APPENDIX

Appendix A

- 1. The Letter to invite the experts.
- 2. List of expert names to check the research tools.
- 3. The letter to permit collection data in schools.

Appendix B

- 4. The tools used for collection data in this research.
 - 4.1 The questionnaire to check a corresponding index in each item on the problems and requirements in data and information system.
 - 4.2 The questionnaire of the problems and requirements in data and information system.
 - 4.3 The form to record the knowledge of data and information technology system in basic educational schools.
 - 4.4 The interview questionnaire of the problems and requirements in using programs of the data and information system.
 - 4.5 The programs acceptance questionnaire in the measurement and evaluation, academic program, and registration program.
 - 4.6 The website acceptance questionnaire for presentation of data and information in school.
 - 4.7 The questionnaire to check a corresponding index in each item of the efficacy and effectiveness in data and information system.
- 4.8 The efficacy and effectiveness evaluation questionnaire in the data and information system.

Appendix C

- 5. The Data and Information System User's Manual.
- 6. DVD for Installation the Data and Information System.

Appendix A 1. The letter to invite experts.

No. Edu 6393(15)/154



Education faculty, Chiang Mai university 239 Huaykaew rd., Muang district Chiang Mai Province, 50200.

March 2013

Title	Invited as an expert.
То	9/10/12/19/19
Enclo	sure with the corresponding index of the items checklist questionnaire.

As Mr. Nirun Tungteerabunditkul Ph.D. Student of research and development in education, education faculty, Chiang Mai university approved the thesis as part of the course in title "Data and Technology Information System Development for Monitoring, Supervision, and Evaluation in Basic Educational Level". Advisory committee consisted of Assoc. Prof. Dr. Somsak Phuvipadawat, asst. Prof. Dr. Ruetinan Samuttai, Dr. Nampueng Intanate.

Currently conducting research on the process of quality monitoring tool for research in this case the research and development of education faculty, Chiang Mai university to get help as an expert to check the quality of the tools and give information to student accordance with the submitted.

Kindly ask for the courtesy and thank you very much for coming on the occasion.

Yours truly,

(Assoc. Prof. Dr. Kiasuda Srisuk)

Chairman graduate program

of research and development in education

Research and Development in Education Office.

Tel. 053944272, 053221283

Appendix A 2. List of expert names to check the research tools.

Experts list to check the consistency index of each item in the research tool, and monitoring of the computer programs.

- The problems and requirements of data and information technology system, and the efficacy and effectiveness of developed programs questionnaire.
 - 1. Assoc. Prof. Dr. Tay Chiengchee
 - 2. Assoc. Prof. Dr. Sermsri Chaisorn
 - 3. Prof. Phean Chaisorn
 - 4. Prof. Daroon Hantrakul
 - 5. Prof. Uten Punyo
 - 6. Asst. Unnop Kunpun
 - 7. Dr. Pratana Kowittayangkul
- The records to study the knowledge for development system.

 Interview for the development the system, the acceptance program and website, the evaluation of measurement program, academic, and registration program.
 - 1. Mr. Jarun Chaisak Head of academic office in The Prince Royal's College.
 - 2. Mr. Pakanan Thongkum Programmer in The Prince Royal's College.
 - 3. Miss. Supawan Sriburee Head of registration in The Prince Royal's College.
- Expert to advice the development of data and information technology system.

Prof. Jakrapop Wonglakorn

Dean of information and communication faculty, Mae Jo University.

Appendix A 3. The letter to permit collection data in schools.

No. Edu 6393(15)/155



Education faculty, Chiang Mai university 239 Huaykaew rd., Muang district Chiang Mai Province, 50200.

March 2013.

Title	Allowing data collection.
То	Principal of the school

As Mr. Nirun Tungteerabunditkul Ph.D. Student of research and development in education, education faculty, Chiang Mai university approved the thesis as part of the course in title "Data and Technology Information System Development for Monitoring, Supervision, and Evaluation in Basic Educational Level". Advisory committee consisted of Assoc. Prof. Dr. Somsak Phuvipadawat, asst. Prof. Dr. Ruetinan Samuttai, Dr. Nampueng Intanate.

Student intending to collect data from administrators, teachers and educational personnel in your school for the dissertation. in this case the research and development of education faculty, Chiang Mai university to get help from you, please know your personnel and cooperation in responding to student as well.

Kindly be informed and provide information to students with courtesy, yours strongly.

Yours truly,

(Assoc. Prof. Dr. Kiasuda Srisuk)

Chairman graduate program

of research and development in education

Research and Development in Education Office.

Tel. 053944272, 053221283

Appendix B 4. The research tools . 4.1 The problems and requirements IOC checklist. The corresponding index of each item checklist on the problems and requirements of the data and information system for monitoring, supervision, and evaluation in school

Explanation

Researcher is doing a Ph.D. thesis on the title of the development of data and information technology system for inspection, supervision, monitoring and evaluation of learning in basic education level. So it's cooperation, can you check the validity of content, helping to determine what each item in accordance with the problem or requirement on each side.

As defined or consider the following criteria when determining

+1 Mean the corresponding

0 means not sure

-1 Means inconsistent

If you have any suggestions. Please write them in the comments box at the end of each verse in the note.

Thank you very much for the professional courtesy to the research at this occasion.

Mr. Nirun Tungteerabunditkul Researcher

Part 1 Passages of the problems for the data and information system in schools.

Passage	-1	0	+1	Note
1. Problems of the hardware and networking	8,880	. 300.3	311	7
1.1 Performance of computers out of dated.	n	V	e	cl.
1.2 Number of computers is not enough to meet demand.				
1.3 The budget shortfall to supply computers.				
1.4 The inappropriateness of the ratio of students per				
computer in computer classroom.				
1.5 No computer network or network instability.				

Passage	-1	0	+1	Note
1.6 No information centers (Data Center).				
1.7 Shortages projector to use in teaching and learning.				
1.8 Shortage of digital equipment to assist in the				
production of electronic media.				
1.9 Internet services are inadequate and do not cover all				
the space available.				
1.10 Speed Internet connections in schools, is not fast				
enough.				
2. Problems of the software or computer programs.	2		EV.	
2.1 The lack / shortage the office programs on a	- 20	3	V	
computer.			M	
2.2 The lack / shortage computer programs for teachers to	1	26		
measure and evaluate learning results.	13	Ŷ,	Ш	
2.3 The lack / shortage academic programs for academic		7	11	
affair personnel in management.	8	5/	P	
2.4 The lack / shortage programs for registrar to manage	~	///		
and report student ducuments.	1			
2.5 The lack / shortage programs for teachers to manage				
teaching and learning.				
2.6 The lack / shortage website for school to promote and				
public relations.	SE.	'nΪ	14	i i
2.7 The lack / shortage website to provide data and				
information of schools.	nn	/ei	sit	У
2.8 No program or software that responds to the needs of	m	V	e	d
users.				2000
2.9 The absence or lack of proper manuals in many				
programs.				
2.10 The difficulty and complexity of using programs.				

Passage	-1	0	+1	Note
3. Problems of people ware				
3.1 Most of the teachers don't have the basic knowledge				
and skills in computer.				
3.2 No technicians help maintain computer in schools.				
3.3 Most people lack the knowledge to use the computer				
programs.				
3.4 Management lacks of vision, knowledge, and				
information technology.		/		
3.5 Teachers could not use program to measure and	2	11	100	
evaluate the student learning results.	59	5	V	
3.6 Heads of academic affair could not use program to			M	
help their jobs.	10	25	11	
3.7 The registrar could not use computer to help	15	100	11	
educational document and transcript.	1 3	d-	//	
3.8 Programmers develop programs do not meet the	0	2/		
needs of the user.	~		lin	
3.9 Lack of coordination between users and computer	1/2			
program developers.				
3.10 Lack of knowledge and training to use computer				
programs or software.		3	N.C	

Part 2 Passages of the requirements for the data and information system in schools.

Copyright.	Passage	-1	0	+1	Note
1. Requirements of hardware and computer networks.		r	V	0	d
1.1 Providing modern computers with high					
performance to school	ls.				
Table (Continued)	ber of computers to meet the				
demand.					
1.3 Increasing the	budget for computer and accessories.				

Passage	-1	0	+1	Note
1.4 Improving classroom computer proportion is 1				
person per machine.				
1.5 The preparation of computer network and stable.				
1.6 The establishment of data and information centers				
(Data Center).				
1.7 Supply Projector (Projector) for use in the teaching				
and learning.				
1.8 Supplying additional digital equipment to assist in	7			
teaching media production.	3	1	125	
1.9 To provide a stable internet service. And covers an	2	3	V	
area of active	1		M	
1.10 Increased speed Internet in schools as needs.	10			
2. Requirements of software or a computer program.	16	Š.		
2.1 Providing the office programs on computer.		7	//	
2.2 Development the program to assists in the	0	5/	1	
measurement and evaluation.	~			
2.3 Development academic programs in management.	1/			
2.4 Development the program to help registrar.				
2.5 Providing program helps teachers to manage				
teaching and learning.		-		
2.6 Development program for Public Relations website.	ST.	nÌ	M.	l I
2.7 Development website to provide information of				1000
schools	UÜ	/ei	SIL	У
2.8 Supplying other programs that respond to the needs	r	V	е	d
of users.				
2.9 Providing and preparation of manuals for users.				
2.10 Supply or edit programs to use not complicated.				
3. Requirements of people ware.				
3.1 Development teachers or personnel to have the				

Passage	-1	0	+1	Note
basic knowledge and skills.				
3.2 Providing for a computer technician in school.				
3.3 Training teachers and staff to have the knowledge,				
the ability to use various applications.				
3.4 Development administrators to have the vision, and				
knowledge of information technology.				
3.5 Development teachers can use computer program to				
measure and evaluate learning results.				
3.6 Developed administrators can use software for	2	11		
academic administration.	3	3		
3.7 Development, the registrar can use computer to help			M	
in document and transcript.	c	RS.		
3.8 Development software programming to meet the	18	Ů.		
demand.		7	//	
3.9 coordination between the program user and the	0	2/		
application developer to solve problems together.	~		(ii	
3.10 Training and workshops to users in all programs as	1/1			
needs and ongoing.				

Table 7 The consistency index (IOC) of problems and requirements of data and information technology for the inspection supervision, monitoring and evaluation of learning in basic education level.

Item No.	IOC Values of Problems	Item No.	IOC Values of Requirements
1.1	1.00	1.1	1.00
1.2	0.86	1.2	1.00
1.3	0.71	1.3	0.71
1.4	0.86	1.4	0.86
1.5	1.00	1.5	1.00
1.6	1.00	1.6	1.00
1.7	0.86	1.7	0.86
1.8	0.86	1.8	0.86
1.9	1.00	1.9	1.00
1.10	1.00	1.10	1.00
2.1	1.00	2.1	1.00
2.2	1.00	2.2	1.00
2.3	1.00	2.3	1.00
2.4	1.00	2.4	1.00
2.5	1.00	2.5	1.00
2.6.	1.00	2.6.	1.00
2.7	0.86	2.7	1.00
2.8	0.86	2.8	1.00
2.9	0.86	2.9	1.00
2.10	1.00	2.10	1.00
3.1	1.00	3.1	1.00
3.2	1.00	3.2	1.00
3.3	1.00	3.3	1.00
3.4	0.86	3.4	0.86
3.5	0.86	3.5	0.86
3.6	1.00	3.6	1.00
3.7	0.86	3.7	0.86
3.8	1.00	3.8	1.00
3.9	1.00	3.9	1.00
3.10	1.00	3.10	0.86

Appendix B 4.2 The problems and requirements of data and information questionnaire. The Questionnaire of the problems and requirements in data and information technology system for inspection, supervision, and evaluation of learning in basic education level.

