result on how much the operation can be successful according to standards. Moreover there are reliable operation which have procedures as the following.

1) Appoint Internal Quality Audit committee (group 2)

2) Set the time schedule for education quality audit.

3) Perform audit, check operation evidence according to the time schedule at least 1 time/semester by using evaluation framework according to standards and indicators of the model. For each staffs, the head of teacher evaluate and supervise study to activate, support and give suggestion to work.

4) Write audit result report including checking result, comment and suggestion to director for later improvement and development.

Step 3 Quality Assessment is the process of school quality evaluation on how much

the operation can be successful according to criteria and standards by school staffs and/or original affiliation which have procedure as the following.

1) Appoint Internal Quality Assessment committee (group 3)

2) Perform quality assessment of school which can separate into 3 steps including before visiting, while visiting and after visiting. The inspector and school have role and duty as the followings.

Table 27 Role and duty of school and inspector can be separated into 3 steps

Assessment duration	Role and duty	
	School	Inspector
Before visiting	1. Prepare SAR and submit to inspector at least 2 weeks before. 2. Prepare staffs by hold a meeting to explain about internal assurance process and appoint responsible person for each standards and indicators to help on finding evidence. 3. Prepare the place for inspectors which suitable for putting document and quiet. In addition, prepare facility including computer, stationery, snack food and beverage. 4. Appoint internal quality assessment committee.	1. Study SAR.
While visiting	1. The school prepare related people including teachers and students. 2. Inform staffs to work as normal and cooperate for being interviewed or visited by inspectors. 3. Prepare staffs for cooperation and accommodation while visiting on both document and place. 4. Cooperate related people to get the assessment result and suggestion by inspectors after finish so that every department know and find the way to improve and develop. However, everyone can exchange their opinion.	1. Hold a meeting to elect committee chairman. 2. The committee chairman and committee hold a meeting to make a plan and schedule by each inspector select standards according to their knowledge, ability and aptitude. After that make schedule for visiting for 3 days and make daily action plan then cooperate with school. 3. Perform assessment follow the model for checking consistency between SAR and empirical data. 4. The assessment committee analyze, conclude and discuss assessment result. 5. The committee present assessment result to related people and give opportunity the school to explain unclear issue then write the assessment report.

Table 27 (Continue)

Assessment duration	Role and duty	
	School	Inspector
After visiting	1. The director hold a meeting with relate people to set development plan and improve operation according to concrete assessment result and suggestion by assessment committee. 2. The school submit SAR to original affiliation and publish to public.	1. The assessment committee improve report after oral presentation and write report for school within 1 week for the school to check and if the report doesn't match with oral presentation, director or teachers can oppose within 15 days. If there are not any objection, it can assume that the assessment result is correct. 2. If the school have any objection, the assessment committee must analyze the objection then consider to improve report and send back to school.

