CHAPTER 3

Research Method

The Research done on the structure of learning organization to early childhood private school Chiang Mai Province has used "Mixed Methodology" between Quantitative Research and Qualitative Research. The researcher has divided up the research method into the following 4 steps:

3.1 Step 1 the study of the components of learning organization to early childhood private school Chiang Mai Province

3.1.1 Objective

To study the components of being a learning organization to early childhood private school Chiang Mai Province

3.1.2 The Population and sample group used in the research

The sample group used in the research consisted of 9 qualified individuals used in the Purposive Sampling. Individuals consisted of: professors from state and private universities or doctoral degree holders with knowledge and experience in management, teacher development, and personnel development. Individuals who held administrative positions in education and scholars who are interested in early childhood education and learning organizations who were knowledgeable and qualified in management theory, teaching in higher education, educational administration in private schools, basic education and graduated in evaluation, or research at a Master's or Doctorate level on those who were happy to provide feedback and input on the research.

3.1.3 Scope of Content

The researcher has set the scope of content concerning the *study of* learning organization to early childhood private school Chiang Mai Province to consist of:

1) Analyzing the components of the learning organizations from: documents, textbooks, theories, and research related to learning organizations within the country and abroad. This included 12 individuals chosen for the Purposive Sampling: Weerawut Machasiranon (2548), Wijarn Panich (2550), Juthaporn Boonwan (2553), Anutida ChiangChee (2554), Juree Soypetch (2554), Ranya Chupwa (2555), Wipa Sairach (2557), Peter M. Senge (1990), Michael J. Marquadt (1996), Gephardt, Marsick and Buren (1997), and Watkins and Marsick (1999).

2) Analyzing the assisting factors contributing to learning organizations from: documents, textbooks, theories, and research related to learning organizations within the country and abroad. This included 12 individuals chosen for the Purposive Sampling: Wiroch Saratna (2545), Leuchai Jantpo (2546), Somkid Sroynam (2547), Montree Pongpaew (2548), Surat Duangchachom (2549), Choogiat Boonganan (2550), Nhatai Watna (2550), Sakorn Chaihan (2550), Bennet and O'Brien (1994), Marquardt and Reynolds A. (1994), Nevis, Dibella and Gould (1995), and Kaiser, S.M. (2000).

3.1.4 The tools used to gather research data

The research tools used to conduct this research were as follows:

1) A synthesized record of the components and assisting factors conducive to learning organization to early childhood private school Chiang Mai Province

2) A structured interview for those who were qualified which asked for feedback on the validity and the appropriateness of the components, along with the assisting factors conducive to the research topic.

3.1.5 Creating and verifying the quality of the tools

Step 1 in creating and verifying the quality of the tools are as follows:

1) A synthesized record of the components and assisting factors conducive to being a learning organization to early childhood private school Chiang Mai Province.

1.1 Analyzing the assisting factors contributing to learning organizations from: documents, textbooks, theories, and research related to learning organizations within the country and abroad.

1.2 Creating a synthesis record and facilitating the assisting factors according to the components, the concepts, and assisting factors involving learning organizations within the country and abroad.

1.3 Take the framework from the synthesis record of components and assisting factors to present to a qualified advisor to review its appropriateness and correct use of language.

1.4 Taking the advisors' feedback and applying it to improve the framework so that it can be used for the synthesis record of components and assisting factors for the researcher.

2) A structured interview for those who were qualified which asked for feedback on the validity and the appropriateness of the components, along with the assisting factors conducive to the research topic.

2.1 Studying the components and assisting factors of being learning organizations which the researcher has synthesized.

2.2 Proceeding to construct an interview to collect data concerning the quality of the components and assisting factors received from the data synthesis.

2.3 Presenting the tools to the advisor again to receive feedback and evaluation on improvements for the interview in the areas of accuracy, suitability of the language, consistency of content, and the assisting factors presented by the nine experts. Reviewing the details of the interview in its accuracy, suitability, and its components and assisting factors related to the research topic.

2.4 Take the results from the research received from the interviews and interviews and presenting them to the advisor again. Take the feedback and suggestions in the areas of assisting factors and components to create a questionnaire in step 2

3.1.6 Data Collection

The data collection from those qualified concerning the study learning organization to early childhood private school Chiang Mai Province.

1) Collaborating and gathering the necessary documents from the Faculty of Education, Education Management, and the Faculty of Education in Chiang Mai University, and presenting a formal request to the qualified individuals for permission to do research and collect data.

2) Contacting and collaborating with qualified experts for help and analyzing data along with scheduling times to personally store and record the data.

3) The researcher personally collects all the information through interviews to verify the components along with additional discussion on topics and issues related to the research topic.

4) Continuing to analyze data

3.1.7 Analyzing the data and Statistics used

Step 1 in analyzing the data and statistics are as follows:

1) Content Analysis of *assisting factors contributing to being* a learning organization to early childhood private school Chiang Mai Province**.**

2) Data analysis to check the accuracy and appropriateness of results from the research topic by frequency and percentage. Setting the criteria and basing it on 7 out of 9 qualified individuals and above or 77% and up.