Explanation

Researcher is doing a Ph.D. thesis on the title of the development of data and information technology system for inspection, supervision, monitoring and evaluation of learning in basic education level.

Therefore, please respondents the following problems and requirements in your school. This questionnaire is divided into four sections as follows.

- Part 1 Preliminary data of the respondent, and education.
- Part 2 The problems of data and information technology in school.
- Part 3 The requirements of data and information technology in school.
- Part4 Comments and other feedback.คำชื่นจง

And thank you very much for contributing to the research at this occasion.

Mr. Nirun Tungteerabunditkul

Researcher

Part 1 Preliminary data of the respondent, and education.

Please mark the ✓ to [] or fill in the blank

1.1 Gender		
[] Male	[] Female	
1.2 Your work status in school	ol.	Iniversity
[] Teacher	[] Educational personnel	
[] etc. (fill in the blank)	nts rese	rvea
1.3 School Name		
1.4 School is under		
[] Government school	[] Private school [] Loca	al school
[] Ruddhist school	[] etc. (fill in the blank)	

1.5 S	tart from class to class.
[] P.1 – P.6 [] P.1 – M.3 [] M.1- M. 6 [] P.1 – M.6
[] etc. (fill in the blank)
1.6 S	chool size (Following the number of students)
[] Extra size (students over 1,500) [] Large size (students 600-1,499)
[] Medium size (students 300-599) [] Small size (students 1-299 คน)
1.7 N	umber of computers that works in Academy approx.
[] 1-10 [] 11-49 [] 50-100 [] 101-299
[] over 300 [] Etc. (fill in the blank)
1.8 A	pplications that are used in schools. (Select more than 1 response).
[] Office programs (Word Excel Access).
[] Program for the measurement and evaluation (score).
[] Program for Academic Administration.
[] The program for the preparation of educational documents.
[] Database management program, such as Access SQL Server Oracle.
[] The program for teaching materials (Photoshop Flash E-Book).
[] The website offers information of the school (Database Website).
[] Other (please specify)
1.9 T	he ability of teachers and staff in the use of computer programs.
(Can answer more than 1).
[] Can be used to manage the office like Word, Excel, Powerpoint.
I] Can be used to measure and evaluate, such as grading by computer program.
I] Can be administered using computer programs such as academic timetable.
[1 Can use computer program to assist in the preparation of documents.
1] Can use database management software such as Access SQL Server Oracle.
[] Can be used for teaching materials (Photoshop Flash E-Book).
[] Can be prepared the website to present information of the school.
[] Other (please specify)

2.10 You agree that schools need to have the following applications or not.					
(Can answer more than 1).	(Can answer more than 1).				
[] Program for the measurem	[] Program for the measurement and evaluation of learning.				
[] Program for academic affa	ir.				
[] Registration program.					
[] The program manages the	database of schools (Database Management).				
[] The programs for teaching	g materials (Photoshop Flash E-Book).				
[] The website to present data and information of school.					
[] Other (please specify)					
Part 2 The problems in using the d	ata and information technology in schools.				
Please mark ✓ into [] of a	problem, consider the following criteria.				
Level of problem	Meaning				
5	Highest problem				
4	High problem				
3	Moderate problem				
2	Low problem				

List	5	4	3	2	1
1. Problems of the hardware and networking		Ä.		ä	
1.1 Performance of computers out of dated.	ın	ſì	41	ī	
1.2 Number of computers is not enough to meet demand.					
1.3 The budget shortfall to supply computers.	IVε	TS.	II.	Ž.	
1.4 The inappropriateness of the ratio of students per computer in computer classroom.	V	. 6		d	
1.5 No computer network or network instability.					
1.6 No information centers (Data Center).					
1.7 Shortages projector to use in teaching and learning.					
1.8 Shortage of equipment to assist media production.					

Lowest problem

1.9 Internet services are inadequate and do not cover all the space available. 1.10 Speed Internet connections in schools, is not fast enough. 2. Problems of the software or computer programs. 2.1 The lack / shortage the office programs on a computer. 2.2 The lack / shortage computer programs for teachers to measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results. 3.6 Academic affair could not use program to help their jobs.	List	5	4	3	2	1
1.10 Speed Internet connections in schools, is not fast enough. 2. Problems of the software or computer programs. 2.1 The lack / shortage the office programs on a computer. 2.2 The lack / shortage computer programs for teachers to measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	1.9 Internet services are inadequate and do not cover all the					
2. Problems of the software or computer programs. 2.1 The lack / shortage the office programs on a computer. 2.2 The lack / shortage computer programs for teachers to measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	space available.					
2.1 The lack / shortage the office programs on a computer. 2.2 The lack / shortage computer programs for teachers to measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	1.10 Speed Internet connections in schools, is not fast enough.					
2.2 The lack / shortage computer programs for teachers to measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2. Problems of the software or computer programs.					
measure and evaluate learning results. 2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.1 The lack / shortage the office programs on a computer.					
2.3 The lack / shortage academic programs for academic affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.2 The lack / shortage computer programs for teachers to					
affair personnel in management. 2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	measure and evaluate learning results.					
2.4 The lack / shortage programs for registrar to manage and report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.3 The lack / shortage academic programs for academic					
report student documents. 2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	affair personnel in management.					
2.5 The lack / shortage programs for teachers to manage teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.4 The lack / shortage programs for registrar to manage and	3	1/1			
teaching and learning. 2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	report student documents.		A			
2.6 The lack / shortage website for school to promote and public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.5 The lack / shortage programs for teachers to manage	100	5			
public relations. 2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	teaching and learning.		2			
2.7 The lack / shortage website to provide data and information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.6 The lack / shortage website for school to promote and	4	1	N		
information of schools. 2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	public relations.	Ö	$/\!J$			
2.8 No program or software responds to the needs of users. 2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.7 The lack / shortage website to provide data and	1/4	1			
2.9 The absence or lack of proper manuals in many programs. 2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	information of schools.					
2.10 The difficulty and complexity of using programs. 3. Problems of people ware 3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.8 No program or software responds to the needs of users.					
3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.9 The absence or lack of proper manuals in many programs.					
3.1 Most of the teachers don't have the basic knowledge and skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	2.10 The difficulty and complexity of using programs.				-	
skills in computer. 3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	3. Problems of people ware	n	Ĺ	41	ī	
3.2 No technicians help maintain computer in schools. 3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	3.1 Most of the teachers don't have the basic knowledge and	9	0.1		Ψ.	
3.3 Most people lack the knowledge to use the computer. 3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	skills in computer.	ve	I'S	It,	/_	
3.4 Management lacks of vision, knowledge, and technology. 3.5 Teachers could not use program to measure and evaluate the student learning results.	3.2 No technicians help maintain computer in schools.	V	£	N	d	
3.5 Teachers could not use program to measure and evaluate the student learning results.	3.3 Most people lack the knowledge to use the computer.					
the student learning results.	3.4 Management lacks of vision, knowledge, and technology.					
	3.5 Teachers could not use program to measure and evaluate					
3.6 Academic affair could not use program to help their jobs.	the student learning results.					
	3.6 Academic affair could not use program to help their jobs.					

List	5	4	3	2	1
3.7 The registrar could not use computer to help educational					
document and transcript.					
3.8 Programmers develop programs do not meet the needs of					
the user.					
3.9 Lack of coordination between users and computer					
program developers.					
3.10 Lack of knowledge and training to use computer					
programs or software.					

Part 4 Please write down the problems and the requirements for the data and information technology in your school.

4.1	The problems of the data and information technology in your school.
4.2	The requirements of the data and information technology in your school.
4.2	The requirements of the data and information technology in your school.
4.2	Γhe requirements of the data and information technology in your school.
4.2	ลิขสิทธิ์แหาวิทยาลัยเชียงใหม่
4.2	ลิขสิทธิ์แหาวิทยาลัยเชียงใหม่
4.2	ลิขสิทธิ์แหาวิทยาลัยเชียงใหม่

Appendix B 4.3 The record form to study the knowledge.

The record form to study the knowledge which concerns with development of data and information technology in basic schools.

Document Type	
() Book / textbook () journals / public	cations () Research / Thesis
Author / researcher	
Title	
Research Publication year	
Educational issues	> / 2
() Development of information technology () The measurement and evaluation.
() The quality assurance () Academic affair work.
() Development of computer program () Registration work in school.
Study or the findings of the research)) / # //
•	-/-
100	
Comments or suggestions for research.	
	v ~ 2
-ลิฮสิทธิมหาวิทยา	
Copyright [©] by Chiang	Mai University
Knowledge gained	eserved

Appendix B 4.4 The interview form.

Interviews form in using the data and information technology system.

1. The work for the data and information te	echnology system that is currently used.
() Measurement and evaluation work	() Academic affair work
() The Registration work	() Data and information website
2. Program working as your objectives or i	not.
3. Program working as your requirements.	5 3 3
4. Problems that you found in the application	
	VIVER
5. What do you want to update the program	or website?
Copyright [©] by Chia	ang Mai University
6. Other comments and suggestions.	reserved
*********	******

Appendix B 4.5 The user acceptance questionnaire in the application programs.

The user acceptance questionnaire after using the programs measurement and evaluation, academic affair, and registration.

Explanation

Please mark in the box (), which statement that the program can work.

Preliminary data of the respondents.	
1. Gender	
() Male () Female	
2. School Name	
3. School under the office of	131
() Local school	
() Private school	
() Government school	
() Etc. (fill in the blank)	/

Part 2 Please mark in the box that corresponds to your comments.

List	Yes	No
1. The measurement and evaluation program.		
1.1 The program can be saved and printed course results.		
1.2 Program helps process and grading for the student.	5	ii .
1.3 The program can record and report the ability to read,	HI	Ĭ
write, and think.		
1.4 The program can record and report the desired	ISIL	4
characteristics.		d
1.5 Program helps to evaluate the activity development.		
2. The academic program.		
2.1 Program can assign subjects to the teachers and enroll.		
2.2 Program can assign students activity to the teachers and		
enroll them.		

List	Yes	No
2.3 Program helps to report the results of the midterm and		
final exams.		
2.4 Program can report the achievement the course.		
2.5 Program can report the achievement of classroom.		
3. The registration program.		
3.1 The program can record the history student.		
3.2 The program can report the students' grading report (PP.1).		
3.3 The program can print a certificate of students (PP.2).		
3.4 Program can report the completion of the class level (PP.3).		
3.5 The program helps to find Improve the learning outcomes	M	
of students.	511	

Part 3	Please w	rite the prog	gram guidelin	es to meet yo	ur needs.	- //
					/	.,.,
					/	
		./				T
			AT III	TIVER	2///	
				1.1		
		= 67				
	ਹੜੀ।	าธิบา	เกอิทเ	บาลัย	เชียง	·lnu···
	onvri	ight©	hy Chi:	ano Ma	i Unive	preity
		6	L A	м. Б		
						<i>,</i>

Table 8 Consistency index (IOC) of each item in user acceptance program questionnaire for measurement and evaluation program, academic program, and registration program.

