

Chapter IV

Results of Data Analysis

The research was divided into three phases as the following:

Phase 1: For this phase, the researcher aimed at studying on what causal factors influence the success in implementation of Schools of Quality for secondary schools in Lao PDR.

Phase 2: The findings from creating a development model of Schools of Quality for secondary schools in Lao PDR.

Phase 3: The findings from implementation and evaluation of the constructed development model of Schools of Quality for secondary schools in Lao PDR.

The findings from phase 1 were:

Phase 1: For this phase, the researcher had an objective to study on what causal factors influenced a success in implementation of Schools of Quality for secondary schools in Lao PDR. With the initial hypotheses assuming that the factors influenced a success in implementation of School of Quality for secondary schools were leadership, teachers, students, pedagogical advisors, management and administration, teaching and learning, participation of community, and school environment and equipment. The questionnaires were used to collect data from the samples in 116 secondary schools in the five UNICEF target provinces namely Phongsaly, Luangnamtha, Saravan, Sekong and Attapeu. In each school, a total number of four persons representing directors, teachers, students, and community representatives were key informants to provide information in respect to a given set of questionnaire.

The researcher presented the findings from data analysis by studying on what causal factors influenced a success in implementation of Schools of Quality for secondary schools in Lao PDR based on the structural equation modeling using LISREL. The symbols and abbreviation terms of words or phrases of variables and statistical values in analyzing the

data based on the initial research theoretical hypothesis model were defined. Then, the procedures of model specification, identification, estimation, testing, and modification, and interpretation were presented. The detailed procedures of data analysis and its findings in phase 1 were presented in the following topics:

1. The result of an initial data examination for testing of the initial research theoretical hypothesis.
2. The analyzed results of factor influence a success in implementation of Schools of Quality Approach in Secondary Schools in Lao PDR

For this study, the researcher defines the symbols and abbreviation used for variables and statistical values as follow:

1. The abbreviation used for variables

1.1 Exogenous Variables (Independent Variables)

LED Leadership

STU Students

TEA Teachers

PAD Pedagogical Advisors

PAR Participation of Community

SEE School Environment and Equipment

1.2 Endogenous Variables (Dependent Variables)

MAN Management and Administration

TNL Teaching and Learning

SUC A Success of School of Quality in Secondary Schools.

2. The symbols/abbreviation used for statistical values

\bar{X} Mean

SD Standard Deviation

SKEWNESS Skewness

KURTOSIS Kurtosis

3. Pearson's product moment correlation coefficient

df	Degree of Freedom
CN	Critical N
DE	Direct Effects
IE	Indirect Effects
TE	Total Effects
GFI	Goodness of Fit Index
RMR	Root Mean Square Residual
AGFI	Adjusted Goodness of Fit Index
RMSEA	Root Mean Square Error of Approximation
R ²	Squared Multiple Correlation Coefficient
X ²	Chi-Square

The finding from an initial data examination leading to testing of research hypothesis in accordance with the criterion of Structural Equation Modeling (SEM) by using LISREL (a statistical application package for Path Analysis).

A basic assumption in using LISREL, the data must be in the mode of normal distribution and the variables must be continuous values. Every variable must have both skewness and kurtosis values within the range of ± 1 . In this study, the researcher conducted a data analysis for statistical values of Mean, Standard Deviation, Skewness and Kurtosis. The result finding from the data analysis is shown in the following table:

Table 4 The initial data analysis on Mean, Standard Deviation, Skewness, and Kurtosis of Independent variables

Variables	Mean	Standard Deviation	Skewness	Kurtosis
LED	4.6902	.23710	.050	-1.000
TEA	4.6629	.121930	-.472	.056
STU	1.4155	.30860	-.210	-1.000
PAD	1.5026	.28421	-.154	-.725
PAR	4.5185	.27979	-1.000	-.317
MAN	4.6899	.16872	.124	-.397
TNL	4.5807	.16773	.183	1.000
SEE	1.4362	.2.6975	-.380	-.334

From Table 4, it is a data analysis on Mean, Standard Deviation of all of the eight variables. The data were then analyzed if the data were normally distributed and had normal curve by examining the Skewness and Kurtosis values of the eight independent variables. As shown in Table 4, all of the eight independent variables have statistical values for Skewness and Kurtosis within the range of ± 1 . This means that the peak of a curve of the data has a normal distribution as a normal curve. Thus, the data are valid for further analyzing.

The Multiple Linear Regression was used for Pearson's Product Moment Correlation (r) to find correlation coefficients of the independent variables or the predictors and the dependent variable at the statistically significant level of .05. In Table 5, it is the regression coefficients of the independent variables with the dependent variable (SUC) that have a statistical significant level of .05 and influence on the dependent variable or SUC.

Table 5 Regression Coefficients of the Independent and Dependent Variables

Factors	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
LED	.165	.058	.211	2.845	.005*
TEA	.138	.062	.164	2.220	.029*
STU	.010	.048	.016	.200	.842
PAD	-.053	.071	-.082	-.751	.454
PAR	.110	.048	.167	2.309	.023*
MAN	.264	.076	.241	3.495	.001*
TNL	.323	.083	.293	3.903	.000*
SEE	-.043	.078	-.063	-.557	.579

* Statistical significance at the level of .05

From Table 5, only five of the eight independent variables were statistically significant at the level of .05. The five independent variables were leadership (LED), teachers (TEA), participation of community (PAR), management (MAN), and teaching and learning (TNL). While the other three independent variables including students (STU), pedagogical advisors (PAD), and school environment and equipment (SEE) were not statistically significant at the level of .05.

The five independent variables that had values with a statistical significance at the level of .05 were analyzed to find Pearson correlation.

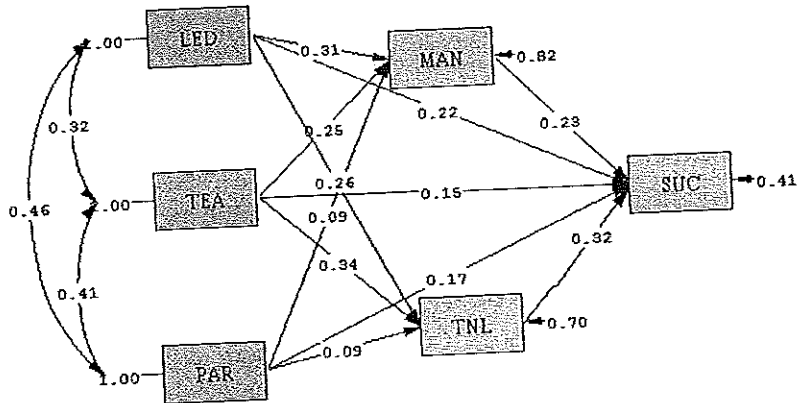
Table 6 Pearson correlations of the independent and dependent variables

Variables	SUC	LED	TEA	PAR	MAN	TNL
SUC	1.000					
LED	.559	1.000				
TEA	.508	.318	1.000			
PAR	.490	.462	.405	1.000		
MAN	.498	.364	.325	.191	1.000	
TNL	.620	.411	.462	.350	.350	1.000

* Statistical significance at the level of .05

From Table 6, the internal correlation coefficient values of the five independent variables. The correlation coefficient values are in the range from .191 to .462. The highest values of correlation coefficient of variables are the correlations between LED and PAR, and TEA and TNL. And the lowest value of correlation coefficient of the independent variables is a correlation between PAR and MAN.