3.2 Step 2 A study of the problems and assisting factors affecting the learning organization amongst Chiang Mai's private pre-elementary schools

3.2.1 Objective

To study the problems and assisting factors affecting learning organization to early childhood private school Chiang Mai Province

3.2.2 The Population and sample group used in the research

The sample group used in the research has been divided into 2 groups consisting of: 105 administrators and 210 teachers from early childhood private school Chiang Mai Province schools with a total of 315 individuals selected using Multi-stage Random Samplings procedure with the following steps:

1) Establishing the sample size. The researcher has chosen a sample size which was appropriate to the target population consisting of: 121 administrators, 728 teachers, totaling 849 individuals.

94

2) The Stratified Random Sampling method was used to select the schools to collect data from. In Chiang Mai schools were categorized in the following category: 79 small schools, 39 medium sized schools, and 3 large schools. The sample size was chosen based off a chart created by Robert V. Krejcie, Earyle W. Morgan and Psychological Measurement, 1970. Which has a 95% confidence level (α=0.05) seen in the chart below:

Size of the school	Amount of schools	Sample Size
Small	79	66
Medium	39	36
Large	3	3

The choosing of the private pre-elementary schools was done in such a way that it included all districts in Chiang Mai. Which administrators used specific selection methods limiting each school selection to 2 teachers each in Table 3.1

95

Table 3.1   The target sample used to collect data

Education District	Amount of Schools			Total	Administrators	Teachers	Total
	Small	Medium	Large				
Chiang Mai Education District 1	27	16	1	44	44	88	132
Chiang Mai Education District 2	7	10	1	18	18	36	54
Chiang Mai Education District 3	8	5	0	13	13	26	39
Chiang Mai Education District 4	17	5	1	23	23	46	69
Chiang Mai Education District 5	2	0	0	2	2	4	6
Chiang Mai Education District 6	5	0	0	5	5	10	15
Total	**66**	**36**	**3**	**105**	**105**	**210**	**315**

3.2.3   Scope of Content

The researcher has set the scope of content concerning the data to consist of the following:

1) The scope of content for problems contributing to the learning organization to early childhood private school Chiang Mai Province. The results which were examined by experts in Step 1 consisted of 6 components: 1. System Thinking 2. Personal Mastery 3. Mental Model 4. Shared Vision 5 Team Learning and 6. Knowledge Management.

96

2) The scope of content for assisting factors contributing to the research topic. The results which were examined by experts in Step 1 consisted of 7 assisting factors: 1. Strategy 2. Appropriate Structure   3. Leadership   4. Management   5. Supportive and Corporate Learning Culture 6. Motivation and 7. Learning Technology

3.2.4   The tools used to gather research data

The tool used to gather research data in step 2 was in the form of a questionnaire which consisted of 4 parts:

1) Part 1 included general information about those doing the questionnaire and the school

2) Part 2 concerning the state of being a learning organization for private pre-elementary schools in Chiang Mai (including additional suggestions) using a 5 point rating scale:

5	meaning taken into practice/true	Highest
4	meaning taken into practice/true	High
3	meaning taken into practice/true	Moderate
2	meaning taken into practice/true	Low
1	meaning taken into practice/truthfully	Lowest

3) Part 3 concerning the problems related to the research topic (including additional suggestions) using a 5 point rating scale:

5	meaning there is a problem	Highest
4	meaning there is a problem	High
3	meaning there is a problem	Moderate
2	meaning there is a problem	Low
1	meaning there is a problem	Lowest

4) Part 4 concerning the assisting factors contributing to research topic (including additional suggestions) using a 5 point rating scale:

5	meaning factor's importance	Highest
4	meaning factor's importance	High
3	meaning factor's importance	Moderate
2	meaning factor's importance	Low
1	meaning factor's importance	Lowest

97

3.2.5 Creating and verifying the quality of the tools

The process in creating and verifying the quality of the tools used in step 2 are as follows:

1) Studying the concepts and research related in the creation of data collection tools and choosing the appropriate tool.

2) Taking the assisting factors conducive to the research topic obtained from experts and then using the results to create questions,

3) Setting a scope of data concerning the questions asked which covers the following categories: the state, the problems, and the assisting factors contributing to the research topic.

4) The researcher has taken the questionnaire created and presented to 5 experts using Purposive Selection with the following qualities: professors from state and private universities or doctoral degree holders with knowledge and experience in management, teacher development, and personnel development. Individuals who held administrative positions in education and scholars who are interested in early childhood education and learning organizations who were knowledgeable and qualified in management theory, teaching in higher education, educational administration in private schools, basic education and graduated in evaluation, or research at a Master's or Doctorate level. Those who were happy to provide feedback and input on the research. Having the experts check for the content's validity by using the following scale to rate each question:

Point +1   the question was able to be measured to meet the objectives

Point 0   not sure whether the question is able to be measured to meet the objectives

Point -1   the question is unable to be measured to meet the objectives

Then taking the results and calculating it into the Index of Item Objective Congruence: IOC (Puangrat Tweerat, 2543) resulting in a correlation coefficient of 0.67 - 1.00 per each question.