List	IOC
1. Measurement and evaluation program	
1.1 Program can be saved and printed score report.	1.00
1.2 Program assists in the processing and student grading.	1.00
1.3 Program can record and report the ability to think critically.	1.00
1.4 Program can record and report the desired characteristics.	1.00
1.5 Program helps to evaluate the activity development.	1.00
2. Academic program	\
2.1 Program can define instructor and enroll.	1.00
2.2 Program can be organized and registered in each semester.	1.00
2.3 Program can report the midterm and final score.	1.00
2.4 Program can report student achievements.	1.00
2.5 Program can report subject and class achievements.	1.00
3. Registration program	
3.1 Program can record the history of students.	1.00
3.2 Program can report students' grade in each curriculum	1.00
(PP1).	
3.3 Program can print certificate of students (PP2).	1.00
3.4 Program can report completion of the class level (PP3).	1.00
3.5 Program helps to report the learning outcomes of students.	1.00

Appendix B 4.6 The user acceptance questionnaire in website.

The user acceptance questionnaire in the website to present data and Information for monitoring, supervision, and evaluation.

Explanation

Please mark in the box (), which statement that the website can present the data and information for monitoring, supervision, and evaluation in basic school.

1.1 Location of the school 1.2 Amount of the class students 1.3 Amount of the teachers 1.4 number of classrooms 1.5 The ratio of students per class 1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty. 2.1.3 Presentations evaluating the love Thailand.		
1.2 Amount of the class students 1.3 Amount of the teachers 1.4 number of classrooms 1.5 The ratio of students per class 1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
1.3 Amount of the teachers 1.4 number of classrooms 1.5 The ratio of students per class 1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
1.4 number of classrooms 1.5 The ratio of students per class 1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
1.5 The ratio of students per class 1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
1.6 The ratio of students per teacher 2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.	/	
2. Presentation of information for quality assurance in education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
education. 2.1 Students have moral, ethical and desirable. 2.1.1 Presentations assessing discipline. 2.1.2 Presentations assessing honesty.		
Zitio Tresentations evaluating the feve Thumane.	nı	
2.2 Students have the ability to think, analyze, synthesize.2.2.1 Presentations to assess the ability to think critically.	sity	
2.3 Learners with the knowledge and skills required by the curriculum.		
2.3.1 Presentations to assess student achievement average.		
2.3.2 Presentations summarizing the national test.		
2.4 Learners with the skills to work with the ability to		

Table (Continued)

List	Yes	No
2.4.1 Presentations assessment diligent in work.		
2.5 Learners with physical and mental health, good habits.		
2.5.1 Presentations to evaluate weight, height, and		
nutritional status.		
3. Presenting information to the report.		
3.1 Report on the development of the learners (PP.6).		
3.2 Achievement report of student achievement by class		
3.3 Achievement report of student achievement by group		
learning	V.	

Table 9 The consistency index (IOC) of each item in user acceptance website questionnaire to present the data and information for monitoring, supervision, and evaluation in basic schools.

List	IOC Value
1. Presentation of the preliminary information of school.	1//
1.1 The location of school.	1.00
1.2 The number of students.	1.00
1.3 Number of teachers.	1.00
1.4 Number of classrooms.	1.00
1.5 Ratio of students per room.	1.00
1.6 Ratio of students per teacher.	1.00
2. Presentation of information for quality assurance in	versity
school.	v e d
2.1 Students have moral, ethical and desirable values.	1.00
2.1.1 Presentation of discipline evaluation.	
2.1.2 Presentation of honesty evaluation.	1.00
2.1.3 Presentation of the love Thailand evaluation.	1.00

Table 9 (Continued)

List	IOC Value
2.2 Learners have the ability to think, analyze, synthesize.	
2.2.1 Presentation of the ability to think critically.	1.00
2.3 Learners have knowledge and skills required by	
curriculum.	1.00
2.3.1 Presentation of the average learning achievement.	
2.3.2 Presentations of summarizing the national	1.00
average.	
2.4 Learners with the skills and ability to work with others.	
2.4.1 Presentation of student's diligence in the work.	1.00
2.5 The learners' health habits, physical health and mental	3 11
health.	1.00
2.5.1 Presentation of the assessment, weight, height.	25
3. Presentation of information to report.	\$P
3.1 Report on the development of learners individually.	1.00
3.2 Reporting achievement by students' class	1.00
3.3 Reporting achievement by group learning.	1.00

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved

Appendix B 4.7 The efficiency and effectiveness of the system IOC checklist. The corresponding index in each item checklist of efficiency and effectiveness in data and information technology for monitoring, supervision, and evaluation in school.

Explanation

Researcher is doing Ph.D. thesis on the development of data and information technology system for monitoring, supervision, and evaluation of learning in basic education level. Please check out which item is corresponding with the objectives (Content Validity). Consider the following criteria when determining

- +1 Means the corresponding
- 0 means not sure
- -1 Means inconsistent

If you have any suggestions. Please write them in the comments box at the end of each verse. Thank you very much for the professional courtesy to the research at this occasion.

Mr. Nirun Tungteerabunditkul researcher.

Part 1 The efficiency evaluation of the data and information technology system.

List	-1	0	+1	Note
1.1 System developed helped facilitate the operation in school.		2.		
1.2 System developed helps user to work faster, save time and	0	u	N	
reduce redundant work.	ive	214	itv	
1.3 System developed running accuracy is acceptable to user.				1
1.4 The developed system is easy to use with a manual			- 54	
assembly applications and step in operation.				
1.5 Measurement and evaluation program is easy to use,				
convenient, fast and works properly.				
1.6 Academic program is easy to use, convenient, fast and				
works properly.				

List	-1	0	+1	Note
1.7 Registration program is easy to use, fast and properly.				
1.8 Website data and information system is easy to use, fast				
and works properly.				
1.9 The developed system is well worth the effort versus				
working by hand, usually.				
1.10 user satisfaction with information systems and				
information technology system.	ζ.			

Part 2 The effectiveness evaluation of the data and information technology system.

List	-1	0	+1	Note
2.1 System developed processes are in line with the core basic curriculum B.E.2551	3	1		
		-11		
2.2 The measurement and evaluation program works directly		21		
with the operations and needs of teachers.	YUN	* II		
2.3 Academic Program works meets the academic needs.	A	11		
2.4 Registration program works meets the requirements of	9	//		
registration in schools.	4/			
2.5 The measurement and evaluation program, academic				
program, and registration program can work accordingly and				
allows teachers academic and registration to work together.				
2.6 Website services information and provides educational				
information is current.	'n	ĺν	F 1	
2.7 System developed allows you to check the accuracy of the		-		
data and information.	ve	ľS	ty	
2.8 System developed assist in the supervision, monitoring and	V	е	d	
evaluation of learning.		.000		
2.9 System developed processing is required to comply with				
the requirements of the core basic curriculum.				
2.10 The developed system can produce reports, documents				
transcript (PP.1-3) have met with the Ministry of Education.				

Table 10 The consistency index (IOC) of each question item in measuring the efficiency and effectiveness of data and information technology system for the inspection supervision, monitoring and evaluation of learning.

Item No.	IOC Value of Efficiency	
1.	1.00	
2.	1.00	
3.	1.00	
4.	1.00	
5.	0.86	
6.	0.86	3 //
7.0/	0.86	211
8.	0.86	~
9.	1.00	
10.	1.00	Q#

IOC Value of effectiveness
1.00
0.86
0.86
0.86
0.86
1.00
1.00
1.00
1.00
1.00

Appendix B 4.8 The efficiency and effectiveness of the system evaluation.

Evaluating the efficiency and effectiveness of the data and information system for monitoring, supervision, and evaluation in school

Explanation

Researcher is doing a dissertation topic. "The development of information systems and information technology for the monitoring, supervision, and evaluation of learning in basic education" and have developed the data and information system which contains the system for measurement and evaluation, academic affair, and registration programs and website to present data and information. Please evaluate the efficiency and effectiveness of the system according to the actual. The researcher would like to thank you all for your cooperation in answering the questionnaire at this.

Mr. Nirun Tungteerabunditkul Researcher

Part 1 Preliminary data of the resp	ondent, and education.
Please mark the ✓ to []	or fill in the blank
1. Gender	
[] Male	[] Female
2. Your work status in scho	ol.
[] Teacher	[] Head of academic affair
[] Registrar	[] Administrator
[] etc. (fill in the blan	k)
3. School Name	
4. School is under	Chiang Mai University
[] Government school	l [] Private school [] Buddhist school
[] Local school	[] etc. (fill in the blank)
5. Start from class to class.	
[] P.1 – P.6 [] I	P.1 – M.3 [] M.1- M. 6 [] P.1 – M.6
[] etc. (fill in the blank	<u>(</u>)

Part 2 Please evaluate the efficiency and effectiveness of the data and information technology system for the monitoring, supervision, and evaluation of learning in basic education level. Consider the following criteria.

Level of the efficiency	and effectiveness	Meaning
5		Highest
4		High
3	0101010	Moderate
2	Main 8	Low
// 3º 1		Lowest

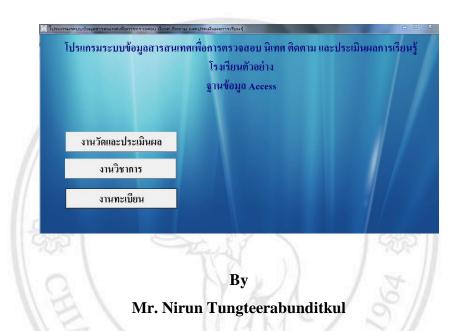
List	5	4	3	2	1
1.1 System developed helped the operation in schools.	/	9	ll	Ą	
1.2 System developed helps user to work faster, save	1	100	- 1	1	
time and reduce redundant work.	1	rš	25	ı	
1.3 System developed running accuracy is acceptable		5	No.	1	
to the user.	1	700			
1.4 The developed system is easy to use with a manual	/	80		Ü.	
assembly applications and step in operation.	1	Ψ,			
1.5 Measurement and evaluation program is easy to		11	7		
use, convenient, fast and works properly.	1				
1.6 Academic program is easy to use, convenient, fast					
and works properly.			- 1		2
1.7 Registration program is easy to use, fast and	8.5	11/	Ñ.	451	
works properly.		2.	1 6	111	all.
1.8 Website data and information system is easy to	Uĭ	IIV	er	sity	4
use, fast and works properly.	е	n a	7 (8 (d
1.9 The developed system is well worth the effort					
versus working by hand, usually.					
1.10 user satisfaction with information systems and					
information technology system.					