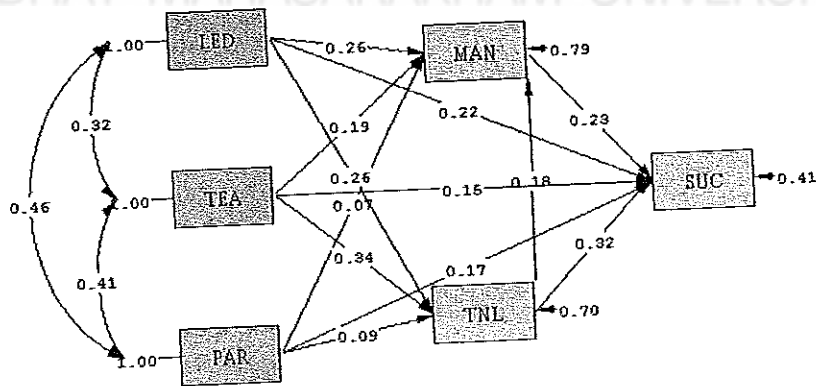
The correlation co-efficient values between the independent variables, the predictors, and the dependent variable, the criterion variable, range from .490 to .620. The independent variables that have the highest value of correlation coefficient with the dependent variable are TNL, and seconded by LED. The independent variable that has the lowest value of correlation coefficient with the dependent variable is PAR.



Chi-Square=3.21, df=1, P-value=0.07305, RMSEA=0.141

Figure 12: Path Analysis of the Initial Theoretical Hypothesis Model.

Thus, the researcher conducted a modification of the initial theoretical hypothesis model by implementing a model generating, model modification based on model modification indices and theoretical causal effects. Then, the model was modified by parameter at a time by reducing the initial criteria of error to be able to correlate. The model modification was stopped when the statistical values of the model fit with the goodness fit of index and construct a final model. The statistical values are $X^2 = 0.000$, $df = 0$, $p\text{-value} = 1.000$, $GFI = 0.998$, $AGFI = 0.966$, $RMSEA = 0.000$. This represents that the model fits with the empirical data. The direct, indirect and total effects are shown in Figure 13.



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Figure 13 Path Analysis of the Final Modification Model

Table 7 Goodness of Fit Index of Theoretical Hypothesis & Modification Model

Indices	Criteria	Initial Theoretical Hypothesis Model	Final Modification Model
χ^2 (Chi-Square)	Not statistically significant (p-value $\geq .05$)	$\chi^2 = 3.21$, df = 1.000 (p-value = 0.073)	$\chi^2 = 0.00$, df = 0.000 (p-value = 1.000)
GFI	≥ 0.90	0.99	0.998
AGFI	≥ 0.90	0.81	0.966
RMSEA	≤ 0.05	0.141	0.000
RMR	≤ 0.05	0.030	0.030
CN	≥ 200	235.14	235.14

As show in Table 7, the initial theoretical hypothesis model, Adjusted Goodness of Fit Index (AGFI = 0.81) and Root Mean Square Error Approximation (RMSEA = 0.141) do not have statistical values in accordance with the criteria pre-defined. Although, the other statistical values fit with the pre-defined criteria as Chi-Square (χ^2) = 3.21, Degree of Freedom (df) = 1.000, P-Value for Test of Close Fit (p-value) = 0.073, Goodness of Fit Index (GFI) = 0.99, Root Mean Square Residual (RMR) = 0.030, and Critical N (CN) = 235.14. As not most of the statistical values fit with the set criteria, it is summarized that the initial theoretical hypothetical model does not fit with the empirical data.

Table 8 Correlation Coefficients of exogenous and endogenous variables

Exogenous Variables (Causal)	Type of Effect	Endogenous Variables (Effect)		
		SUC	MAN	TNL
LED	DE	0.22	0.26	0.26
	IE	0.15	0.05	-
	TE	0.37	0.31	0.26
TEA	DE	0.14	0.19	0.34
	IE	0.17	0.06	-
	TE	0.31	0.25	0.34
PAR	DE	0.17	0.07	0.09
	IE	0.02	0.02	-
	TE	0.19	0.09	0.09
MAN	DE	0.23	-	-
	IE	-	-	-
	TE	0.23	-	-
TNL	DE	0.32	0.43	-
	IE	0.04	-	-
	TE	0.36	0.43	-
R ²		0.59	0.21	0.30

From Table 8: Path Analysis of causal effects of factors influence a success in implementation of Schools of Quality for secondary schools in Lao PDR. The direct, indirect and total effects are presented as follows:

1. Direct Effects

1.1 Leadership (LED) factor has a direct effect with an influencing coefficient score of 0.22 on the success in implementation of School of Quality in Secondary Schools (LED DE = 0.22 on SUC).

1.2 Teacher factor has a direct effect with an influencing coefficient score of 0.14 on the success in implementation of School of Quality in Secondary Schools (TEA DE = 0.14 on SUC).

1.3 Participation of community factor has a direct effect with an influencing coefficient score of 0.17 on a success in implementation of School of Quality in secondary schools (PAR DE = 0.17 on SUC).

1.4 Management and administration factor has a direct effect with an influencing coefficient score of 0.23 on the success in implementation of School of Quality in secondary schools (MAN DE = 0.23 on SUC).

1.5 Teaching and learning factor has a direct effect with an influencing coefficient score of 0.32 on the success in implementation of School of Quality in secondary schools (TNL DE = 0.32 on SUC).

2. Indirect Effects

2.1 Leadership (LED) factor has an indirect effect with an influencing coefficient score of 0.15 on the success in implementation of School of Quality in secondary schools (LED DE = 0.15 on SUC).

2.2 Teacher factor has an indirect effect with an influencing coefficient score of 0.17 on the success in implementation of School of Quality Approach in secondary schools (TEA IE = 0.17 on SUC).

2.3 Participation of community factor has an indirect effect with an influencing coefficient score of 0.02 on the success in implementation of School of Quality in secondary schools (PAR IE = 0.02 on SUC).

2.4 Management and administration factor has no an indirect effect on the success in implementation of School of Quality in secondary schools.

2.5 Teaching and learning factor has an indirect effect with an influencing coefficients score of 0.04 on the success in implementation of School of Quality in secondary schools (TNL IE = 0.04 on SUC).

3. Total Effects

3.1 Leadership (LED) factor has a total effect with an influencing coefficient score of 0.37 on the success in implementation of School of Quality in secondary schools (LED TE = 0.37 on SUC).

3.2 Teacher factor has a total effect with an influencing coefficient score of 0.31 on the success in implementation of School of Quality in secondary schools (TEA TE = 0.31 on SUC).

3.3 Participation of community factor has a total effect with an influencing coefficient score of 0.19 on the success in implementation of School of Quality in secondary schools (PAR TE = 0.19 on SUC).

3.4 Management and administration factor has a total effect with an influencing coefficient score of 0.23 on the success in implementation of School of Quality in secondary schools (MAN TE = 0.23 on SUC).