1) Improving and developing the research tools based on the advice from experts and the thesis advisor.

2) Taking the questionnaire which has been approved for Content Validity and trying it out with a sample population with similar characteristics. The questionnaire was tested with 15 private pre-elementary schools in Lamphun province: Laohasit Witthaya School, Boonrawee Kindergarten, Baibun Lamphun School, Orapin Pittaya School, Dormitory Development Kindergarten, Thanarat Witthaya School, Rapee Wittaya School, Christian Kindergarten, Ban Tak Kindergarten School, Lopthip School, Kulpatra Kindergarten, Dhamma education school, Boon Pasang School. Preawpun Kindergarten and Lamphun Pattana School in the order received from Purposive sampling. The research was done to find out the quality, the ability, and trust amongst 30 administrators and teachers. Then taking the results from the testing of the questionnaire to calculate a reliability percentage by finding the Alpha Coefficient to equal a 96% confidence level.

3) Presenting the results from testing the questionnaire to experts and thesis advisor. Then update and improve the questionnaire again so that it may be used to collect from the target population.

4) Submit the completed and improved questionnaire and continue to collect data from the target population.

3.2.6 Data Collection

Data collection in step 2 consists of the following:

1) Collaborating and gathering the necessary documents from the Faculty of Education, Education Management, and the Faculty of Education in Chiang Mai University, and presenting a formal request to the administrators and teachers of private pre-elementary schools in Chiang Mai (105 locations) for permission to conduct research and collect data.

2) Contact and collaborate via telephone with administrators and teachers from private pre-elementary schools in Chiang Mai for research and data collection.

3) Proceed with submitting the questionnaire and formal request to conduct research to the private pre-elementary schools in the target population and request that they send the results back via mail.

4) Gather all questionnaires which have been sent back and continue with data analysis.

99

3.2.7 Analyzing the data and statistics used

The procedure in analyzing the data and statistics in step 2 are as follows:

1) Part 1 the results from the information received concerning the general information of the respondents were done in the form of a checklist which was then analyzed by frequency, percentage, and descriptive analysis. The information is presented in the form tables with explanations.

2) Part 2   the state, problems, and assisting factors contributing to the research topic

2.1 The inspection of the validity and completeness of the questionnaire

2.2 The inspection of the ratings given concerning the state, problems, and assisting factors contributing to the research topic follows the scale below:

5   means is taken to practice/there is a problem/it is a critical factor   Highest
4   means is taken to practice/there is a problem/it is a critical factor   High
3   means is taken to practice/there is a problem/it is a critical factor   Moderate
2   means is taken to practice/there is a problem/it is a critical factor   Low
1   means is taken to practice/there is a problem/it is a critical factor   Lowest

Average   4.51 – 5.00   means is taken to practice/there is a problem/
                              it is a critical factor to being a learning organization
                              is at the highest degree

Average   3.51 – 4.50   means is taken to practice/there is a problem/
                              it is a critical factor to being a learning organization
                              is at a high degree

Average   2.51 – 3.50   means is taken to practice/there is a problem/
                              it is a critical factor to being a learning organization
                              is at a moderate degree

Average   1.51 – 2.50   means is taken to practice/there is a problem/
                              it is a critical factor to being a learning organization
                              is at a low degree

Average   1.00 – 1.50   means is taken to practice/there is a problem/
                              it is a critical factor to being a learning organization
                              is at the lowest degree

2.3 The Standard Deviation with the value of the mean being defined by Boonshom Srisaad 2554 page 100 is as follows:

3.3 Step 3 Creating a model format and Model's instruction for using with learning organizations of Chiang Mai's private pre-elementary schools.

3.3.1 Objectives

To create a model format and Model's instruction for use with learning organizations of Chiang Mai's private pre-elementary schools

3.3.2 The Population and sample group used in the research

In Step 3 of the research the following two groups were used in conducting the research:

1) The group used to create the model of learning organization of Chiang Mai's private pre-elementary school consisted of 10 individuals who were administrators and teachers in private pre-elementary schools.

2) This group was used to examine the usefulness, the suitability, and feasibility of a model and Model's instruction for learning organizations of Chiang Mai's private pre-elementary schools. From the 10 individuals, 7 were chosen through using the process of Purposive Selection based on the following criteria and characteristics: professors from state and private universities or doctoral degree holders with knowledge and experience in management, teacher development, and personnel development. Individuals who held administrative positions in education and scholars who are interested in early childhood education and learning organizations who were knowledgeable and qualified in management theory, teaching in higher education, educational administration in private schools, basic education and graduated in evaluation, or research at a Master's or Doctorate level. Those who were happy to provide feedback and input on the research topic and qualified in early childhood education holding official positions in pre-elementary education in the district.