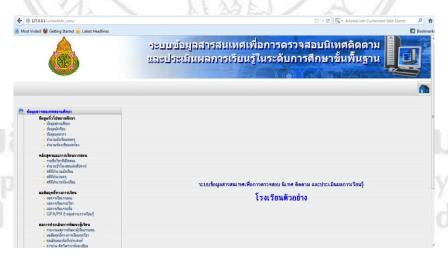
List	5	4	3	2	1
2.1 System developed processes are in line with the					
core basic curriculum B.E.2551					
2.2 The measurement and evaluation program works					
directly with the operations and needs of teachers.					
2.3 Academic Program works meets the academic					
needs of basic education.					
2.4 Registration program works meets the					
requirements of registration in schools.	8.				
2.5 The measurement and evaluation program,		2	1		
academic program, and registration program can work	\	9	. 11	ē	
accordingly and allows teachers academic and		100	. 1		
registration to work together.	1	eš.	2	l	
2.6 Website services information and provides		吸	P	1	
educational information is current.	1	7	. /		
2.7 System developed allows you to check the	/	SC.	-//	0.	
accuracy of the data and information.	1	ς,			
2.8 System developed assist in the supervision,		11			
monitoring and evaluation of learning.	1				
2.9 System developed processing is required to					
comply with the requirements of the core basic					2
curriculum.	18.5	11/	1	Z1	i
2.10 The developed system can produce reports,		-			
documents transcript (PP.1-3) have met with the Ministry	Ur	ijν	ers	iity	/
of Education.	е	n s	7.1	3 1	d

documents transcrip	ot (PP.1-3) have	e met with	the Ministr	ry	iversi	ty
of Education.	igh	t s	res	s e i	ı v e	d
Part 3 Comments a	nd other sugge	estions.				
	*****	******	*******	·***		

Appendix C 5. The User's Manual for using the data and information system.

Manual of using the data and information technology system for monitoring, supervision, and evaluation of learning in basic educational level





This document is part of the research study

"Data and Technology Information System Development for Monitoring, Supervision, and Evaluation in Basic Educational Level"

Research and Development in Education, Chiang Mai university

Preface

The programs of data and information technology system was developed to assist the school work. The registration program helps documents and evidence based on current curriculum (PP.1-9), the measurement and evaluation program used for teachers to entry student assessments in each subject or course, results of evaluation in reading, thinking and writing, desirable characteristic, activity to develop students, and reports of student developments (PP.5) in every courses. And academic affair program used to monitor and evaluate the learning of students. Reports and the achievement of the students by the courses and classes. Moreover, all the programs can be displayed on both monitors and printers.

Operating normally in academic institutions by using these programs cause the data and information systems for monitoring supervision, and evaluation of learning in schools make schools reflect on their own performance to be useful to improve the school further.

Documentation on this system prepared to guide in using the system to get easy access and can use the system efficiently and effectively according to the desired target in the measurement and evaluation work, academic affair work, and registration work.

Thank you for everyone who helps and advises to developer and makes this manual to be complete documentation for the benefit of the educational outcome.

Developer Mr. Nirun Tungteerabunditkul

Ph.D. student of research and development, Chiang Mai university.

TEL. 081-8833633, E-mail: nirun_prc@hotmail.com, nirunprc@gmail.com

Programs of the data and information technology system in school

Features of the programs.

The programs of the data and information technology system in basic school were developed to assist in the performance of school work. The registration program helps documents and evidence based on current curriculum (PP.1-9), the measurement and evaluation program used for teachers to entry student assessments in each subject or course, results of evaluation in reading, thinking and writing, desirable characteristic, activity to develop students, and reports of student developments (PP.5) in every courses. And academic affair program used to monitor and evaluate the learning of students. Reports and the achievement of the students by the courses and classes.

Steps for implementation process to complete the data and information.

- 1. Registrar record school data, student data and history, teaching subjects or all courses in the school and receiving/sending data to the government as required.
- 2. Academic affair personnel assign subjects to teachers (Connected to teachers and classes) and enroll (Connects student data to teachers and classes) in each semester. (High School Program) or the academic year. (Primary of Education)
- 3. Teachers entry the data of measurement and evaluation of course assessment into the system and print the documents for development of students in each course (PP.5). The program will helps processing in the student results and the class teacher entry more data about student data and reporting the student development (PP.6) and student all records since study in this school (PP.8).
- 4. Registrar entry more data about study and report all grades and activity assessment of each student in class level (PP.1) diploma (PP.2), reporting graduates in each class level (PP.3), and various certificates as students need (PP.7). When the end of academic year, registrar use back up data and move students to the next class for the next academic year.
- 5. When a complete database of schools, it should be forwarded to the office which schools were under for the planning study or supporting school and should backup database to electronic media or the internet.

Computer specification to install the system

Computer specification to install the system should has the following features to work efficiently.

Computer Hardware

List	The minimum specification.	Recommended features		
CPU	Pentium 4 or compactable	Core 2 or higher		
RAM	512 MB	2 GB		
Hard disk	40 GB	500 GB		
Monitor	15" 1024 x 768 Pixels	17" 1024 x 768 Pixels		
CD-ROM		1 Drive		
Printer	Printer Dot matrix	Printer Laser		

Operating System

Windows Me, Windows 2003, Windows XP, Windows 7 or later for the client (Client) and server (Server) is the operating system Windows 2003 Server or Windows 2008 Server up and install a database management system (Microsoft. SQL Server) should use SQL Server 2000 or later also.

Note

The use of computer networks should have the following equipment

- LAN Card installed on all computers.
- Switching Hub for transmission between computers.
- UTP cable to connect the computer to the Switching Hub.

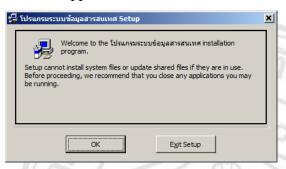
Program Installation

Steps to install the program as follows

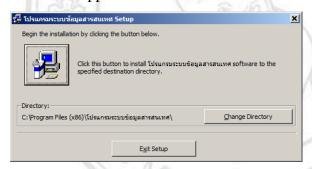
- 1. From installation CD/DVD Double click Folder SetupPC2551CMU
- 2. Then double click icon



3. When appear



- 4. Click mouse to buttom OK
- 5. When appear



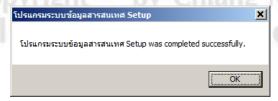
If user want to install in folder c:\Program Files\โปรแกรมระบบข้อมูลสารสนเทศ\

Click



(change in different folder Click Change Directory, then browse to the desired folder)

6. Then if appear anything to click button Continue, OK or Yes to accept installation, and the end step will appear



7. Click button OK to finish the installation

Running the program

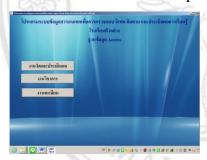
Steps to run the program. Are as follows:

- 1. From Windows, click the Start button, select All Programs, select data and Information system.
- 2. Click at information systems programs.
- 3. Would appear Authority Program as shown



4. Type a user ID and password, and click OK (default user is 1, No password). And Click button ตกลง

Then the main menu of the programs appear as below.

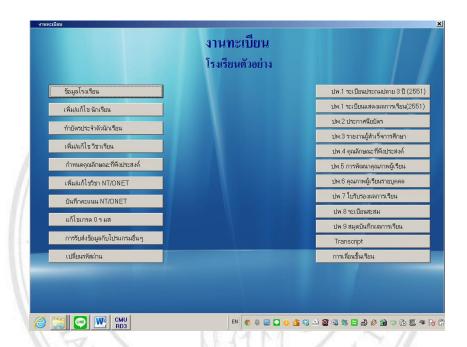


Select the desired program that user would like to work. Each program served briefly as follows.

- 1) Registrar to add, edit student information and classify student classroom currently. Updating student assessments, calculate GPA and provide evidence of study.
- 2) Academic affair personnel used for determining subjects to the teachers and enrolled. So the teachers can work in the course assessments and reports to parents and stakeholder for monitoring achievement of the course the students the class.
- 3) Teachers used the measurement and evaluation program to assist teachers for student assessments in each subject, reading thinking writing, desired characteristics, and activity development. The program helps calculation and reporting.

1. The Registration Program.

Registration program serves to add, edit and update student information, update school data, manage all courses in school, update student assessment, and provide the documents and evidence of learning evaluation, especially PP.1-3,7. The main menu of registration program consists of items are as follows.



Updating school data.

1. Click button "ข้อมูลโรงเรียน" from the main menu, the screen appear as follows

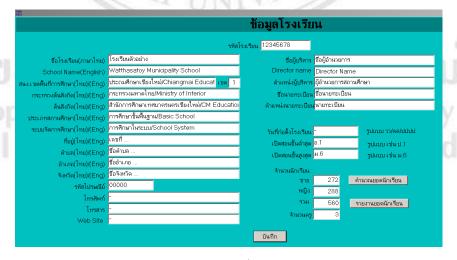


Image screen ข้อมูลโรงเรียน

- 2. Fill them correctly. According to the program notes.
- 3. When you want to save, click the button.
- 4. The number of students, Click the button
 The screen appears the amount of students are currently in school.

And when user want to report the number of students, Click the button

รายงานจำนวนนักเรียน

Printing amount of students.

1. The screen displays the number of students separate by class, room, and gender.

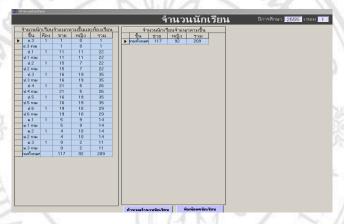


Image shows screenshot calculate amount of students

2. When the screen displays the number, click buttons

Print Preview screen is displayed where you can select print pages as needed.

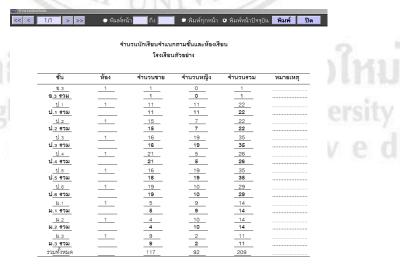


Image shows amount of students on print screen

3. When you want to print, click button at the top right of the screen.

Updating student data.

This procedure consists of adding new students, updating students and delete students who withdraw from the system.

Adding new students

1. Click button "เพิ่ม/แก้ไขนักเรียน" from the main program



ภาพ หน้าจอ เพิ่ม/แก้ไขรายชื่อนักเรียน

- 2. Click button then fill in the details of the students to complete the boxes and click the button to save student data.
- 3. And if you want to add individual detailed records are retained in Accumulate student records (PP8).

Editing student data.

Work in this section will be updated the details of students who are already in the database.



Image the detail screen "เพิ่ม/แก้ ใจรายชื่อนักเรียน"

- 1. Click the name of the student who wants to make a change. By clicking unit to edit the details which user need.
- 2. When editing is complete, click button. to save data after updating.
- 3. If you do not want to change data and return to normal. Click button the data back to the original data. But if you saved before, it could not be cancellation.

Deleting the student data.

This section will also delete existing student from the database. Deleting the student data can not be called back, so before deleting should be checked properly before removing from the system.

		ราย	ชื่อนักเรียน				
	เลชประจำตัว	ชื่อ	นามสกูล	ชั้น	ห้อง	เลชที่	•
	1768	ดนุนัย	คำหล้า	ป.1	1		
ŷ ▶	1842	สิทธิโชค	อินทะวัน	ป.1	1		
	1844	ชนะชัย	ใชยวงค์	ป.1	1		
	1845	ณัฐพล	ปลิวจันทึก	ป.1	1		

Image on screen in selection of student who user want to delete

- 1. Select the student you want to remove from the table to the left. Table lists the students selected, click it to turn into a black bar to indicate that the students.
- 2. After confirming that the student is a list of students who want to remove and click a button. The program will display a warning message to allow us to confirm the delete button, the students again.