3.5 Teaching and learning factor has a total effect with an influencing coefficient score of 0.36 on the success in implementation of School of Quality in secondary schools (TNL TE = 0.36 on SUC).

The causal factors or variables that have the total effects influencing the success in implementation Schools of Quality in secondary schools with a statistical significant level of .05 are LED with influencing coefficient total effect score of 0.37; seconded by TNL with an influencing coefficient total effect score of 0.36; and the third is TEA with an influencing coefficient total effect score of 0.31; and the fourth factor is MAN with an influencing coefficient total effect score of 0.23. And the fifth factor which is the last one is PAR which has the coefficient total effect scores of 0.19 on success in implementation Schools of Quality in secondary schools. This represents that all of the causal effect variables are significant contributing to the dependent variable which is the success in implementation of Schools of Quality in secondary schools.

Thus, the researcher selected all of the causal variables which consist of leadership factor, teacher factor and teaching and learning, management and participation of community

factor to construct a development model for implementation Schools of Quality for secondary schools in Lao PDR.

Phase 2: A Result from Constructing a Development Model for Implementation Schools of Quality for Secondary Schools in Lao PDR.

From the research analysis findings in Phase.1, it found that there were five factors influencing a success in implementation of Schools of Quality for secondary schools which included the factors of leadership, teachers, teaching and learning, management and administration, and participation of community. The researcher used the influencing factors to construct a development model for each one with the following procedures:

1. In order to have a draft design of a development model for implementation Schools of Quality in secondary schools, the researcher had had an in-depth review of the definition of terms, the meaning and the implication of the five influencing factors (leadership, teachers, teaching and learning, management and administration, and participation of community); and reviewed the relevant literatures. Then, the researcher drafted a development model and sent it to the education experts for reading in advance two weeks prior the workshop.

2. The researcher conducted a workshop to comment on the draft model. The participants for the workshop included 20 experts on education and development. In a small focus group, the experts commented on the draft model and provided feedback and recommendation for improving it. The comments and feedbacks on the draft model from each small focus group were then presented to the large group of participants for plenary discussion and brainstorming. Then, all of the comments and feedbacks provided by the experts were summarized and used for improving the draft development model for implementation Schools of Quality in Secondary School Level.

3. The development model was improved based on the experts' comments and recommendation gained from the workshop before using in Phase 3.

The procedure in constructing the development model is presented as the following:

1. In order to construct a draft development model for implementation Schools of Quality in secondary schools, the researcher initially defined the development model for all the five factors which consisted of leadership, teachers, management, teaching and learning, and participation of community were processed as the following:

1.1 An initial development model of leadership for school directors in implementation Schools of Quality in secondary schools (LED - factor 1) which was the most influencing factor that had the total effect influence coefficient score of 0.37 (LED = 0.37 on SUC) on a success for implementation Schools of Quality approach in secondary school level. The researcher constructed a model to develop school leadership based on the review of literature and relevant theories on educational leadership and Schools of Quality concepts (also known as Child Friendly School concepts). The detailed procedures in constructing the development model is shown in Figure 14 below:

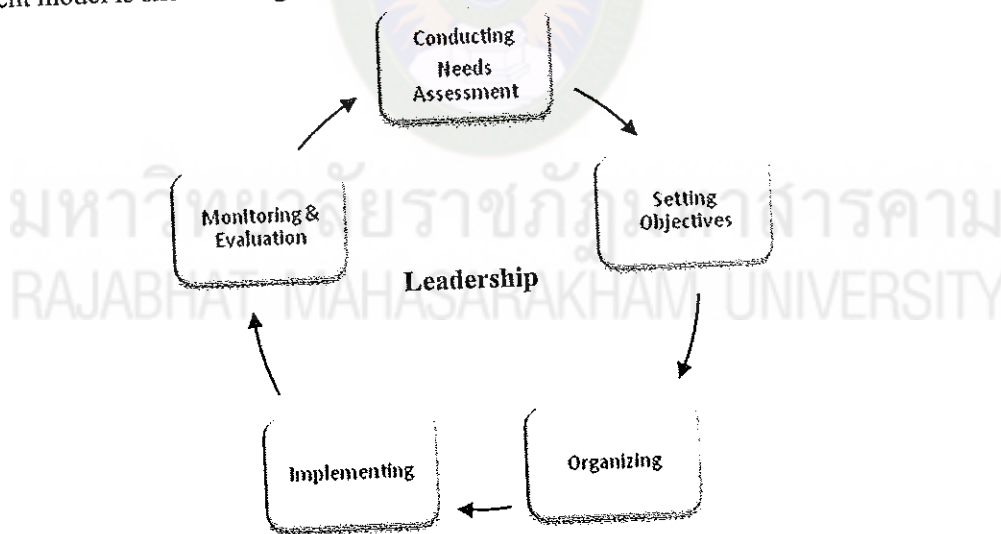


Figure 14 A process in constructing a model to develop leadership

A model to develop leadership for school directors consists of five steps as illustrated by this diagram. The model development process begins with a needs assessment which results in the formation of goals and objectives of the leadership development. The

goals and objectives determine the content of session designs which guide implementation of the development.

1. Step 1: A needs assessment is a process of a) identifying the requirements of what leadership the school directors need to be developed b) designing a workshop that will provide the school directors with the leadership knowledge, skills and attitudes needed, and c) how to develop the leadership for school directors in order to implement Schools of Quality approach in secondary school level. Having based on a result from conducting a needs assessment, the researcher has a list of leadership knowledge, skills and attitudes which the school directors must be developed in order to implement Schools of Quality approach in secondary school level.

2. Step 2: Objective setting - an objective is the specific statement of what the school director must be able to do to demonstrate that they have achieved the leadership knowledge, skills and attitudes in order to implement Schools of Quality approach in secondary school level. Each objective must be SMART: Specific, Measurable, Achievable, Relevant, and Time Bound. As a result from a needs assessment, the researcher has a list of leadership knowledge, skills and attitudes for school director to be developed in order to implement Schools of Quality approach in secondary school level. Base on the list, the researcher set the objectives of the development model of leadership for school directors by a) identifying what objectives of the development model for school directors are to be able to do, b) specifying the content of the training workshop to develop leadership knowledge, skills and attitudes of school directors to be developed, and c) planning an implementation training workshop.

3. Step 3: Organizing – in this stage, it is an organizing of the model development of leadership for school directors. It describes in detail how the leadership development will be conducted and based on the desired leadership knowledge, skills and attitudes of school director in order to implement Schools of Quality in secondary schools.

4. Step 4: Implementing – It is a step of developing leadership based on the model in order to develop knowledge, skills and attitudes of the desired leadership

characteristics. This process consists of developing the desired leaders and leadership characteristics for implementing Schools of Quality approach.

5. Step 5: Monitoring and evaluation – it is a stage of evaluating the result from developing leadership if the development produced the desired leadership characteristics of school directors. This includes observation of school director behavior in directing and leading their school development.