Criteria for quality evaluation

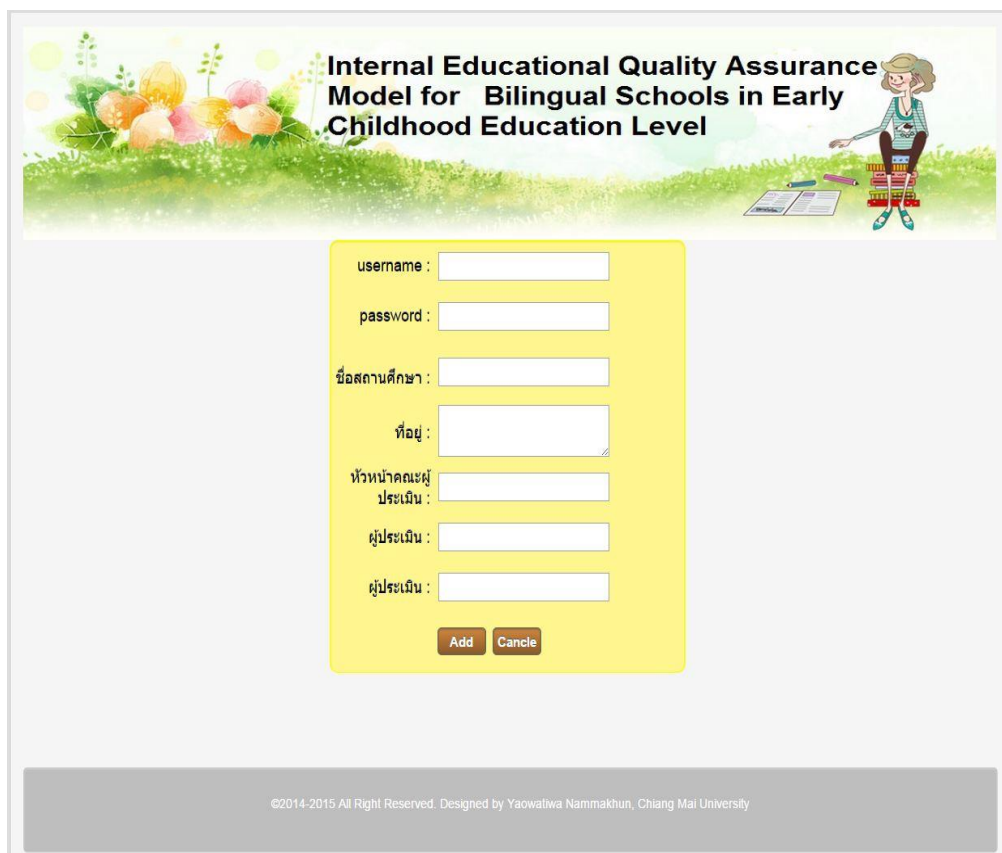
The setting of standard and indicators weight from the result of Second Confirmatory Factor Analysis and the conclusion on brainstorming by experts which have detail as the followings.

Table 28 Percent of weight of each standards

Standards	Weight	Percent of score
Standard 1 Educational management	0.931	13.25
Standard 2 Physical and intellectual development of students	0.849	12.08
Standard 3 General management	0.886	12.61
Standard 4 Teacher performance have efficient and effective	0.924	13.15
Standard 5 Administrators performance have efficient and effective	0.926	13.18
Standard 6 Students have self-care and interaction in multicultural society	0.749	10.66
Standard 7 Students have emotions and mentality development	0.836	11.90
Standard 8 Teacher quality promotion	0.925	13.17
Total	7.026	100

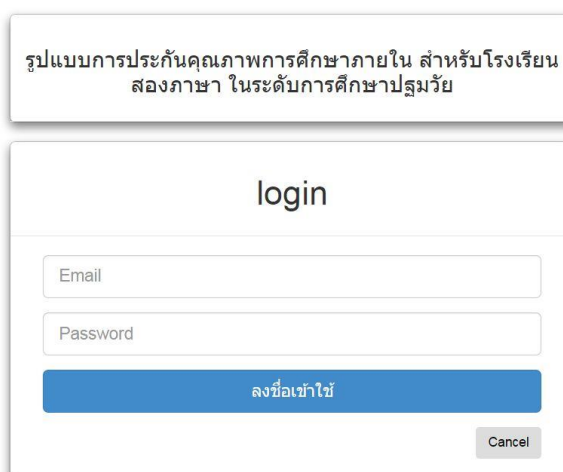
Handbook of the evaluation program

1. Open Browser and enter to <http://www1.edu.cmu.ac.th/inasmodel/home>



The screenshot shows a web interface for the 'Internal Educational Quality Assurance Model for Bilingual Schools in Early Childhood Education Level'. The header features a colorful illustration of a child playing with blocks and a banner with the title. Below the header is a yellow login form with the following fields: 'username', 'password', 'ชื่อสถานศึกษา' (School Name), 'ที่อยู่' (Address), 'หัวหน้าคณะผู้ประเมิน' (Assessor Head), 'ผู้ประเมิน' (Assessor), and another 'ผู้ประเมิน' field. There are 'Add' and 'Cancel' buttons at the bottom of the form. At the bottom of the page, a copyright notice reads: '©2014-2015 All Right Reserved. Designed by Yaowatiwa Nammakhun, Chiang Mai University'.