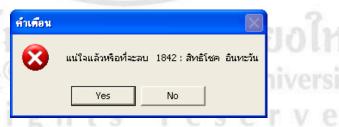
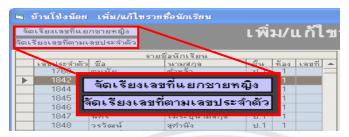


Image screen display a warning message to allow us to confirm the delete button

3. Click button Yes to delete, No to cancel to delete.

Note: Students can't delete if there is data that student in table TScore or any table thai had evaluation data because if deleted, it can't be issued transcripts. Should be used to change student state to 0 (0=students out, 1=current student).

Sorting student numbers



Programs have added features to arrange a number of students to be automatic.

The arrangement of the two types. 1) Arrangement that separate men and women.

2) Align identification number by number.

Step arrangement no.

- 1. Choose classes and preferred classroom then click the (If you do not choose the classes and classrooms can not. Sort by Number)
- 2. Double-click the selected forms that user requirements. (Sort by gender, or by IDstudent) then program aligns number automatically.

Updating subjects or courses in school

This step is a step to update all courses in school. The step consists of adding a new course, editing course detail and delete course from the system.

When user click button "เพิ่ม/แก้ไขวิชาเรียน" from the main screen to bring up the add / edit courses as shown.

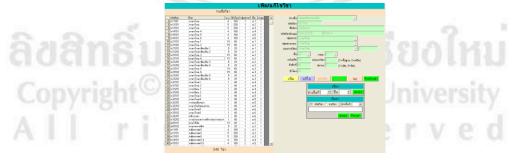


Image on screen "การเพิ่ม / แก้ไขวิชาเรียน"

This procedure has 3 main options for user to update the subjects or courses.

- 1) Adding new course to academic work.
- 2) Modify existing courses.
- 3) Deleting the course from the system.

Adding new course.

Working in this section when no courses or user want to add new subject or course into the system. To start adding new courses by click after click the Add button then fill data in the box as the image shown then click to save data into database.

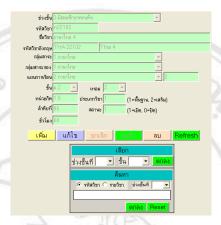


Image show the complete details of the new course

- 1. ช่วงขั้น = select the class level of the subject or course
- 2. รหัสวิชา = ID subject in Thai, should be the same curriculum define, such as ค16101
- 3. ชื่อวิชา = Enter subject name in Thai, should be concise and compact, and not too long.
- 4. รหัสวิชาภาษาอังกฤษ = ID subject in English that show in the transcript if don't have, user can use the sign " "
- 5. ชื่อวิชาภาษาอังกฤษ = Enter subject name in English
- 6. กลุ่มสาระ = select learning group in this subject (1=Thai,2=Mathematic,...,8=English)
- 7. แผนการเรียน = Study plan (in case P.1-M.3 don't study plan should define to 1), and in class level 4 should define 1=Science-Mathematic plan, 2.Art-Math, 3=Art-French, 4=Art-German, 5.Art-Chinese, 6= Art-Japanese, if there were subjects in many plan, should use "," separate in each plan such as 1,2,3 or some subject study in every plan use 0
- 8. รหัสของแผนกการเรียน = In this section does not need to do anything. The program determines automatically
- 9. $\mathring{\mathbf{fu}} = \mathbf{Select\ classes\ to\ enroll.}$

- 10. เทอม = semester to sudy(1 = Semester 1, 2 = Semester 2 (if subject study all year enter only 1)
- 11. หน่วยกิต = amount credits (used in high school), amount hours (used in primary) (should enter in both boxes, usually 1 credit= 40 hours, or study time per week)
- 12. ประเภทวิชา = type of subject (1 = Basic subject, 2 = additional subject)
- 13. ลำดับที่ = Running number (the program will be set automatically)
- 14. สถานะ = Indicate that this course is open to registered students or not.

$$(1 = open, 0 = close)$$

15. Full score in each time

Case class level 1-2 (in primary section) consist of

```
Time 1
Time 2
Time 3
Final

Time 1
Time 2
Time 3
Final

Total = 100 in semester 1
Time 2
Time 3
Final
```

Case class level 3-4 (in high section) consist of

```
Time 1
Time 2
Time 3

Final

Total = 100 in each semester
```

Note: In the scoring total scores on the four channels must not exceed 100, any channel not used to record the score should enter data is 0 points, after filling the required data then save by click the record button as the last step of recording the new course. But if user do not save, can be canceled by click the Cancel button to cancel recording of this course.

Updating subject data.

This section will be detailed and modified scoring of courses already existing in the database. Courses begin editing by click and edit the information in the course of completing it then save data to click button.

Deleting subject

This section will be deleted from the database of existing courses. Removing this course can not be called back, so before deleting should be checked properly before removing.



Images, select the course you want to delete

User will start deleting courses by click select the course you want to delete the first table on the left. After the course you want to delete and click. Table shown to indicate that the course we have chosen then click button ______, the screen displays confirmation message to the delete data from this course as follows

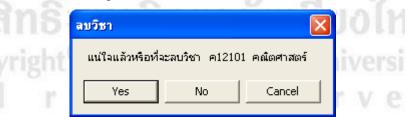


Image on screen display confirmation message to the delete data

If user want to delete click Yes, if don't delete click No

Updating teachers and personnel data.

This procedure consists of adding new teachers, edition teacher data, and delete teachers data out of the database.

Adding teacher data.

1. Click button "เพิ่ม/แก้ไขรายชื่อครูและบุคลากร" from the main menu, then screen displays as follows

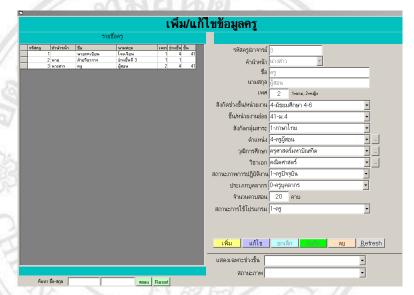


Image screen "เพิ่ม/แก้ไขรายชื่อครูผู้สอน"

2. To Add to new teachers. Please click on the button Then fill teachers. Then click on to save teacher data to database of system.

Editing teacher data.

The steps to edit teacher data from database.

- 1. Select teacher who wants to make a change by click to edit.
- 2 then modify teacher data and click _______ to save data after fixed.
- 3. If user want to cancel click button to cancel.

Note: the use status to use programs. If the registrar of the school will be able to view and edit data in any programs. But the teacher can access only the measurement and evaluation program (PP.5).

Deleting teacher data.

Deleting the teachers are teachers who deleted can not be called back, so before deleting should be checked properly before removing.

Starting deleted by click on the list of teachers to be erased first. From the left side then Click it, it will turn black to indicate that the list of teachers that we have chosen, as shown in Figure.



Image shown select teacher to delete

After checking teachers who want to remove and click a button.

After clicking deleted. The program will display a warning message as follows

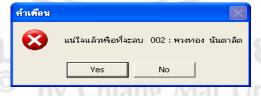


Image shown the warning message to delete data

If user want to delete click Yes, if don't delete click No

Documentation and evidence in basic education (PP1-9).

Records show all evaluation of students in each class level report (PP.1 report).

Documented academic performance of the students as learning courses, activities, and all of assessment in the basic education curriculum to be used as evidence of status and success in the education of each student. And used as evidence for admission or apply to study or work in other places.

Steps to report PP.1 from the main menu of registration program click PP.1 the screen shows as follows:

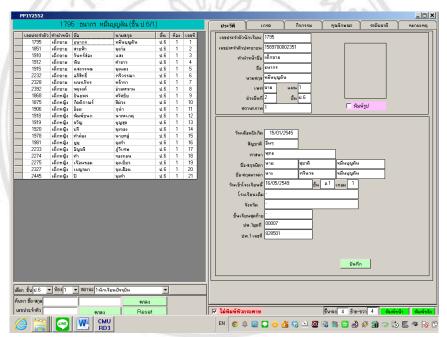


Image screen of PP.1

1. Select Class and room to report PP.1 from List Box "รู้น" and "ห้อง"



- 2. Click student from the table who want to report.
- 4. To print through printer click button พิมพ์



ระเบียนแสดงผลการเรียนหลักสูตรแกนกลางการศึกษาขั้นพื้นฐาน ระดับประถมศึกษา

ปพ.1 : ป ชุดที่ 00004 เลขที่ 935926

โรงเรียน ตัวอย่าง	
สังคัด สำนักงานคณะกรรมการการศึกษาขั้นที่ในฐาน	
ตาบล/แขวง ทั่วยแก้ว	ส่ อ เด็กหญิงกันติยา
ฮำเภอ/เขต แม่ออน	ชื่อสกล รักทงษ์
จังหวัดเชียงใหม่	แลขประจำตัวนักเรียน ⁰²¹⁰⁵
สำนักงานเขตพื้นที่การศึกษา ประถมศึกษาเชียงใหม่ เขต 1	ลขประจำตัวประชาชน ¹⁵⁰⁹⁹⁶⁶¹³⁷¹¹⁸
วันเข้าเรียน 16 พฤษภาคม 2551	<u>เกิดวันที่ 1 เดือน มีถุนายน พ.ศ²⁵⁴⁴</u>
โรงเรียนเติม โรงเรียนวัดทั่วยแก้ว	เพล หญิง สัญชาติ ไทย คาสนา คริสต์
จังหวัดเชียงใหม่	นื่อ-นื่อสกุลปิดา. พงศ์เทพ รักพงษ์
ชันเรียนสดท้าย ประถมศึกษาปีที่ s	ชื่อ-ชื่อสกลมารดา กันยนา รักพงษ์

ผลการเรียนรายวิชา

รหัส / รายวิชา	เจลา (ทั้วโมล)	สดการชื่อน	รหัส / รายวิชา	(1) (1) (1)	สดการชียน	รหัส / รายวิชา	เวลา (ขั้วโมล)	หลการชื่อน
ปีการศึกษา 2551 ขึ้นประถมศึกษาปีที่ 1 รายวิชาที่นฐาน ทะแบบ ภาษาไทย คะแบบ คณิตศาสตร์ วะแบบ วิทยาศาสตร์ สะแบบ สังคมศึกษา 1 ทะแบบ สุขศึกษาและพลศึกษา สะแบบ สิงคมศึกษาและพลศึกษา สะแบบ ก็สบน งะแบบ ภาษาจังกลุย	240 200 80 80 80 80 40	2.5 2 2 2 2 2.5 2	ปีการศึกษา 2553 ขั้นประถมศึกษาปีที่ 3 รายวิชาที่นฐาน ทามรถเภาษาไทย คามรถเภาษาไทย คามรถเวิทยาศาสตร์ วามรถเวิทยาศาสตร์ สามรถ สังคมศึกษา ว สามรถเสซศึกษาและพลศึกษา ศามรถเสซศึกษาและพลศึกษา ศามรถเลียน	240 200 80 80 40 80 80 40	4 3.5 3	ปีการศึกษา 2555 ชั้นประฉมศึกษาปีที่ 5 รายวิชาที่นฐาน ทเรเณ ภาษาไทย 5 คเรเณ คณิคศาสตร์ 5 วิเรเณ วิทยาศาสตร์ 5 สเรเณ สังคมศึกษา 5 สเรเณ ชังคมศึกษา 18 ทเรเณ สุขศึกษาและพลศึกษา 5 ศเรเณ สุขศึกษาและพลศึกษา 5 ศเรเณ สุขศึกษาและพลศึกษา 5 งเรเณ สุขศึกษาแรงพราชริพและเทคโนโลยี 5	160 200 80 80 40 80 80 40	4 4 3.5 3.5 3.5 3 4 4
عدد عدد العدد ا			อเรเกเ ภาษาอังกฤษ	40	3	อเรเอเ ภาษาอังกฤษ ร รายวิชาเพิ่มเติม งเรเอะ คอมที่วเตอร์ ร	40	4
ปีการศึกษา 2552 ชั้นประถมศึกษาปีที่ 2 รายวิชาพื้นฐาน ทา2101 ภาษาไทย	240	3.5	ปีการศึกษา 2554 ชั้นประถมศึกษาปีที่ 4 รายวิชาพื้นฐาน ทเ4101 ภาษาไทย 4	160	3.5	ปีการศึกษา 2556 ชั้นประถมศึกษาปีที่ 6 รายวิชาพื้นฐาน ทเธเอเภาษาไทย 6	160	4