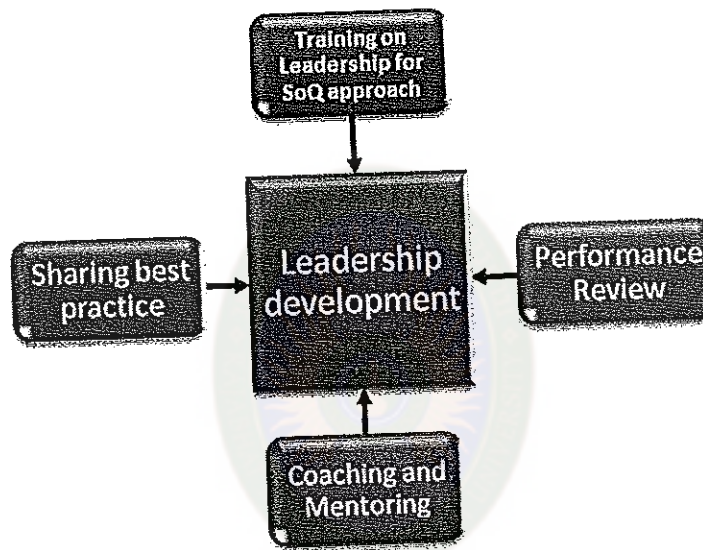


Figure 15 A model to develop leadership for Schools of Quality approach in secondary school level

Then, the researcher constructed a development model by designing the training course on leadership for school directors for implementation Schools of Quality in secondary schools. The detailed course outline is shown as follows:

Activity 1: Training Workshop on Leadership

Target Participants: School Directors and Deputy Directors

Instructing facilitator: Core Trainers from Provincial and District Education Offices

Duration: 3 days

Objective:

The participant will:

- ✓ acquire knowledge, skills and positive attitudes of leadership for leading and managing Schools of Quality approach.
- ✓ gain a complete understanding and knowledge of the difference styles of leadership and know different approaches to bring them into practice in school improvement.
- ✓ be able to apply different leadership approaches to implement Schools of Quality approach in secondary school level.

Content:

1. Leadership theories: transactional leadership, instructional leadership, transformational leadership.
2. School leadership vs. School Effectiveness.
3. Leadership knowledge, skills and attitudes of school directors need for implementation Schools of Quality approach in secondary school level.
4. Performance review and feedback activities.
5. Sharing best practice, lessons learned and experience.

Method/Implementation Process:

1. Method: Presentation (PowerPoint Presentation)
2. Group discussion, group work, group assignment
3. Plenary discussion
4. Role play: sharing best practice, performance review

Budget:

1. Daily Subsistence Allowance = 15 persons x 5 day 200,000 Kip/day = 15,000,000K

2. Refresher/Snack = 15 persons x 3 day 10,000 Kip/day = 450,000 Kip

3. Fuel = 10 litre/day x 3 day x 10,000 Kip/litre = 300,000 Kip

4. Travel cost = 15 persons x 2 trips x 200,000 Kip/day = 6,000,000 Kip

5. Stationery and copying = 20,000 Kip/set x 3 days x 15 persons = 900,000

Kip

Total cost: 22,650,000 Kip

1.2 A model for development of teaching and learning for school teachers in implementation Schools of Quality in secondary schools (TNL and TEA - factor 2 & 3) which are the second and third most influencing factors after LED that have the total effect influence coefficient score of 0.67 (TNL = 0.36 and TEA = 0.31 on SUC) on a success for implementation Schools of Quality in secondary schools. The researcher constructed a model to develop teachers' teaching and facilitating learning approach based on the review of literature and relevant teaching and learning theories and Schools of Quality concepts. The detailed procedures in constructing the development model is shown in figure 16 below:

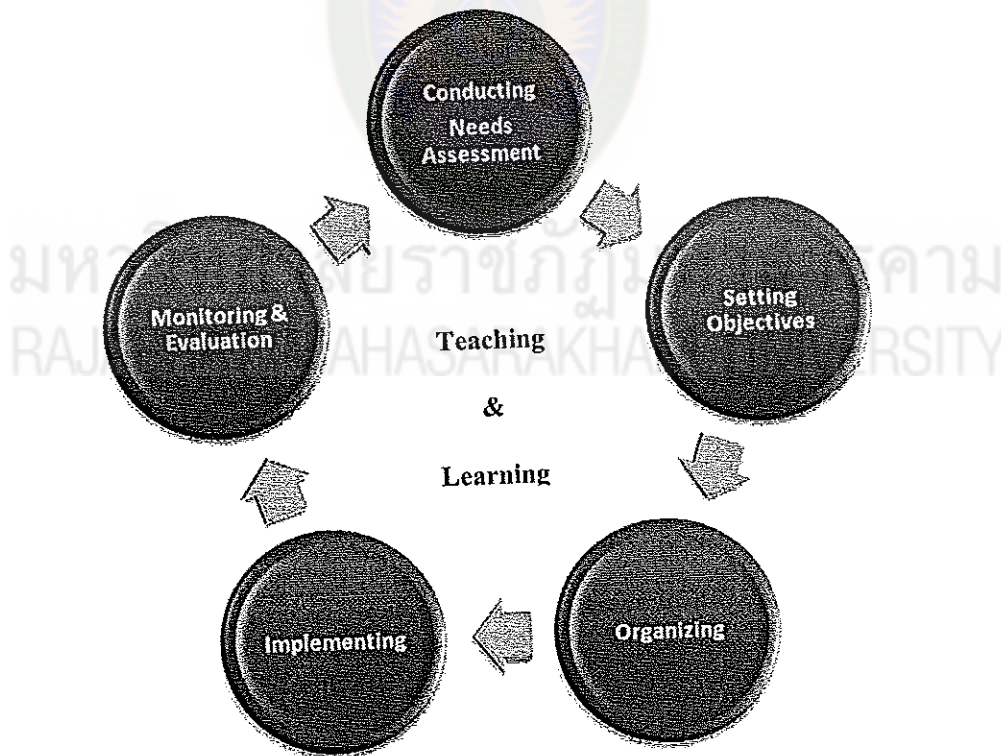


Figure 16 The process in constructing a model to develop teaching and learning

A model to develop teaching and learning for secondary school teachers consists of five steps as illustrated by the above diagram. The model development process begins with conducting a needs assessment which results in the formation of setting objectives of the teaching and learning development. The objectives determine the content of session designs which guide implementation of the development.

1. Step 1: A needs assessment is a process of a) identifying the requirements of what teaching and learning approaches the school directors need to be developed b) designing a training workshop that will provide the school teachers with the teaching and learning knowledge, skills and attitudes needed, and c) how to develop the teaching and learning methods for school teachers in order to implement Schools of Quality approach in secondary school level. Having based on a result from conducting a needs assessment, the researcher has a list of knowledge, skills and attitudes for teaching and learning methods which the school teachers must be developed in order to implement Schools of Quality in secondary schools.

2. Step 2: Objective setting - an objective is the specific statement of what the school teachers must be able to do to demonstrate that they have achieved the teaching and learning knowledge, skills and attitudes in order to implement Schools of Quality in secondary schools. Each objective must be SMART: Specific, Measurable, Achievable, Relevant, and Time Bound. As a result from a needs assessment, the researcher has a list of teaching and learning knowledge, skills and attitudes for school teachers to be developed in order to implement Schools of Quality approach in secondary school level. Base on the list, the researcher set the objectives of the development model of teaching and learning for school teachers by a) identifying what objectives of the development model for school teachers are to be able to do, b) specifying the content of the training workshop to develop teaching and learning knowledge, skills and attitudes of school teacher to be developed, and c) planning an implementation training workshop. The Schools of Quality teaching and learning approach is a child-centered or student-centered teaching and learning method which

is based on a mixture of active learning, cooperative learning and inductive teaching and learning approach as shown in Figure 17: below.