Please enter login and password

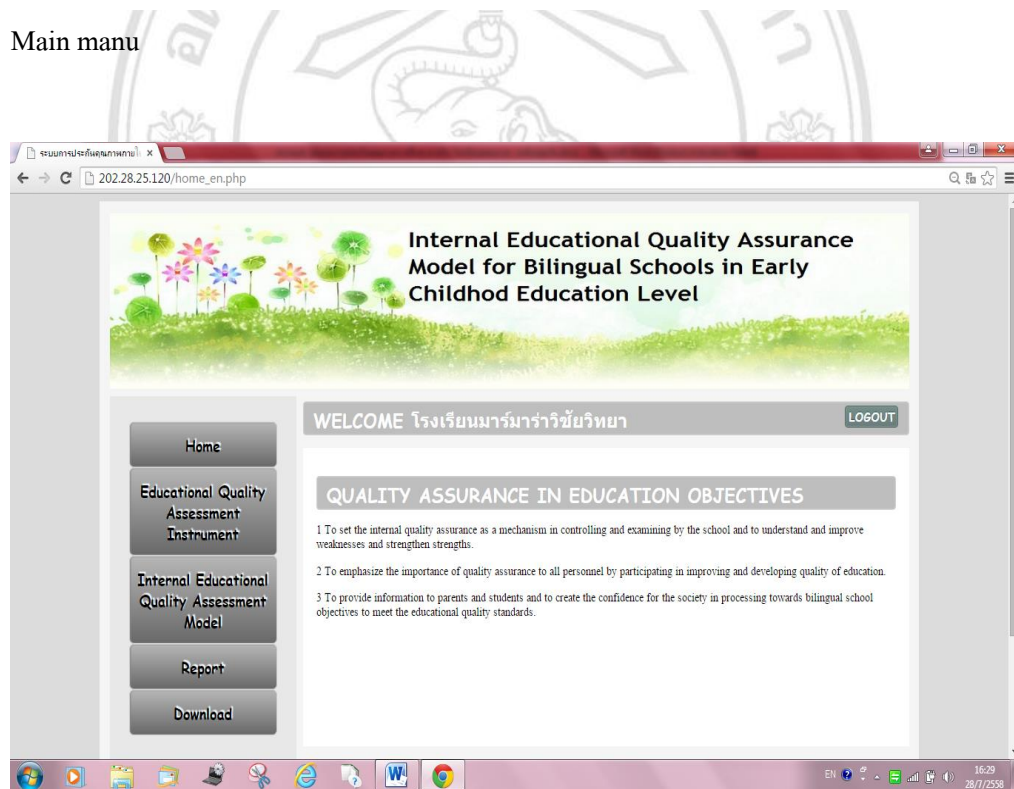


The screenshot shows a login dialog box with the title 'login'. It contains two input fields: 'Email' and 'Password'. Below these fields is a blue button labeled 'ลงชื่อเข้าใช้' (Login) and a smaller 'Cancel' button.

2. Please choose language



3. Main manu



4. Educational quality assessment instrument and input data

Internal Educational Quality Assurance Model for Bilingual Schools in Early Childhood Education Level

WELCOME โรงเรียนนารีนารีวิทยวิทยา

Home
Educational Quality Assessment Instrument
Internal Educational Quality Assessment Model
Report
Download

The weight of each standard

Standard 1: Educational management	weight score
Indicator 1: The school has a curriculum for kindergarten that can lead to efficient practice.	0.824 5
Indicator 2: The school has a system and a mechanism engaging all parties to understand educational management for kindergarten.	0.815 5
Indicator 3: The school has an effective management system in giving services.	0.813 4
Indicator 4: The school supports participation and cooperation with parents, society, and local.	0.821 5
Indicator 5: The school sets standards of education for kindergarten.	0.798 4
Indicator 6: The school prepares and proceeds according to educational development plan to meet the standards of education.	0.833 5

5. Internal Educational quality assessment model

Internal Educational Quality Assurance Model for Bilingual Schools in Early Childhood Education Level

WELCOME โรงเรียนนารีนารีวิทยวิทยา

Home
Educational Quality Assessment Instrument
Internal Educational Quality Assessment Model
Report
Download

Part 1 The opinion about detail of the internal educational quality assurance model for bilingual schools in early childhood education level

The goal of Model

- To set the internal quality assurance as a mechanism in monitoring and measuring by the school and to implement and improve resources and strategies.
- To emphasize the importance of quality assurance to all personnel by participating in improving and developing quality of education.
- To provide information to parents and students and to ensure the confidence for the society in promoting towards bilingual school objectives to meet the educational quality standards.