3.3.3 Scope of Content

The researcher has set the scope of content concerning creating a *model and format for learning organizations amongst Chiang Mai's private pre-elementary schools* to consist of:

1) The scope of content for creating a model and format for learning organizations amongst Chiang Mai's private pre-elementary schools has been designed to be consistent with the data results from the study of the problems and assisting factors affecting the learning organization amongst Chiang Mai's private pre-elementary schools. The content follows the following format:

1.1 Synthesizing the components for the format of learning organization amongst Chiang Mai's private pre-elementary schools from theoretical concepts, related research and documents related to the topic. Using that information to create a model with three parts the components of being a learning organization, Learning to develop, and Target and or Results. The model then consisting of the following 6 components: 1.Personal Mastery, 2 Knowledge Management, 3 Mental Model, 4 Shared Vision, 5 Team Learning, and 6 System Thinking. The assisting factors to learning organizations amongst private pre-elementary schools consist of the following 7 factors: 1) Strategy, 2) Supportive and Corporate learning Culture, 3) Motivation, 4) Leadership, 5) Appropriate Structure, 6) Learning Technology, and 7) Management. Along with creating understanding in corporate diagnostics, improvement and development, measuring goals and productivity, taking into account being a learning organization and the satisfaction of the user using the model.

1.2 Applying the Synthesis of components within the model of learning organizations amongst Chiang Mai's private pre-elementary schools contains 6 different parts: part 1 the Model's explanation, part 2 Introduction, part 3The basic knowledge about Learning Organization, part 4 the Type of Learning Organization and its Procedure, part 5 the Measurement of the Model, and part 6 the Reference and Appendix.

2) Examining the usefulness, the suitability, and feasibility of the model and Model's instruction for learning organizations of Chiang Mai's private pre-elementary schools

102

3.3.4 The tools used to gather research data

The tools used in to gather the data in step three are as follows:

1) A record of a Workshop held on the topic of creating a model format for learning organization of Chiang Mai's private pre-elementary school covering the following topics: 1) the Components, 2) the Assisting Factors, 3) the Characteristics of learning organization, 4) the process in creating a learning organization, and 5) Activities to use in creating learning organizations.

2) The Evaluation form used to evaluate the model of learning organization of Chiang Mai's private pre-elementary schools have 4 available options: feedback on usefulness, feedback on accuracy, feedback on appropriateness, feedback on feasibility, and the appropriateness of the Model's instruction concerning the topic.

3.3.5 Creating and verifying the quality of the tools

The process in creating and verifying the quality of the tools in step 3 are as follows:

1) Creating a record of feedback for the Workshop on the topic of creating a model format for learning organization of Chiang Mai's private pre-elementary school. The researcher used the following steps: The record of feedback received from the workshop on the topic

1.1 Studying documents, theories, and components related to creating a model for learning organization to set the agenda and topic for the workshop.

1) Synthesizing the components from the model learning organization of Chiang Mai's private pre-elementary schools.

2) Analyzing the results from research on the problems and assisting factors contributing to learning organization of Chiang Mai's private pre-elementary schools.

1.2 Setting the agenda for the meeting and consulting the advisor for feedback on the content and appropriate use of the language.

1.3 Take the feedback and apply it to the workshop to improve it for use the next time.

1.4 Finalize the agenda and have a complete record format for data collection with the sample group.

2) Evaluation of the model format for learning organization of Chiang Mai's private pre-elementary schools.

      2.1   Studying the documents and research related to creating and format of the tools, analyzing the content to create the questions within the tool.

      2.2   Studying the rules and process in creating a 5 point rating scale based on Likert's method.

      2.3   Creating the questions and presenting it to experts and advisors for feedback and evaluation on appropriateness of language and content.

      2.4   Taking the tool and presenting it for evaluation to 5 experts chosen using the method of Purposive Selection based on the following characteristics: professors from state and private universities or doctoral degree holders with knowledge and experience in management, teacher development, and personnel development. Individuals who held administrative positions in education and scholars who are interested in early childhood education and learning organizations who were knowledgeable and qualified in management theory, teaching in higher education, educational administration in private schools, basic education and graduated in evaluation, or research at a Master's or Doctorate level, those who were happy to provide feedback and input on the research topic. The experts will evaluate the tool's accuracy and content covered within the questionnaire based on the IOC (Index of Item Objective Congruence). The researcher has set the IOC criteria value for research tools to be 0.67 and above setting the criteria for each question to be within the range of 0.88 – 1.00 and cutting any question with values lower.

      2.5   Developing and improving the tools based on the feedback received from experts and the advisor.

      2.6   Finalizing and completing the evaluation form for use in data collection.

3) Creating a record from the Focus Group discussion so that that the researcher can document the feedback received from experts and advisors on: the usefulness, the suitability, and feasibility of the model and Model's instruction for learning organizations of Chiang Mai's private pre-elementary schools.