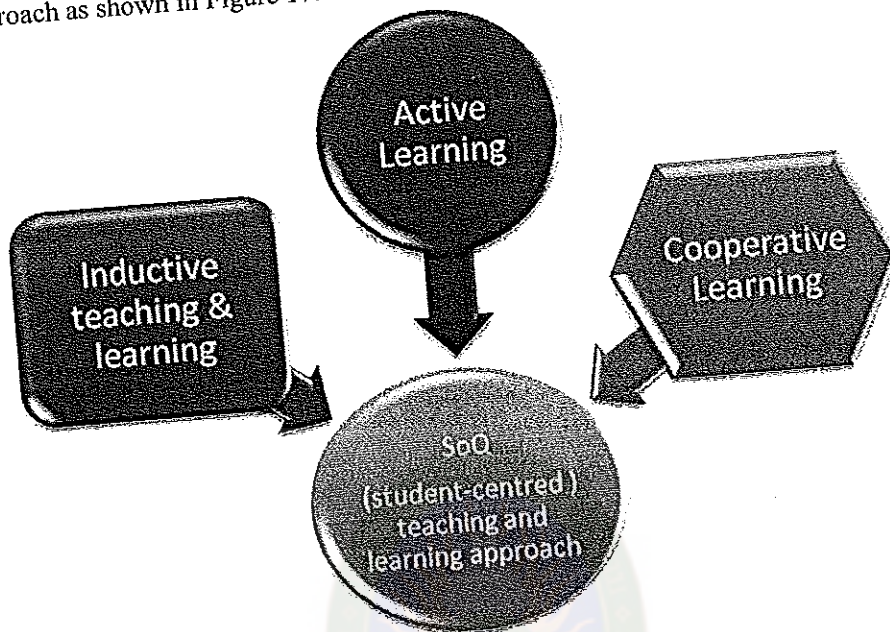


Figure 17 The teaching and learning method of Schools of Quality approach

3. Step 3: Organizing – in this stage, it is an organizing of the model development of teaching and learning approach for school teachers. It describes in detail how the teaching and learning development will be conducted and based on the desired approach of teaching and learning knowledge, skills and attitudes of school teachers in order to implement Schools of Quality in secondary schools.

4. Step 4: Implementing – It is a step of developing teaching and learning methods based on the model in order to develop knowledge, skills and attitudes of the desired teaching and learning styles. This process consists of developing the desired teaching and learning approaches for implementing Schools of Quality approach.

5. Step 5: Monitoring and evaluation – it is a stage of evaluating the result from developing teaching and learning methods if the development produced the desired teaching and learning styles of school teachers. This includes observation of school teachers' behavior in teaching and facilitating learning process in their day-to-day teaching and facilitating learning development of their students.

Then, the researcher constructed a development model by designing the training course on teaching and facilitating learning for school teachers in order to implement Schools of Quality in secondary schools.



Figure 18 A model to develop teaching and learning for Schools of Quality approach

With the constructed model to develop teaching and learning method of Quality of Quality in secondary schools, the researcher designed a training workshop for conducting development process as described Figure 18 above. The detailed course outline is shown as follows:

Activity 2: Training Workshop on Teaching and Learning Methods for Teachers to implement Schools of Quality in Secondary Schools

Target Participants: Secondary school teachers and directors

Instructing facilitator: Core Trainers from Provincial and District Education

Duration: 2 day

Objective:

1. School teachers have a complete understanding and see the importance of Schools of Quality approach.
2. Schools teachers are able to apply multiple teaching and learning methods which is a combination of participatory and cooperative teaching and learning approaches, in their teaching and facilitating learning of Schools of Quality approach.
3. School teachers are able to organize Schools of Quality teaching and facilitating learning approaches which promote a learner-centered, interactive teaching and learning methodologies.
4. School directors are able to provide supervisory and monitoring support to classroom teachers in organizing learner-centered teaching and learning approach.
5. School directors are able to initiate a monitoring and follow-up system for teaching and learning methods of Schools of Quality approach.

Content:

1. Theories of Learning: Participatory and Cooperative
2. Schools of Quality approach – Child Friendly Principles
3. Education Quality Standards for Secondary Education
4. Application of Cooperative Learning Theory in Schools of Quality approach
5. Teaching and learning methodologies for Schools of Quality approach
6. Classroom management for teaching and learning of Schools of Quality approach.

Method/Implementation Process:

1. Presentation:
2. Group discussion, plenary discussion and summarizing the applicable approaches for teaching and learning methods in implementation Schools of Quality approach in secondary school level.
3. Practice conducting teaching and learning using SoQ approach.

Budget:

1. Daily Subsistence Allowance = 15 persons x 2 days 200,000 Kip/day =
6,000,000K
2. Refresher/Snack = 15 persons x 2 days 10,000 Kip/day = 300,000 Kip
3. Fuel = 10 litre/day x 2 day x 10,000 Kip/litre = 200,000 Kip
4. Stationery and photocopying = 20,000 Kip/set x 15 persons = 300,000
Kip
5. Total cost: 6,800,000 Kip

1.3 A model for development of management for implementation Schools of Quality in secondary schools (MAN – factor 4) which is the fourth contributor or influencing factor that has the total effect influence coefficient score of 0.23 (MAN = 0.23 on SUC) on a success for implementation Schools of Quality in secondary schools. This factor is one of most contributing factors to other independent variables, such as leadership, teachers, teaching and learning, and participation of community. As shown in Table 8 above, management factor has correlation with other factors - TNL, LED, TEA and PAR with the coefficient scores from 0.43, 0.31, 0.25, and 0.09 respectively. Thus, the researcher constructed a model to develop management knowledge, skills and attitudes for school administrators, teachers, directors and community representatives in order to implement Schools of Quality approach in secondary schools based on the review of literature and relevant teaching and learning theories and Schools of Quality concepts. The detailed procedure in constructing the development model is shown in Figure 19 below:

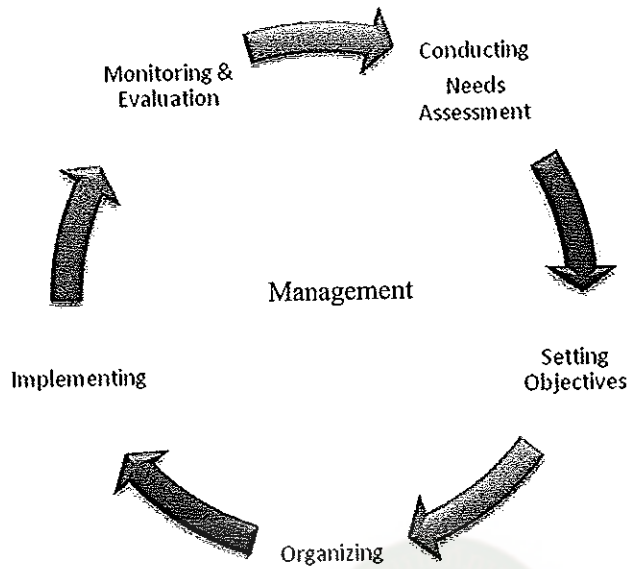


Figure 19 The process in constructing a model to develop school management

A model to develop school management for secondary school directors, administrators and teachers consists of five steps as illustrated by the above diagram. The model development process begins with conducting a needs assessment which results in the formation of setting objectives of the management development. The objectives determine the content of session designs which guide implementation of the development.