Image print preview on the front page of PP.1

00004 ปพ.1:ป ชุดที่...... ผลการประเมินกิจกรรมพัฒนาผู้เรียน กิจกรรม (Sept.) anna Ibanin กิจกรรม เราการ เขาการ เขาการ เขาการ (เก็กในกุ เมษาการ เป็นเมิน ปีการศึกษา 2551 แนะแนว ลูกเลือ/เนตรนารี ชุมนุม กิจกรรมเพื่อสังคม ปีการศึกษา 255: ปีการศึกษา 2555 บการทหมา 2555 แนะแนว ลูกเลือนพรนารี รูมนุม เพื่อสังคมและสาธารณประโยชน์ แนะแนว ลูกเสือ/เนตรนารี 40 40 30 10 ขุมบุม กิจกรรมเพื่อสังคมและสาธารณประโยชน์ ปีการศึกษา 2552 แนะแนว ลูกเลืองเนครนารี จุมนุม กิจกรรมเทื่อสังคมและสาธารณประโยชน์ ปีการศึกษา 2554 แนะแนว ลูกเลืองเนครนารี รุมนุม เพื่อสังคมและสาธารณประโยชน์ ปีการศึกษา 2556 แนะแนว ลูกเลืองเนตรนารี รุมนุม เพื่อสังคมและสาธารณประโยชน์ 40 40 30 10 40 40 30 10 สรุปผลการประเมิน ผลการตัดสิน กลุ่มสาระการเรียนรั ..ผลการประเมินรายวิชาพื้นฐาน. .ค่านทูกรายวิชา. ..einu.. ผลการประเมินการอ่าน คิดวิเคราะห์ และเพียน.
 ผลการประเมินคุณลักษณะอันทึ่งประสงค์...... ก่าน ..einu. คณิสศาสสร์ วิทยาศาสสร์ 4.ผลการประเมินกิจกรรมพัฒนาผู้เรียน. .einu 15.0 6.0 9.0 6.0 สังคมศึกษา ตาลนา และวัง วันอนุมัติการจบ.. 25 มีนาคม 2557 วันออกจากโรงเรียน. คือปะ สาเหตุการออกจากโรงเรียน. จบการศึกษาระคับประถมศึกษา การงานอาชีพและเทคโนโลยี 6.0 4.00 ผลการทดสอบระดับชาติ การศึกษาดันคร้าด้วยคนเอง (IS) คะแนนเค็ม 100 ได้ 62 วิทยาศาสตร์ คะแนนเต็ม 100 ได้ so.s ผลการเรียนเจลี่ยตลอด 3 ปี (ป.4-6) ภาษาไทย

Image print preview on the back page of PP.1

Diploma or graduates report (PP.2 report).

This document issued to graduates student for 9 years (graduation class in M.3) and 12-year basic education graduates (graduation class in M.6) to represent the honor and privilege of graduates. The students used as evidence of qualification.

The steps to report PP.2 from the main menu of registration program click PP.2 the screen shows as follows:

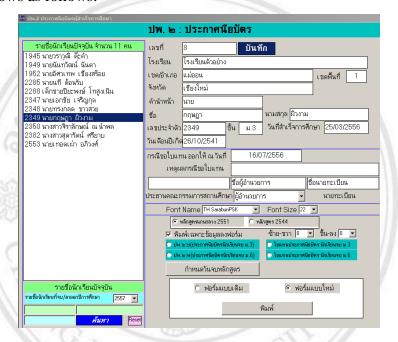
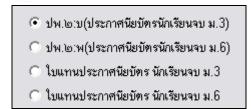


Image screen PP.2

1. click button กำหนดวันจบหลักสุดร then entry the date graduates by



2. Choose the type certificate by clicking on the white circle



- 3. Selected list of students who need certification. by clicking the student's name in the table of students
- 4. Choose the print format. Whether to print only Or type all information and forms 🔽 พิมพ์เฉพาะข้อมูลลงฟอร์ม

The preview print button click		พิมพ์		
			ಡ	
1/2	โรงเรียนตัวอย่า	٩		
แม่อ	อน	เชียงใหม่	8, //	
1/20.			2	
// 60/ /	นายกฤษฎา ผิวง	าม		
ල්ම	ตุลาคม	ଜଝୁଝୁଡ		
ල්.	มีนาคม	l ev ev		
© @.	มน เผท	ර්ව්වීම	400	
Image pre	eview print or	ıly data in repor	t PP.2	
		Ad A		
11 52 1	14/	11/6/	291/	
			ปพ.๒ : บ เลขที่	
	ประเ	าาศนียบัตร รวงศึกษาธิการ		
\$	กระท รงเรียน โรงเรี	รวงศึกษาธิการ แบตัวอย่าง		
		จังหวัดเชียงใหม่ จังหวัดเชียงใหม่		
		ยบัตรนี้ให้ไว้ เพื่อแสดงว่า		
ลิสส์เ	นายกฤข	ปฏา ผิวงาม		
เกิด	ควันที่๒๖. เดือนตุล	าาคม _{พ.ศ.} ๒๕๔	(<u>n</u>	
		• จับตามหลักสูตรแกนกลางกา		cit
(a) (a)	อวันที่๒๕. เดือนมีใ	1 <u>၂</u> ၂၂୩ - ଜଣ୍ଟ	්ට	
	ขอให้มีความ	เสุขสวัสดิ์เจริญเทอญ		
 ประธานคณะกรรมการสถานศึก	 Nen		ผู้อำนวยการ	
ประธานคณะกรรมการอำนวยการสเ			v	

Image preview print data with form in report PP.2

5. To print to printer click button



The students list for graduation from each class level reports (PP.3 report).

The students list for graduation of the basic education curriculum in class P. 6, M.3 and M.6 reports of achievement and qualification of graduates in each class level. Schools should send this report to the area of education and Ministry of Education.

The steps to report PP.3 from the main menu of registration program click PP.3 the screen shows as follows:

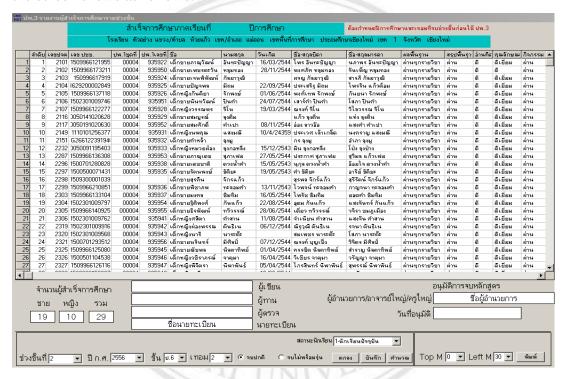
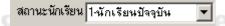
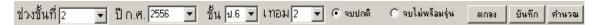


Image show the screen of PP.3 report

1. Choose a current student or the former students (on PP.1 given to students completing the course before report PP.3)



2. Select Class level, Class, Year Graduate (BE), and semester as picture



- 3. And then click "mnay" to display the list of students who graduated in the class to display the list of students who were graduated.
- 4. To print to printer click button พิมพ์

Student certificate (PP.7 report).

This document issued to learners as statements to ensure educational status of students, temporarily. Both cases, students do not graduate and graduation.

The steps to report PP.7 from the main menu of registration program click PP.7 the screen shows as follows:

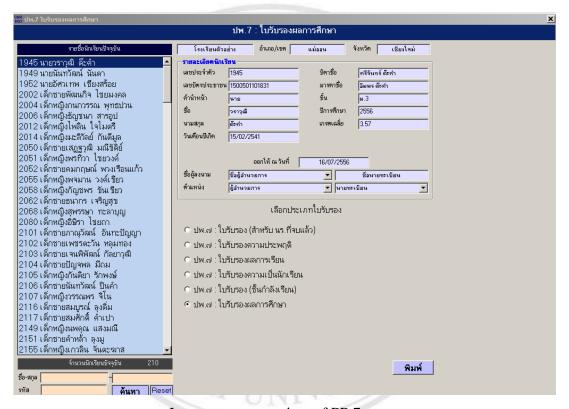


Image screen preview of PP.7 menu

Selected list of students who want to certification by click student in the table

- 1. Choose the form of PP.7 by click on the white circle
- Print preview by click button "พิมพ์"
- 3. When you want to print. Click the printer in the top right of the screen



ปพ. ๗

ใบรับรองผลการศึกษา

มัธยมศึกษาปีที่ 1-3

โรงเรียน	โรงเรียนตัวอย่าง			
อำเภอ	แม่ออน	จังหวัด	เชียงใหม่	
รับรองว่า	นายวราวุฒิ ต๊ะคำ	เลร	ขประจำตัว 19	45
เลขประจำตัว	ประชาชน 1500501101831 เกิดวันที่	15 เดือน ก	ุมภาพันธ์	พ.ศ. 2541
ชื่อ - ชื่อสกุลโ) _{ดา} ศรีจันทร์ ต๊ะคำ ชื่อ	- ชื่อสกุลมารด	า อัมพ	ร ต๊ะคำ
มีสถานภาพท	ทางการเรียน ดังนี้ กำลังศึกษาชั้น มัธย	มศึกษาปีที่	3 ปีการศึกษา 2	556
	ระดับผลการเรียนเ	ฉลี่ยสะสม	3.57	
	ออกให้ ณ วันที่16เดือน .	กรกฎาคม	พ.ศ. 2556	5
		(ชื่อผู้อำนวยเ	การ
			ผู้อำนวยกา	15
	NAT.		7. 29%	

Image print preview in PP.7 educational certificate



ใบรับรองความประพฤติ

โรงเรียนตัวอย่าง

ข้าพเจ้าขอรับรองว่า เด็กหญิงพจมาน วงค์เขียว เลขประจำตัว 2055 เกิดวันที่ เดือน พฤษภาคม พุทธศักราช 2543 วิเชียน วงค์เขียว มารดาชื่อ ศิริวรรณ วงค์เขียว กำลังเรียนระดับชั้น มัธยมศึกษาปีที่ 1 2556 ปีการศึกษา ของโรงเรียนตัวอย่างและเป็นผู้มีความประพฤติเรียบร้อย