      3.1   Setting the issues and topics for discussion in the group for evaluation by experts concerning the following points:

3.1.1 The usefulness, the accuracy, the suitability, and the feasibility of applying the model to learning organization of Chiang Mai's private pre-elementary school.

3.1.2 The appropriateness of the Model's instruction for the learning organization of Chiang Mai's private pre-elementary school.

3.2 Taking the record from the discussions and meetings and presenting it to the advisor for constructive feedback.

3.3 Make improvements and finalize the records and documentation based on the feedback to apply to private pre-elementary schools.

3.3.6 Data Collection

1) The data collected to create the model for learning organization of Chiang Mai's private pre-elementary schools was gathered through the process of using a workshop involving 20 administrators and teachers from private pre-elementary schools.

1.1 Creating a formal invitation to the workshop and sending it to the sample group to process and analyze the information received in step 2 and discuss issues related to creating a model for learning organization of Chiang Mai's private pre-elementary schools.

1.2 Proceeding with the target group in the workshop to create a model for learning organization of Chiang Mai's private elementary schools. December 9th, 2016 carry out a draft of the model format and Model's instruction for learning organization of Chiang Mai's private elementary schools with the following points:

1.2.1 Study of the concepts, theories, and research on creating a model

1.2.2 Study of organizational models of learning from various research

1.2.3 Creating a draft for learning organization of Chiang Mai's private pre-elementary schools consisting of: components of characteristics of being a learning organization, the method of creating a learning organization, and activities involved in creating a learning organization.

1.2.4 Taking the results and data received in step 2 to consider the issues, components, and assisting factors in becoming a learning organization set as a criteria for consideration (Chapter 4 pages 207-208).

1.2.5 Gathering the issues and matters for consideration to create a draft of a model for learning organization of Chiang Mai's private pre-elementary schools consisting of the following: 1. Activities, 2. Components/Assisting Factors. 3. Objective. 4. Indicators of Success. 5. Guidelines for activities. 6. Goal.

1.2.6 Taking the draft and presenting it to experts and advisors for their examination of appropriateness and proper use of language.

1.2.7 Taking the feedback received from experts and advisors to develop and improve the draft for the model.

1.2.8 Taking the model for learning organization of Chiang Mai's private pre-elementary school to create the Model's instruction.

2) Collecting and evaluating information concerning the usefulness, suitability, and feasibility for the model and Model's instruction for learning organization of Chiang Mai's private pre-elementary schools by using the Focus Group Discussion Method with 7 qualified individuals.

2.1 Creating a letter to request cooperation from the Faculty of Education, the Chiang Mai University's Department of Education and experts to formally invite them to the focus group discussion with time, date, and location of the meeting included.

2.2 The researcher sends the invitation letter to the qualified individuals via post office with a summary draft of the model, and topics/issues of discussion attached within the letter.

2.3 The researcher coordinates with the qualified individuals for confirmation in whether or not they will be joining the Focus Group Discussion.

2.4 Proceeding with the Focus Group Discussion on evaluating the usefulness, suitability, and feasibility of the model and Model's instruction in its application for learning organization of Chiang Mai's private pre-elementary schools on the 5th of January 2017 in the Auang Luang meeting room on the second floor of building 1 located in Chiang Mai University's Department of Education.

2.5   The researcher takes the feedback received and uses it to improve and develop the model and Model's instruction for learning organization of Chiang Mai's private pre-elementary schools.

2.6   The researcher takes the new, improved, and completed model for trial in the school from the target group.

3.3.7   Analyzing the data and Statistics used

Analyzing the data and statistics in Step 3 are as follows:

1) Analyzing the information received from conducting the workshop. The researcher has taken the feedback and advice received from the meeting to create a Consensus for making a draft.

2) Evaluating the model for learning organization of Chiang Mai's private pre-elementary schools after the Focus Group Discussion with qualified individuals using the evaluation form.

2.1   Part 1 Evaluation of the model

2.1.1 Evaluating the model: usefulness, accuracy, suitability, and feasibility based on a 5 point system:

Assessment Level	5	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at the highest degree
Assessment Level	4	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a high degree
Assessment Level	3	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a moderate degree
Assessment Level	2	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a low degree
Assessment Level	1	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at the lowest degree

107

2.1.2 Taking this data and using a computer to calculate the Mean and Standard Deviation by basing the criteria off of Boonchom Srisaad's scale (2544)

Average	4.51 – 5.00	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at the highest degree
Average	3.51 - 4.50	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a high degree
Average	2.51 - 3.50	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a moderate degree
Average	1.51 - 2.50	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at a low degree
Average	1.00 - 1.50	Meaning This category according to the model has usefulness, accuracy, suitability, and feasibility for the user at the lowest degree

2.2   Part 2 Evaluating the suitability and appropriateness of the Model's instruction follows the following scoring:

2.2.1 A complete examination and the validity of the evaluation form

2.2.2 A complete examination and scoring of the suitability and appropriateness of the Model's instruction:

Assessment Level	5	Meaning The entry for the Model's instruction is appropriate at the highest degree
Assessment Level	4	Meaning The entry for the Model's instruction is appropriate at a high degree
Assessment Level	3	Meaning The entry for the Model's instruction is appropriate at a moderate degree