1. Step 1: A needs assessment is a process of a) identifying the requirements of school management approaches the school directors, administrators and teachers need to be developed b) designing a training workshop that will provide the school directors, administrators and teachers with the management knowledge, skills and behaviors needed – the 7-task of school managers and 6-dimension of Schools of Quality concept , and c) how to develop the school management for school directors, administrators and teachers in order to implement Schools of Quality approach in secondary school level. Having based on a result from conducting a needs assessment, the researcher has a list of knowledge, skills and attitudes for school management which the school directors, administrators and teachers must be developed in order to implement Schools of Quality in secondary schools.

2. Step 2: Objective setting - an objective is the specific statement of what the school directors, administrators and teachers must be able to do to demonstrate that they have achieved the management knowledge, skills and attitudes in order to implement Schools of Quality approach in secondary school level. Each objective must be SMART: Specific, Measurable, Achievable, Relevant, and Time Bound. As a result from a needs assessment, the researcher has a list of teaching and learning knowledge, skills and behavior for school directors, administrators and teachers to be developed in order to implement Schools of Quality approach in secondary school level. Base on the list, the researcher set the objectives of the development model of school management for school directors, administrators and teachers by a) identifying what objectives of the development model for school directors, administrators and teachers are to be able to do, b) specifying the content of the training workshop to develop management knowledge, skills and behaviors of school directors, administrators and teacher to be developed, and c) planning an implementation training workshop for them.

3. Step 3: Organizing – in this stage, it is an organizing of the model development of school management approach for school directors, administrators and teachers. It describes in detail how the management development will be conducted and based on the desired approach of school management knowledge, skills and behavior of school directors, administrators and teachers in order to implement Schools of Quality approach in secondary school level.

4. Step 4: Implementing – It is a step of developing school management approaches based on the model in order to develop knowledge, skills and behavior for school directors, administrators and teachers on the desired school management methods. This process consists of developing the desired school management approaches for implementing Schools of Quality in secondary schools.

5. Step 5: Monitoring and evaluation – it was a stage of evaluating the result from developing school management methods if the development produced the desired school management knowledge, skills and behaviors for school directors, administrators and teachers. It included observation of school directors, administrators and teachers' behaviors in

school managing, administrating and teaching and facilitating learning process in their day-to-day teaching and facilitating learning development of their students.

Then, the researcher constructed a development model by designing the training course on school management for school directors, administrators and teachers in order to implement Schools of Quality in secondary schools as illustrated in Figure 20 below:



Figure 20 A model to develop school management for Schools of Quality approach

The detailed course outline is shown as follows:

Activity 3: Training Workshop on School Management in Implementation

Schools of Quality approach in secondary schools.

Target Participants: School Directors, teachers and administrators,
community representatives

Instructing facilitator: Core Trainers from Provincial and District Education

Duration: 5 days

Objective:

- ✓ The participants have a thorough understanding of the relationship between the 7-tasks of school managers and the holistic Schools of Quality approach.
- ✓ The participants have a complete understanding and knowledge of school management approach and apply it to implement Schools of Quality approach in secondary school level.
- ✓ School management team is able to apply different approaches to promote community participation in school planning, implementing, monitoring, and supporting teaching and learning activities.
- ✓ School management team (directors, teachers and administrators) are able to apply a Child Seeking Mapping approach to mobilize community to ensure that all school-age children in the catchment area come to school.

Content:

1. The 7-tasks of school directors:

- 1.1 Human resource management,
- 1.2 Finance management,
- 1.3 School environment and facilities,
- 1.4 Technical professional support to teachers,
- 1.5 Monitoring students' activities,
- 1.6 Public relation with local community,
- 1.7 Supporting mass organization activities,

2. The six dimensions of schools of quality approach:

- 2.1 It is inclusive of all children,
- 2.2 It supports effective education which is relevant to children's lives ,
- 2.3 It has a welcoming, clean, healthy, safe and protective environment,
- 2.4 It promotes gender balance,
- 2.5 It actively encourages community members to participate in school

development activities and teaching and learning; and

2.6 It has good management and administration

3. The relationship between the 7-tasks of school managers and the holistic

Schools of Quality approach.

4. Participation of community in implementation Schools of Quality approach in secondary school level.

5. Introduction of School Development Plan, School Self-Assessment Child

Seeking Mapping.

Method/Implementation Process:

1. Presentation
2. Brainstorming.
3. Group discussion and plenary discussion.
4. Role play
5. Case studies: school self-assessment, school improvement plan, school

child seeking mapping

6. Field visit

Materials:

1. Blackboard and chalk, flip chart and markers, cello tape, scissors, A4 paper
2. Matching exercise (7-tasks of directors and activities in school) for each group
3. School management and school leadership matching exercise for each group
4. Handout for each participant on supportive teacher observation session
5. Teacher Observation Form for each participant
6. Plan of action dummy tables
7. Forms of school self-assessment, school development plan, and school

child seeking mapping.

Budget:

1. Daily Subsistence Allowance = 15 persons x 5 days 200,000 Kip/day =
1,500,000K
2. Refresher/Snack = 15 persons x 5 days 10,000 Kip/day = 750,000 Kip
3. Fuel = 10 litre/day x 5 days x 10,000 Kip/litre = 500,000 Kip
4. Stationery and photocopying = 50,000 Kip/day x 5 days = 250,000 Kip
5. Total cost: 3,000,000 Kip

1.4 A model for development of community participation in implementation

Schools of Quality in secondary schools (PAR - factor 5) which was another influencing factors that had the total effect influence coefficient score of 0.19 (PAR = 0.19 on SUC) on a success for implementation Schools of Quality in secondary schools. The Schools of Quality approach needed active participation of community in school development planning, supporting teaching of local wisdoms to school students, involving in school self-assessment process, child seeking mapping of school children within the community, and monitoring and reviewing the implementation of school development plan. The diagram below illustrates the participation of community in Schools of Quality approach.

Thus, the researcher constructed a model to develop participation of community in implementation Schools of Quality in secondary schools. It was based on the review of literature and relevant participatory theories and Schools of Quality concepts.

The detailed procedure in constructing the development model is shown in Figure

21 below:



Figure 21 A process in constructing a model to develop participation of community

A model to develop participation of community in implementation Schools of Quality in secondary schools consisted of five steps as illustrated in the above diagram of Figure 21. The model development process began with conducting a needs assessment which results in the formation of setting objectives of the community participation development. The objectives determined the content of session designs which guided implementation of the development.