ออกให้ณวันที่ 16 เดือน กรกฎาคม พุทธศักราช 2556

ลงชื่อ

(ชื่อผู้อำนวยการ) ผู้อำนวยการ

Image print preview in PP.7 behavior certificate



ใบรับรองการเป็นนักเรียน

โรงเรียนตัวอย่าง

ข้าพเจ้าขอรับรองว่า เด็กหญิงพจมาน วงค์เขียว เลขประจำตัว 2055 เกิดวันที่ 15 เดือน พฤษภาคม พุทธศักราช 2543 บิดาชื่อ มารดาชื่อ วิเชียน วงค์เขียว ศิริวรรณ วงค์เขียว กำลังเรียนระดับชั้น มัธยมศึกษาปีที่ 1 ปีการศึกษา 2556 ของโรงเรียนตัวอย่าง

ออกให้ ณ วันที่ 16 เดือน กรกฎาคม พุทธศักราช 2556

ลงชื่อ

(ชื่อผู้อำนวยการ)

ผู้อำนวยการ

Image print preview in PP.7 student certificate



ใบรับรองผลการเรียน

โรงเรียนตัวอย่าง

බ්ඵබ් Copyi A I I

ข้าพเจ้าขอรับรองว่า เด็กหญิงพจมาน วงค์เชียว เลขประจำตัว 2055 เกิดวันที่ พฤษภาคม พทธศักราช บิดาชื่อ วิเชียน วงค์เขียว มารดาชื่อ ศิริวรรณ วงค์เขียว กำลังเรียนระดับชั้น มัธยมศึกษาปีที่ 1 ปีการศึกษา 2556 มีผลการเรียนเฉลี่ยสะสม 3.25 ของโรงเรียนตัวอย่าง

ออกให้ ณ วันที่ 16 เดือน กรกฎาคม พุทธศักราช 2556

ลงชื่อ

(ชื่อผู้อำนวยการ) ผู้อำนวยการ

Image print preview in PP.7 grade point average certificate

Data transfer to other programs.

This program is easy to use and designed to facilitate the users with data in other systems to aid in obtaining data from another application into this program and can export data to other programs with examples of getting data into Excel, click button ""รับส่งข้อมูลกับโปรแกรมอื่น" from the list. Appears as shown



Click the button .รับข้อมูลเข้าจาก Excel" to get the data from Excel appears below.



Select the student data or data the user wants to import (Excel format using imported is in installed folder), then click the ... button to browse to your Excel file to provide the data and click the "mnan" button to import data.

Upgrading student to the next class.

Upgrading student to next class normally done at the end of academic year before the upgrading user should make copy programs in current folder to the new folder by the end of the academic year. So that students request transcripts backward can use the copy folder and the new folder upgrading into the next academic year.

The steps are as follows:

 Click the button "เลื่อนชั้นเรียน" from the list of the registration program. The screen appears as shown



- Select Tab "ลาออก" (for students resigned during the year), Tab "ไม่ได้เลื่อนชั้น"
 (Enter students ID who don't upgrade class) Tab graduate courses (for graduate students grade 1-4), Tab "จบหลักสูตร" (select the students who finish the last class in school).
- Click button "เลื่อนชั้นเรียน" (program will updae student class from P.1 to P.2, ..., until all classes are upgrading)
- Click button "ปรับสถานะนักเรียนที่เลื่อนชั้นเป็นนักเรียนปัจจุบัน" (To change student status into current status=1)
- 5. Click button "โอนข้อมูลนักเรียนที่จบหรือลาออก ออกจากฐานข้อมูล" (To delete students from database, unnecessary)

2. Academic affair program.

Academic affair personnel assign subjects to the teachers and enroll, then teachers can enter data in the measurement and evaluation program.

The main menu of affair list is as follows.



Assigning subjects to teachers.

This process requires teachers for each subject. So that each teacher can fill score evaluation, the desired characteristics, reading and writing assessment which appears in the measurement and evaluation (PP.5).

Steps to assign subjects to teacher.

Click button "กำหนดวิชาให้กรูผู้สอน" from the main menu of academic program.

The screen displays as follows



Image screen displays on item "กำหนดวิชาให้ครูผู้สอน"

- 1. Choose the teacher from the list of tables left side, by click teacher name on the table after clicking Teacher listed with the name of the selected teacher appears.
 - 2. Choose subjects that require teachers to teach and select teacher as image below.

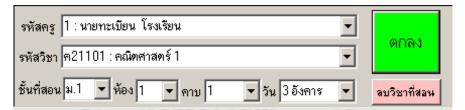


Image screen on item "การกำหนดครูผู้สอน"

3. Choose the class, room, period, teaching days when all selected click button

The courses selected will appear on the table shown on the right side that subject was assigned to that teacher.

Cancellation subject that assigned to teacher.

In this case study, user determined the teacher wrong. User was also able to drop the subjects. Steps to cancel subject that assigned to teacher as follows:

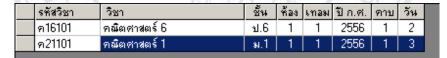


Image screen display result of assigned subjects to teacher

- 1. Choose teachers who want to drop subject after clicking the teacher who had been assigned on the left side of table.
- 2. Click select the subject you want to clear from the table that shows the teacher who taught the subjects. (Table on the right top).
- 3. Make sure to check accuracy before it is subject to be removed. Then click button to drop subject then the screen display as follows:

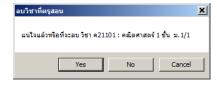


Image screen display the message to confirm to delete subject from the teacher

4. If correct, would make sure the confirmation of the cancellation of the course at all.

After the course, we canceled out, it will be deleted from the table that teach courses.

(The table on the right - top). Click Yes to delete or No to cancel.

Enrollment or assignment students to subjects.

After assignment subjects to teachers then user should assign students to subjects or enrollment. So that teachers can use measurement and evaluation program.

Steps to enroll compulsory subjects as fellows : Click the "ลงทะเบียนเรียนบังคับ" from the main menu of academic program, the screen display as follows.



Image screen displays on item "การลงทะเบียนวิชาบังคับ"

1. Assigned student groups to enroll before by selecting the class level, study plan, class, room, and semester of the subjects. Check for accuracy before clicking the button.

to determine the student group after clicking the OK button, then the program will display the assigned group of students on the green area below.



Image screen display the assigned group of students

- 2. Assign subjects to enroll by selecting course code "เพิ่มรหัสวิชา" in the table on the right. In the course code are listed by number. Subjects assigned to the teacher (step 5) to teach classes that define a group of students only. After selecting a course code already Should check the course code to complete the selection. Then click button assign subjects to enroll. When defining subjects completed the course code selected will be displayed in a table that will give students course enrollment.
- 3. Enrollment by clicking on the button Complete the process of enrollment.

Cancellation of compulsory enrollment.

To cancel the subjects that enrolled to students. Steps to process from menu of "การลงทะเบียน" click button "ยกเลิกการลงทะเบียน" then screen displays as follows:

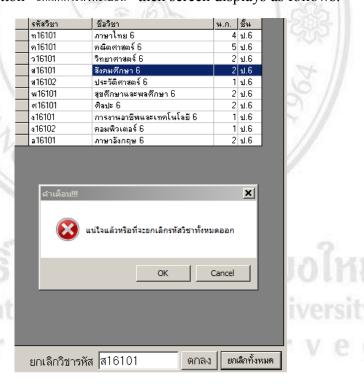


Image screen to cancel the enrollment of subjects

Steps to cancel the enrollment of subjects

- 1. Select the subject or course from the table to cancel. The subject shows is selected.
- 2. Click button to cancel the selected program of study and delete from table.

The desired characteristics of student report (PP.4 report).

The desired characteristics of the students report are the document to develop student character in the core basic curriculum BE 2551. The report must prepare this document to all learners to be used as evidence to show the attributes of the learner to engage in the admission or work.

Steps to report PP.4 from the main menu of academic affair program click button "ปพ.4 คุณลักษณะอันพึงประสงค์" then the screen displays as follows:

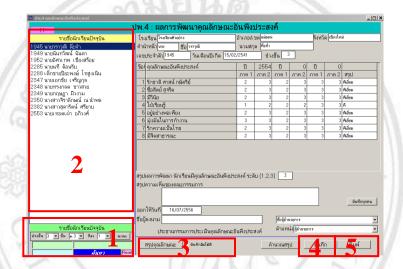


Image screen displays on item PP.4

- 1. Choose Class level, Class, Room, of students, then click button "mnay"
- 2. Choose student from student list to entry data or to report
- 3. Click button "สรุปคุณลักษณะ" to calculate the assessment
- 4. Click button "บันทึก" to save data
- 5. Click button "พิมพ์" to preview report from screen
- 6. Click button "พิมพ์" from screen to print to printer



Image print preview of PP.4 report

The quality of the students individually report (PP.6 report).

Documentation for information about the grades and developments of students in various fields to be used for communication between the school and parents of the students to acknowledge and understand each other.

Steps to report PP.4 report from the main menu of academic affair click button "ปพ.6 คุณภาพผู้เรียนรายบุคคล" then the screen displays as follows:

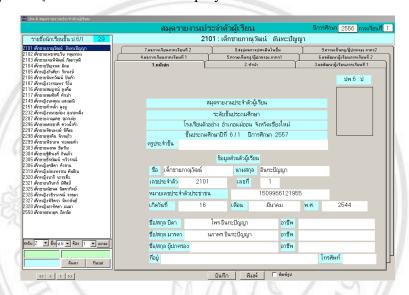


Image screen to report PP.6

- 1. Choose Classroom to report
- 2. Choose student from student list
- 3. Entry data that needs to report as selected Tab
- 4. Click button "บันทึก" to save data in every Tab

When user want to preview to screen click button if to print to printer click พิมพ์ at the top right of the screen.



Image print preview of PP.6 report of student individually

The cumulative student records report (PP.8 report).

Documentation for information about the progress and performance aspects of the Learners both at school and at home for the purpose of guiding the students in all aspects. Steps to report PP8 from main menu of academic program click button "ปพ.8 ระเบียนสะสม" then screen displays as follows:

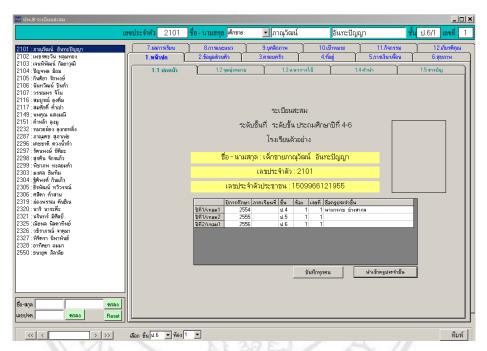


Image screen to report PP.8

- 1. Choose Classroom to report
- 2. Choose student from student list or search by student ID
- 3. Entry data as needs in every Tab
- 4. Save data by clicking the button "บันทึก"

To preview report click button at the top-right preview screen



Image of PP.8 reports

The results of student learning records (PP.9 report).

This reports are documents that schools prepared to record assessments of all subjects that the students had studied. When the students change schools all information of the records in learning outcomes will be useful in the adoption on the transfer of learning from the same education as a result of learning to the new school curriculum.