Assessment Level	2	Meaning The entry for the Model's instruction is appropriate at a low degree
Assessment Level	1	Meaning The entry for the Model's instruction is appropriate at the lowest degree

Taking this data and using a computer to calculate the Mean and Standard Deviation by basing the criteria off of Boonchom Srisaad's scale (2544)

Average	4.51 – 5.00	Meaning The entry for the Model's instruction is appropriate for the user at the highest degree
Average	3.51 - 4.50	Meaning The entry for the Model's instruction is appropriate for the user at a high degree
Average	2.51 - 3.50	Meaning The entry for the Model's instruction is appropriate for the user at a moderate degree
Average	1.51 - 2.50	Meaning The entry for the Model's instruction is appropriate for the user at at a low degree
Average	1.00 - 1.50	Meaning The entry for the Model's instruction is appropriate for the user at the lowest degree

3.4 Step 4 A study of using the model with learning organization of Chiang Mai's private pre-elementary schools.

3.4.1 Objective

To study the results of using a model with learning organization of Chiang Mai's private pre-elementary schools

3.4.2 The Population and the Sample group used for research

The sample group used to test the model was chosen using the method of Purposive Sampling. The group consists of 10 teachers and administrators who teach at a pre-elementary level at the Pimandek School in Chiang Mai under the office of private education. The criteria in which the researcher used to evaluate the school are as follows: 1) A readiness and willingness to be involved. 2) A school which voluntary

chooses to participate in the research. 3) Has the desire to promote learning organization. 4) The school meets the criteria that has been set in step 2 (from lowest to moderate degree)

3.4.3 The Scope of Content

The researcher has set the scope of content to include: the results of using a model with learning organization of Chiang Mai's private pre-elementary schools, the study of the results from evaluation of learning organization, the components and characteristics of learning organization to 3 levels, and the satisfaction from users who used the model.

3.4.4 Applications for data collection

The application of data collection for the 4th procedure of the study represents the characteristics of the application as follow;

1) Applying the model by following the activity memos and interview of each procedure

2) Analyzing the result of applying the model of the learning organization amongst Chiang Mai's private pre-elementary schools. The evaluation is revealed as the rating scale which distinguishes into 3 issues following;

Issue 1, the evaluation of the structure of the learning organization amongst Chiang Mai's private pre-elementary schools regarding the components, factors and additional suggestions

Issue 2, the evaluation of the structure of the learning organization amongst Chiang Mai's private pre-elementary schools regarding the state of being learning organization; individual, teamwork and organization, and additional suggestions

Issue 3 the evaluation of the satisfaction of applying the model of the learning organization amongst Chiang Mai's private pre-elementary schools and additional suggestions

3.4.5 The establishment and evaluation of the applications

This topic consists of 4 procedures following;

1) Activity memo

1.1 Review the documents, synthesis the contexts and the procedure of making memo of the results of making the learning organization activity

1.2 Integrate the knowledge to make the activity memo

1.3 Presenting the activity memo to thesis supervisors and co-supervisors to verify the contexts. Then, the author will efficiently improve the context.

1.4 Publishing the activity memo for data collection

2) Interview Form

2.1 Review the documents, synthesis the contexts and the procedure of interviewing the participants in the learning organization activity

2.2 Integrate the knowledge to make the interview form

2.3 Presenting the interview form to thesis supervisors and co-supervisors to verify the contexts. Then, the author will efficiently improve the context.

2.4 Publishing the interview form of the participation in building the learning organization amongst Chiang Mai's private pre-elementary schools

3) The evaluation of the learning organization amongst Chiang Mai's private pre-elementary schools regarding components and assisting factors

3.1 Review the related documents, literatures and articles and form the procedure of evaluating according to rating-scale evaluation

3.2 Synthesizing the contexts and set up the context of the evaluation of learning organization according to components and factors assisting factors to pose the questions in each section

3.3 Presenting the evaluation form to thesis supervisors and co-supervisors to verify the contexts. Then, the author will efficiently improve the context.

3.4 Publishing the evaluation form of the participation in building learning organization structure for the learning organization amongst Chiang Mai's private pre-elementary schools

4) The evaluation of applying the model of the learning organization amongst Chiang Mai's private pre-elementary schools regarding components and assisting factors

4.1 Review the related documents, literatures and articles and apply the model of the learning organization according to rating scale evaluation

4.2 Synthesizing the contexts and set up the context of the evaluation of applying the model of learning organization according to components and assisting factors to pose the questions in each section

4.3 Presenting the evaluation form to thesis supervisors and co-supervisors to verify the contexts. Then, the author will efficiently improve the context.

4.4 Presenting the evaluation form to specialists to verify the context regarding the application of IOC, the result revealed the consistence of the context is between 0.67 to 1.00.