5 Standards and 10 indicators of model

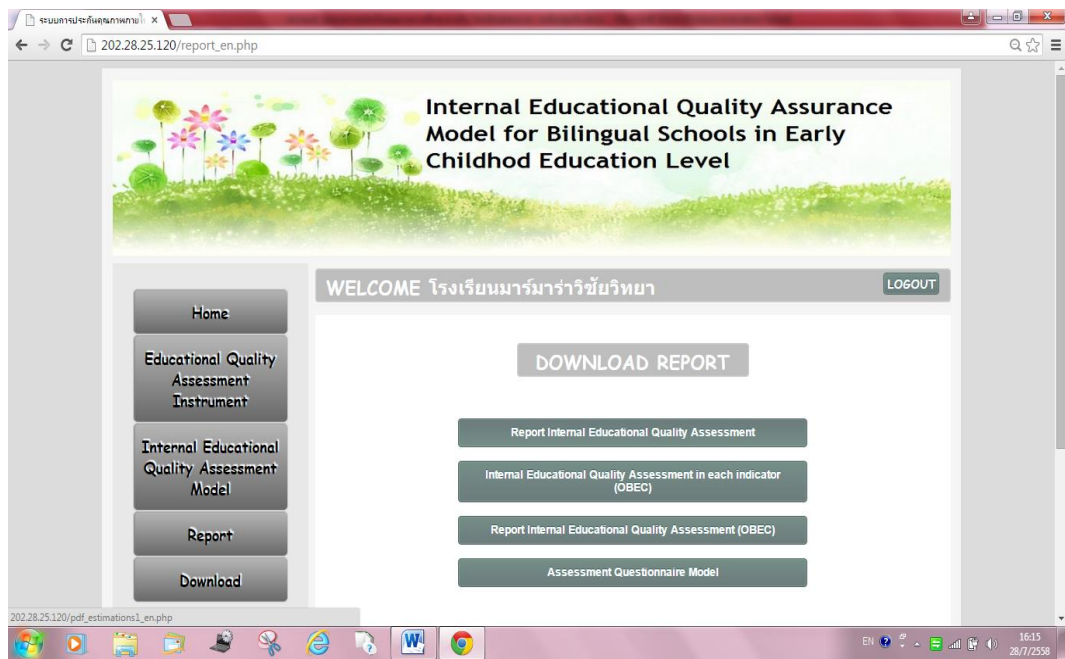
Standard 1: Educational management	Standard 2: Personal and social development of children	Standard 3: General management	Standard 4: Effective and efficient performance of school	Standard 5: Effective and efficient performance of school	Standard 6: Effective and efficient performance of school	Standard 7: Effective and efficient performance of school	Standard 8: Effective and efficient performance of school	Standard 9: Effective and efficient performance of school	Standard 10: Effective and efficient performance of school
1.1 Curriculum management	2.1 Personal and social development of children	3.1 General management	4.1 Effective and efficient performance of school	5.1 Effective and efficient performance of school	6.1 Effective and efficient performance of school	7.1 Effective and efficient performance of school	8.1 Effective and efficient performance of school	9.1 Effective and efficient performance of school	10.1 Effective and efficient performance of school