Steps to report PP9 from the main menu of academic program click button "ปพ.9 ลมุดบันทึกผลการเรียนรู้" then the screen displays as follows :



Image screen to report PP.9

- 1. Choose Class level, Class to report pp.9 and click button "ตกลง"
- 2. Choose student from student list that user want to report
- 3. Entry data that needs on every Tab
- 4. Save data by clicking button "บันทึก"
- Preview data by clicking button "พิมพ์"
- 6. Print report to printer by clicking button "พิมพ์" at the preview print screen

ปพ. ๙

สมุดบันทึกผลการเรียนรู้

หลักสูตรการศึกษาขั้นพื้นฐาน ระดับชั้น**ประถมศึกษา**

โรงเรียน โรงเรียนตัวอย่าง
เขต/อำเภอ แม่ออน
จังหวัด เชียงใหม่

Image preview print of the cover page in PP.9

สรุปผลการเรียนสาระการเรียนรู้ตลอดช่วงชั้น

ชื่อ - สกุล	เด็กชายภาณุว	ĭฒน์	อันทะปัญญา	ช่วงชั้นที่	2	ชั้น ป.6/	า เลขที่า
ลำดับที่	รหัส / รายวิ	ชาที่เรี	ยน	หน่วย	กิต/น์	าหนัก	ผลการเรียน
1	ทา4101 ภา	ษาไทย	1 4		4.	0	3.5
2	ทาราบา ภา	ษาไทย	15		4.	0	4
3	ทาธาบา ภา	ษาไทย	16		4.	0	4
4	ค14101 คถึ	นิตศาร	ทตร์ 4		5.	0	4
5	ค15101 คถึ่	นิตศาร	ทตร์ 5		5.	0	4
6	ค16101 คถึ	นิตศาร	ทตร์ 6		5.	0	4
7	314101 วิท	ยาศาร	ทตร์ 4		2.	0	2.5
8	วาราบา วิท	ยาศาร	ทตร์ 5		2.	0	3.5
9	วาธาอา วิท				2.	0	3.5
10	ส14101 สั้ง	คมศึก	발 4		2.	0	4
11	สา4102 ปร				1.	0	3
12	สาราบา สัง	คมศึก	발1 5		2.	0	4
13	สาราช2 ปร				1.	0	4
14	สาธาบา สัง	คมศึก	bt16		2.	0	4
15	สาธากว ปร	ะวัติศา	เสตร์ 6		1.	0	3.5
16			และพลศึกษา 4		2.	0	2.5
17			และพลศึกษา 5		2.	0	3.5
18	พาธากา สุข	ศึกษา	และพลศึกษา 6		2.	0	4
19	ศา4101 ศิล	ปะ 4			2.	0	2.5
20	ศาราบา ศิล	ปะ 5			2.	0	3.5
21	ศาธาบา ศิล				2.	0	4
22	ง14101 กา	รงานอ	าชีพและเทคโนโลยี 4		1.	0	4
23	ง14102 คอ				1.	0	3
24	ง15101 กา	รงานค	าชีพและเทคโนโลยี ร		1	0	3.5

Image preview print of the student learning results in PP.9

3. The Measurement and evaluation program.

Documents for teachers to record subject attendance, the results of the measurement and evaluation, the development of desired characteristics, the ability to think critically, reading and writing of each student. The assessment of activities to develop students. Also used as evidence for verification condition to participating in various activities and the achievement of each student.

The main menu of the measurement and evaluation program, consists of items are as follows.



Image the screen of all items in the measurement and evaluation program

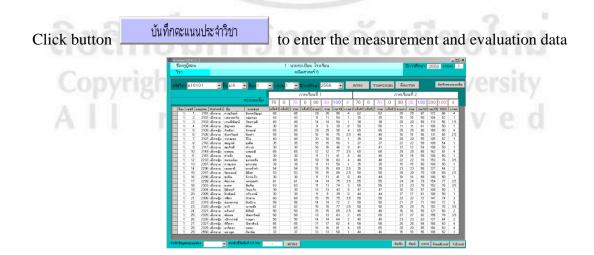


Image screen enter the measurement and evaluation data in each subjects

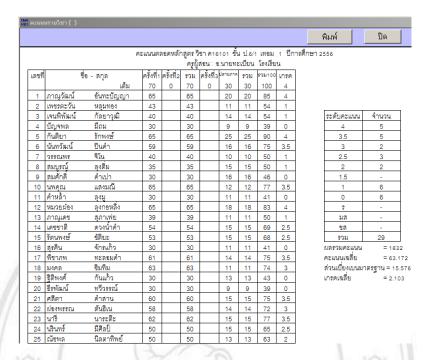


Image print preview of assessment report

Click button บันทึกคุณลักษณะอันพึ่งประสงค์ to enter data and evaluate desired character of students

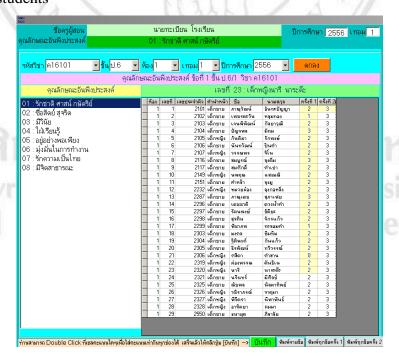


Image screen enter data in evaluation of student characters

ผลการประเมินคุณลักษณะอันพึงประสงค์ ครั้งที่ 1 โรงเรียนตัวอย่าง ชั้น ป.2/1 ปีการศึกษา 2556 ภาคเรียนที่ 1

เลขที่	เลขประจำตัว	ชื่อ - สกุล	ข้อ 1	ข้อ 2	ข้อ 3	ข้อ 4	ข้อ 5	ข้อ 6	ข้อ 7	ข้อ 8	เฉลี่ย
1	16520	เด็กชายสาธิน จะพื้อ	1	2	3	2	3	2	2	1	2.00
2	16521	เด็กชายอนุวัฒน์ สุวงค์	1	2	3	2	3	2	2	3	2.25
3	16522	เด็กซายคุณภาพ บั่วผัด	1	2	3	2	3	2	2	3	2.25
4	16523	เด็กชายคจิตพัฒน์ พลอยกระจ่างศ์รี	1	2	3	2	3	2	2	3	2.25
5	16525	เด็กชายณ พล บัวจันทร์	1	2	3	2	3	2	2	3	2.25
6	16526	เด็กชายขชล เขาเรียง	1	2	3	2	3	2	2	3	2.25
7	16528	เด็กชายปวิชญา พิทมารัตน์	1	2	3	2	3	2	2	3	2.25
8	16542	เด็กชายณัฐพัชร์ บุญเกิด	1	2	3	2	3	2	2	3	2.25
9	16564	เด็กชายกันต์ธีร์ ดวงมณี	1	2	3	2	3	2	2	3	2.25
10	16566	เด็กชายอนาวิล กมณฑลาภิเษก	1	2	3	2	3	2	2	3	2.25
11	16567	เด็กชายวีรภัทร บุญเซียม	1	2	3	2	3	2	2	3	2.25
12	16568	เด็กชายอัสยุช บุญคุ้ม	1	2	3	2	3	2	2	3	2.25
13	16582	เด็กชายวรชัย เทียนหล่อ	1	2	3	2	3	2	2	3	2.25
14	16583	เด็กชายวรพล เทียนหล่อ	1	2	3	2	3	2	2	3	2.25
15	16587	เด็กชายณัฐวัฒน์ คำหลวง	1	2	3	2	3	2	2	3	2.25
16	16604	เด็กชายพัฒนวิชญ์ ชัยกุลธนกิจ	1	2	3	2	3	2	2	3	2.25
17	16627	เด็กชายปรัญชัย สีเงิน	1	2	3	2	3	2	2	3	2.25
18	16629	เด็กชายแสงฟ้า เมืองพาง	1	2	3	2	3	2	2	3	2.25
19	16630	เด็กชายวิธวัฒน์ พงษ์หล้า	1	2	3	2	3	2	2	3	2.25
20	16684	เด็กชายพงษ์พิพัฒน์ กล้ากสิกร	1	2	3	2	3	2	2	3	2.25

Image print preview of student character evaluation report

Click button บันทึกการอ่าน คิดวิเคราะห์ และเขียน to evaluate of reading, thinking, and writing of students.

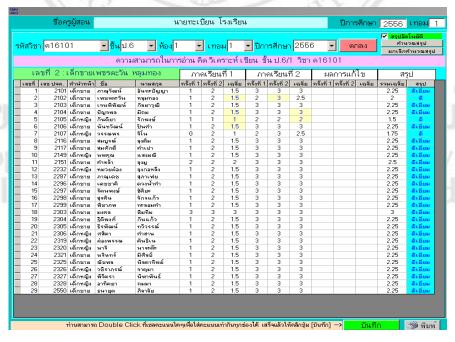


Image scree enter data of students in reading, thinking, and writing



Image print preview of student in reading, thinking, and writing report

Click button บันทึกเวลาเรียนรายวิชา to record student time attendance

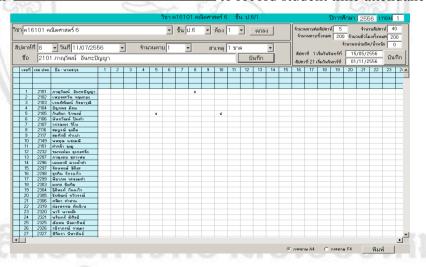


Image screen to record student time attendance in each subject

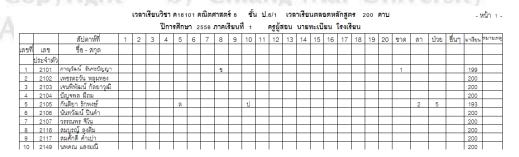


Image print preview of time attendance report

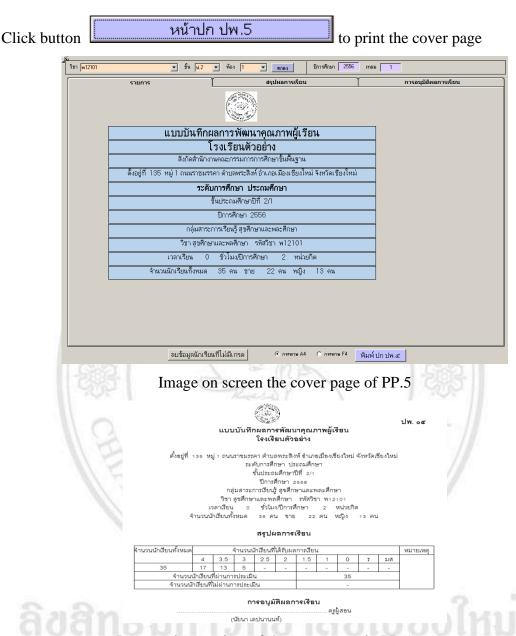


Image print preview of the cover page in PP.5 report

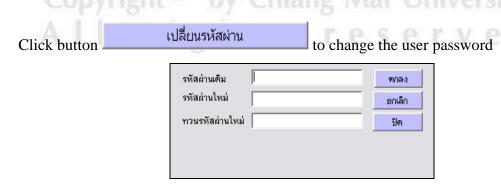


Image on screen to change the user password

Appendix C 6. The DVD for System Installation.

DVD for System Installation



CURRICULUM VITAE

Author's Name Mr. Nirun Tungteerabunditkul

Date/Year of Birth 6 May 1962

Education 1984 Bachelor Degree of Science

in Mathematics, Faculty of Science

Chiang Mai University

1993 Master Degree of Education

in Research and Statistic, Faculty of Education

Chiang Mai University

Experience 1985 - Present

Teacher of The Prince Royal's College.

117 Kaewnawarat Rd.,

Chiang Mai