5) The evaluation of satisfaction of applying the model of the learning organization amongst Chiang Mai's private pre-elementary schools

5.1 Review the related documents, literatures and articles and form of satisfaction towards applying the model of the learning organization according to rating scale evaluation

5.2 Synthesizing the contexts and set up the context of the evaluation of satisfaction towards applying the model of learning organization according to components and assisting factors to pose the questions in each section

5.3 Presenting the evaluation form to thesis supervisors and co-supervisors to verify the contexts. Then, the author will efficiently improve the context.

5.4 Publishing the completed form for data collection

3.4.6   Data Collection

The procedure will be as following;

1) Applying the model of learning organization structure for pre-elementary level of private schools in Chiang Mai to pre-elementary education in privates schools

1.1 Set up the sample groups to apply the procedure of learning organization structure for the learning organization amongst Chiang Mai's private pre-elementary schools

112

1.2 Cooperating with Pimandek pre-elementary School, Chiang Mai for cooperating with the private elementary schools as sample groups on January, 10th 2017

1.3 Organizing the meeting to inform and plan the experiments with sample group; preparation, planning and procedure, organizing focus group to study the school environments

2) Follow-up the sample group after applying the model of the learning organization amongst Chiang Mai's private pre-elementary schools

2.1 Collecting data by inspection, follow-up, evaluating the results, indicators and target of each activity according to components and assisting factors

2.2 Organizing the meeting to wrap up the result of the experiment with executive board and teachers of Pi Man Dek Elementary School, Chiang Mai. Later, the open discussion will be held to discuss about the results, feedbacks and additional suggestions.

2.3 Evaluating the applying of learning organization structure and satisfaction of applying the model via the evaluation form.

2.4 Improving the form and model's Instruction efficiently

2.5 Presenting the structure of learning organization structure for pre-elementary level of private schools in Chiang Mai.

3.4.7 Analyzing the results and statistic

This section consists 4 sections of analyzing

1) Memo form

The author analyses the content regarding the results, discussions and suggestions and conclude the issues

2) Interviewing form

The author analyses the content regarding the results, discussions and suggestions and conclude the issues

3) The evaluation form

3.1 Verifying the evaluation results regarding the components, assisting factors and the measurement as follows;

The certain list is the most likely applied weights   5   points

The certain list is likely applied weights   4   points

The certain list is fairly applied weights   3   points

The certain list is less likely applied weights   2   points

The certain list is the least likely applied weights   1   point

3.2 Analyzing the evaluating via computing program to set Mean and Standard Deviation according to Srisa-ard (2011);

4.51 - 5.00 means the model's Instruction is Highest

3.51 - 4.50 means the model's Instruction is High

2.51 - 3.50 means the model's Instruction is Moderate

1.51 - 2.50 means the model's Instruction is Low

1.00 - 1.50 means the model's Instruction is Lowest

4) The evaluation of the structure of the learning organization amongst Chiang Mai's private pre-elementary schools

4.1 Verifying the evaluation results of the structure for pre-elementary level of private schools in Chiang Mai according to the state of being learning organization in individual, tam and organization levels. The measurement is as following;

The certain list is the most likely applied weights   5   points

The certain list is likely applied weights   4   points

The certain list is fairly applied weights   3   points

The certain list is less likely applied weights   2   points

The certain list is the least likely applied weights   1   point

4.2 Analyzing the evaluating via computing program to set Mean and Standard Deviation according to Srisa-ard (2011);

4.51 - 5.00 means the model's Instruction is Highest

3.51 - 4.50 means the model's Instruction is High

2.51 - 3.50 means the model's Instruction Moderate

1.51 - 2.50 means the model's Instruction is Low

1.00 - 1.50 means the model's Instruction is Lowest

114

5) Verifying the evaluation of the satisfaction towards the structure of the learning organization amongst Chiang Mai's private pre-elementary schools.

5.1 The measurement is as following;

The certain list is the most likely satisfied weights	5	points
The certain list is likely applied satisfied	4	points
The certain list is fairly applied satisfied	3	points
The certain list is less likely satisfied weights	2	points
The certain list is the least likely satisfied weights	1	point