The Process of Model

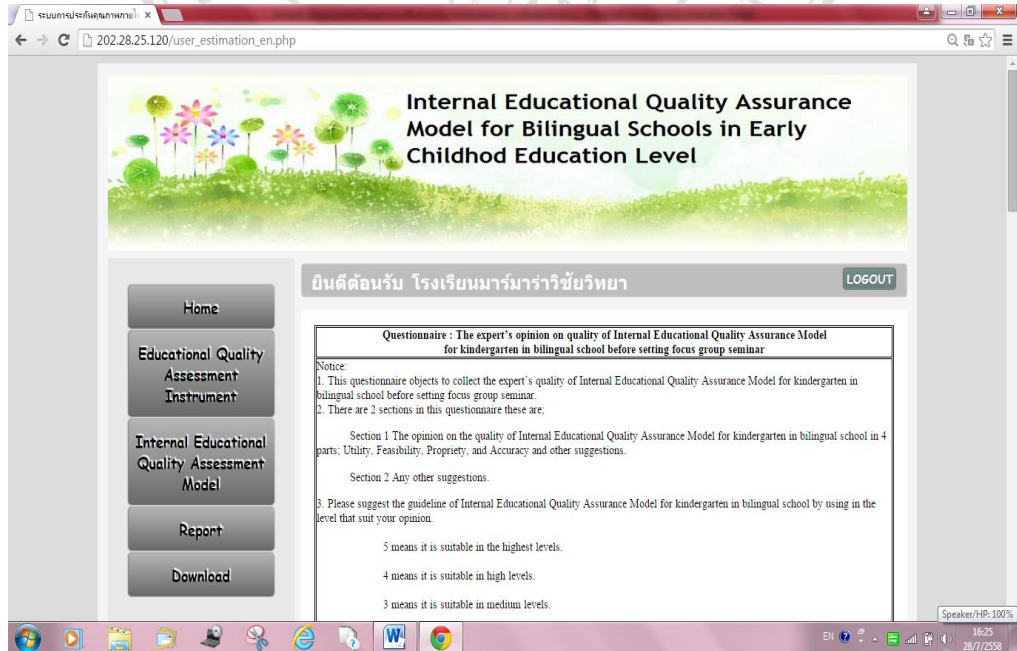
Responsible person

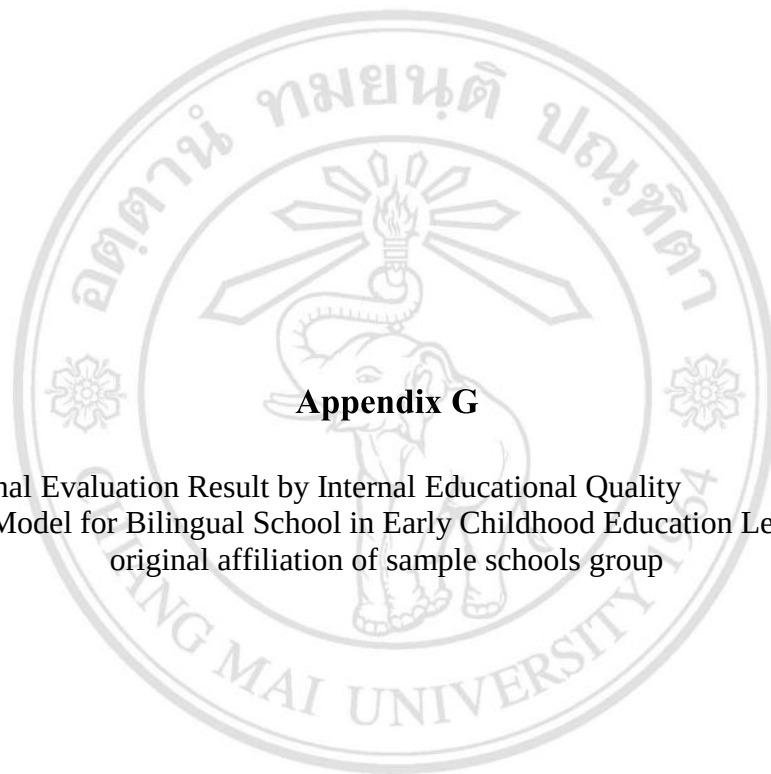
Process

Report



6. Evaluate quality of the model by users





Appendix G

Internal Evaluation Result by Internal Educational Quality Assurance Model for Bilingual School in Early Childhood Education Level with the original affiliation of sample schools group

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

CURRICULUM VITAE

Name	Mrs. Yaowatiwa Nammakhun
Date of Birth	March 23 1976
Education	1998 B. Science in Computer technology, Chiang Mai Rajabhat University 2003 M.Ed in Educational Research and Statistics, Chiang Mai University 2015 B.Ed in Measurement and Evaluation Education, Sukhothai Thommathirat Open University
Bibliography	“A synthesis of the Bilingual School or English Program in Thailand” The research symposium Measurement and Evaluation of the 23 years 2015 conference venue. Faculty of Education Chiang Mai University (Poster) “Development of Internal Educational Quality Assurance Indicators for Bilingual Schools in Early Childhood Education Level” Journal of Education Prince of Songkha University, Vol 28 No.2 (May – August) 2017 “A synthesis of the Internal Educational Quality Assurance” FEU Academic Review of Far Eastern University
Experienced	1998 Computer teacher, Worachat Anusorn School 1999 Computer teacher, Wachirawit School 2003 Mathematic teacher, Wichi Wittaya School