1. Step 1: A needs assessment is a process of a) identifying the requirements of what extent the participation of community – level of awareness, knowledge, roles and responsibility needed to be developed for the community representatives and district education development committees, b) designing a training workshop that will provide the awareness, knowledge, roles and responsibility, and see the importance of community participation in implementation Schools of Quality approach for community representatives and district education development committees, and c) how to develop the participation of community for community representatives and district education development committees in order to implement Schools of Quality in secondary schools. Having based on a result from

conducting a needs assessment, the researcher had a list of awareness, knowledge and the extent of participation of community which the community representatives and district education development committees must be aware of, and to be developed in order to implement Schools of Quality approach in secondary school level.

2. Step 2: Objective setting - an objective was the specific statement of what the community representatives and district education development committees must be able to do to demonstrate that they have achieved awareness, knowledge and see the importance of their participation in order to implement Schools of Quality approach in secondary schools. Each objective must be SMART: Specific, Measurable, Achievable, Relevant, and Time bound. As a result from a needs assessment, the researcher has a list of the level of awareness, understanding and knowledge on Schools of Quality concepts for community representatives and district education development committees to be developed in order to implement Schools of Quality approach in secondary schools. Based on the list, the researcher set the objectives of the development model of community participation for community representatives and district education development committees by a) identifying what objectives of the development model for community representatives to be able to do, b) specifying the content of the training workshop to develop knowledge, skills and attitudes of community representatives to be developed, and c) planning an implementation training workshop for them.

3. Step 3: Organizing – This stage was an organizing step of the model development of participation for community representatives. It described in detail how the participation development was conducted and based on the desired participation knowledge, skills and attitudes of community representatives in order to implement Schools of Quality in secondary schools.

4. Step 4: Implementing – It was a step of developing participation of community based on the model in order to develop knowledge, skills and attitudes of the desired participation. This process consists of developing the desired community participation approaches for implementing Schools of Quality approach.

5. Step 5: Monitoring and evaluation – it was a stage of evaluating the result from developing participation methods if the development produced the desired participation of community representatives. It included observation of community representatives' behavior in involving in school planning, implementing and monitoring school development planning process, including school child seeking mapping, school self-assessment, provision of local wisdoms to teaching and learning process.

Then, the researcher constructed a development model by designing the training course on community participation for community representatives in order to implement Schools of Quality in secondary schools.



Figure 22 A model to develop participation of community

The detailed course outline is shown as follow:

Activity 4: Orientation Workshop on Schools of Quality approach

Target Participants: Representatives of community and pupil parent association, district education development committees.

Instructing facilitator: Core Trainers from Provincial and District Education

Duration: 3 days

Objective:

The key objectives of this orientation workshop on Schools of Quality approach are:

1. The participants will have complete understanding of the Convention on the Rights of the Child and its importance towards education of children.
2. The participants will have knowledge and understanding of Schools of Quality concepts and the process in implementing it.
3. The participants see the importance of community participation in school development and promoting children's learning.
4. The participants have consensus on the roles and responsibilities of different stakeholders in order to implement Schools of Quality approach in secondary schools.
5. The participants involve in school improvement planning and monitoring process including school self-assessment, supporting teaching and learning local wisdoms.

Content:

1. The Convention on the Rights of the Child – survival, participation, development, and protection.
2. Schools of Quality conceptual framework and the process of Schools of Quality implementation.
3. The importance of community participation in school development and promoting children's learning.

4. School self-assessment, school child seeking mapping, supporting local wisdoms teaching and learning.

Method/Implementation Process:

1. Presentation
2. Group work and group assignment/activities: school child seeking mapping, school development plan and monitoring and support.
3. Group discussion and plenary discussion, and conclusion of the discussion.

Budget:

1. Daily Subsistence Allowance = 15 persons x 3 days 200,000 Kip/day = 900,000K
 2. Refresher/Snack = 15 persons x 3 days 10,000 Kip/day = 450,000 Kip
 3. Fuel = 10 litre/day x 3 days x 10,000 Kip/litre = 300,000 Kip
 4. Stationery and photocopying = 50,000 Kip/day x 3 days = 150,000 Kip
- Total cost: 1,800,000 Kip

2. The researcher conducted a workshop to comment on the draft model. The participants for the workshop included 20 experts on education and development on 15th August, 2012 at the Mercure Hotel in Vientiane, Lao PDR. The specialists were seated in small focus groups, the experts commented on the draft model and provided feedback and recommendation for improving the model. The comments and feedbacks on the draft model from each small focus group were then presented to the large group of participants for plenary discussion and brainstorming. Then, all of the comments and feedbacks provided by the experts were summarized and used for improving the development model for implementation Schools of Quality in secondary schools and used in phase 3.

The 20 experts participated in the workshop to comment on a draft development model for implementation Schools of Quality approach in secondary school level consisted of:

1. Mr. Somphou, Deputy Director General – Secondary Education Department of Ministry of Education and Sports.

2. Ms. Somphone Vilaysom, Head of Secondary Education Section of Secondary Education Department, Ministry of Education and Sports.
3. Ms. Ajan Vanphet, Secondary Education Specialist – Secondary Education Department of Ministry of Education and Sports.
4. Mr. Manosin Homsouvanh, Secondary Education Specialist – Secondary Education Department of Ministry of Education and Sports.
5. Mr. Ajan Outhip, Education Curriculum Development Specialist – Research Institute of Education Science, Ministry of Education and Sports.
6. Ms. Phetsamone Sibounheuang, Education Specialist – Research Institute of Education Science, Ministry of Education and Sports.
7. Mr. Phonmany Siliphong, Head of Education Quality Assurance Section – Education Standards and Quality Assurance Center, Ministry of Education and Sports.
8. Mr. Thongmany, Education Quality Assurance Specialist – Education Standards and Quality Assurance Center, Ministry of Education and Sports.
9. Ajan Sithan, Specialist in Education Management - National University of Laos
10. Dr. Khamseng Thalangsy, Specialist in Education and Administration Management, National University of Laos
11. Dr. Kaygnasone, Vice Director of Education Management Institute, Ministry of Education and Sports.
12. Mr. Keth Panhuk, Education Specialist – Teacher Training Education Department, Ministry of Education and Sports.
13. Mr. Khambay Khamsy, Head of Teacher Training Section – Teacher Training Department, Ministry of Education.
14. Mr. Ounpeng Thammanoxay, Education Specialist – Vice Head of District Education Bureau, Provincial Education and Sports Service of Attapeu.
15. Ms. Bounpheng Viengsombath, Primary Education Specialist – Pre-school and Primary Education Department, Ministry of Education and Sports.

16. Mr. Onkeo Souvannasan, Provincial Education Specialist – Saravan Provincial Education and Sports Services.
17. Ajan Somphone Sayakam, Provincial Secondary Education Specialist – Luangnamtha Provincial Education and Sports Services.
18. Mr. Keo Seuysombath, Provincial Education Specialist – Luangnamtha Provincial Education and Sports Services.
19. Mr. Vanxay Xayavong, Provincial Education Specialist – Savannakhet Provincial Education and Sports Services.
20. Mr. Nenseng Vijaitan, Luangnamtha Provincial Education and Sports Service.

The pictures 1 to 8 shown in Annex E are the pictures of the workshop for the experts to comment on the constructing draft development model for implementation Schools of Quality in secondary schools.