5.2 Analyzing the evaluating via computing program to set Mean and Standard Deviation according to Srisa-ard (2011);

4.51 - 5.00 means the model's Instruction is Highest

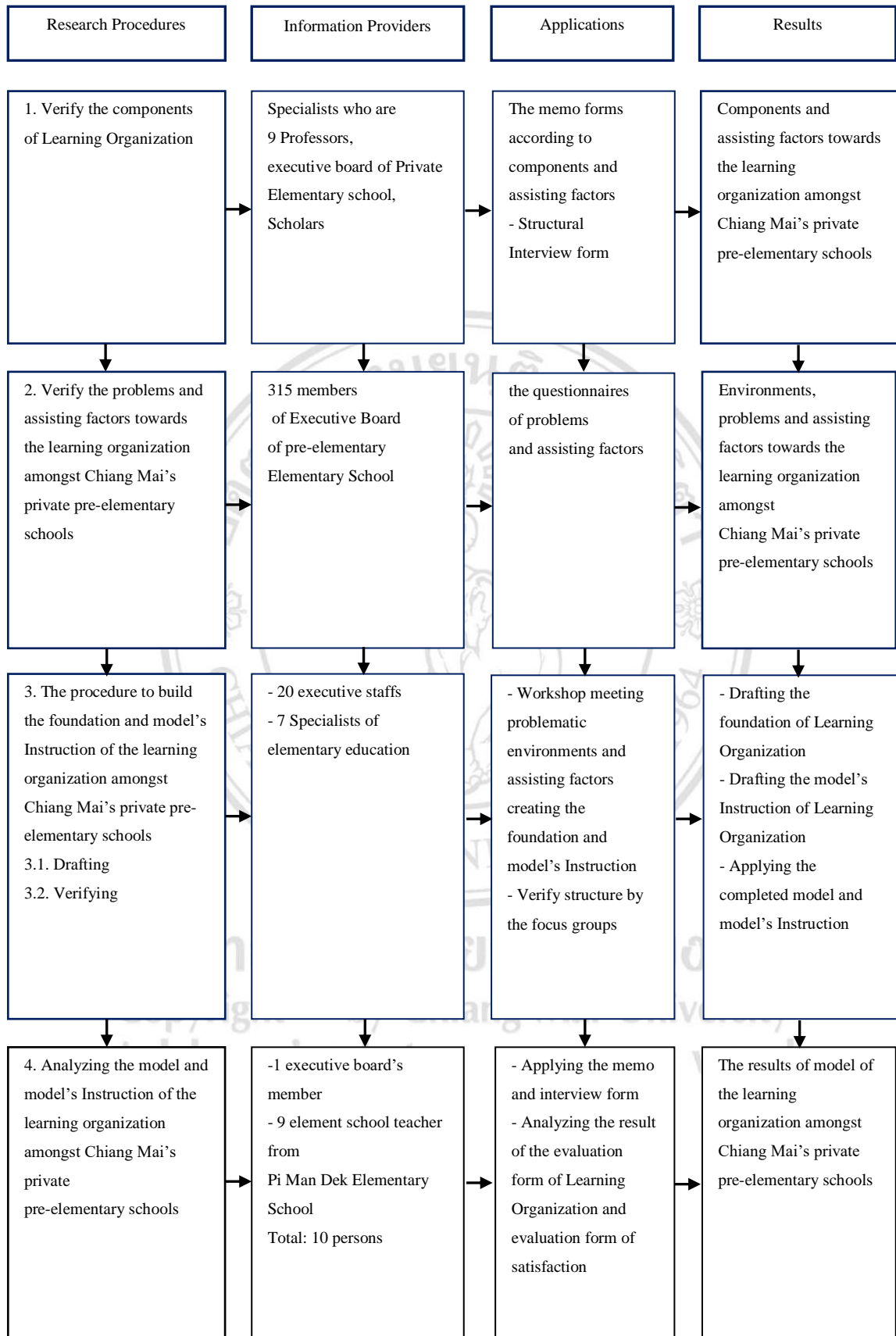3.51 - 4.50 means the model's Instruction is High

2.51 - 3.50 means the model's Instruction Moderate

1.51 - 2.50 means the model's Instruction is Low

1.00 - 1.50 means the model's Instruction is Lowest

The procedures is illustrated in the Figure 3.1

Research Procedures	Information Providers	Applications	Results
1. Verify the components of Learning Organization	Specialists who are 9 Professors, executive board of Private Elementary school, Scholars	The memo forms according to components and assisting factors - Structural Interview form	Components and assisting factors towards the learning organization amongst Chiang Mai's private pre-elementary schools
2. Verify the problems and assisting factors towards the learning organization amongst Chiang Mai's private pre-elementary schools	315 members of Executive Board of pre-elementary Elementary School	the questionnaires of problems and assisting factors	Environments, problems and assisting factors towards the learning organization amongst Chiang Mai's private pre-elementary schools
3. The procedure to build the foundation and model's Instruction of the learning organization amongst Chiang Mai's private pre-elementary schools 3.1. Drafting 3.2. Verifying	- 20 executive staffs - 7 Specialists of elementary education	- Workshop meeting problematic environments and assisting factors creating the foundation and model's Instruction - Verify structure by the focus groups	- Drafting the foundation of Learning Organization - Drafting the model's Instruction of Learning Organization - Applying the completed model and model's Instruction
4. Analyzing the model and model's Instruction of the learning organization amongst Chiang Mai's private pre-elementary schools	-1 executive board's member - 9 element school teacher from Pi Man Dek Elementary School Total: 10 persons	- Applying the memo and interview form - Analyzing the result of the evaluation form of Learning Organization and evaluation form of satisfaction	The results of model of the learning organization amongst Chiang Mai's private pre-elementary schools

Figure 3.1 the Procedure of Learning Organization

116