After having presented the four draft models for development of leadership, teaching and learning, school management, participation of community in implementation Schools of Quality approach in secondary schools, the experts were organized to sit in two small groups to discuss and comment on the four draft models. The first group consisted of experts on education and the second group consisted of the experts on development. The workshop was chaired by Mr. Ly Fong, General Director of Secondary Education Department – Ministry of Education and Sports, and Ms. Somphone Vilaysom, Head of Secondary Education Section of Secondary Education Department of Ministry of Education and Sports, as a workshop secretary. The experts commented on the four draft models and provided the very useful and constructive feedbacks and recommendations for improving the models as follows:

1. A development model for developing school leadership should be practiced as on-going repeated cycle after having the results from evaluating in Step 1, and found that the leadership characteristics or behaviors developed were not appropriate. The necessary steps and action to be taken to rectify that by resuming the development process from Step 3 – organizing a development model for school leadership for school directors;

Step 4 – implementing a development model for school leadership of school directors and;

Step 5 – monitoring and evaluating of the leadership development result again.

2. A development model for developing teaching and learning styles, from a conclusion of the experts' comments and recommendation, it was concluded that there should be a sharing session on good practices and lessons learned, and experiences among teachers teaching different subjects on a quarterly basis. The lessons learned, the best practices should be then documented for scaling up this initiative development model. Also, for the involvement of local community in promotion of teaching and learning local wisdoms.

3. A development model for developing school management, from the experts' comment and recommendations, it was summarized that school directors' role in public relation should be emphasized in the management development model. As effective school management need active participation from the relevant stakeholders; so the focus should be on the level of participation of the stakeholders in school child seeking and mapping, school self-assessment, and school planning and monitoring and evaluation of the practice of these activities.

4. A development model for developing participation of community in implementation Schools of Quality in secondary schools, from the comments and recommendation of the experts, it was summarized that the orientation workshop for community representatives should be done on a yearly basis as the participation of community members in school development process was so significant to school management, teaching and learning, and school improvement – particularly in school child seeking and mapping, school self-assessment, and school development planning, supporting implementation of school development plan, and monitoring and evaluation of the school development plan.

The development model for implementation Schools of Quality approach improved based on the comments and recommendations from the workshop. The complete processes and forms of the development model for implementation Schools of Quality approach are shown in the following figures:

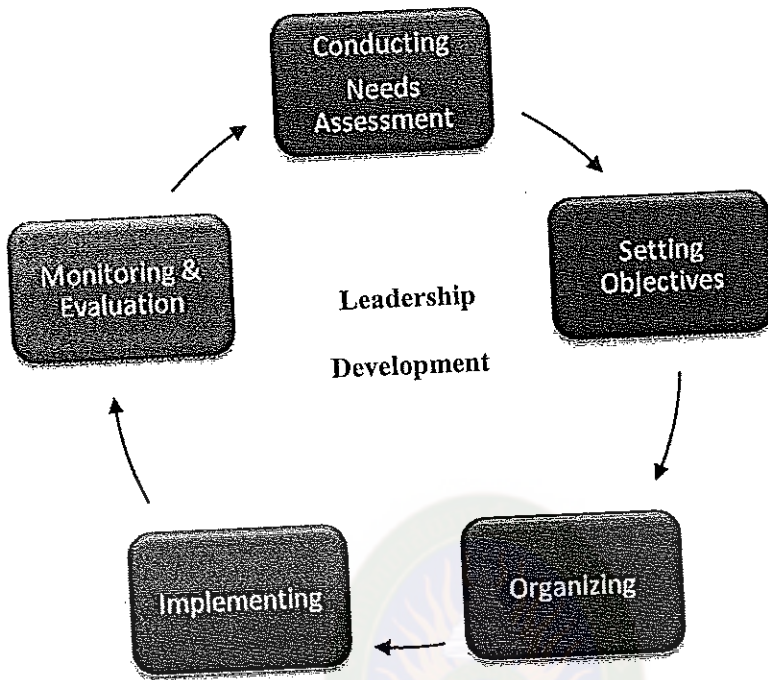


Figure 23 A process in constructing a model to develop school leadership



Figure 24 A model to develop leadership for Schools of Quality approach

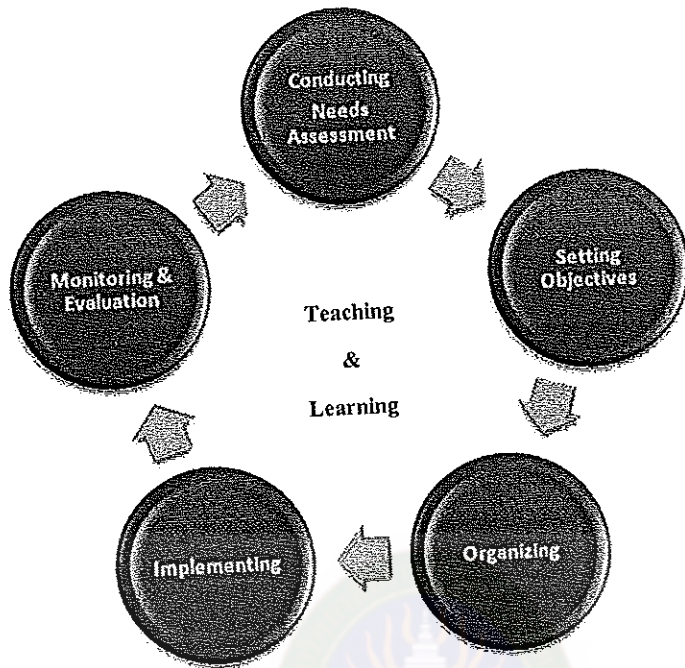


Figure 25 A process in constructing a model to develop teaching and learning

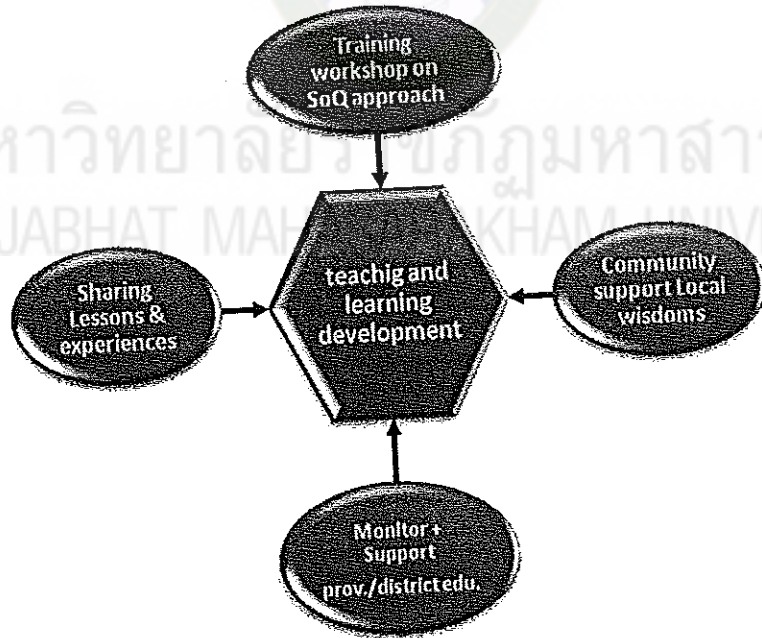


Figure 26 The teaching and learning method of Schools of Quality approach

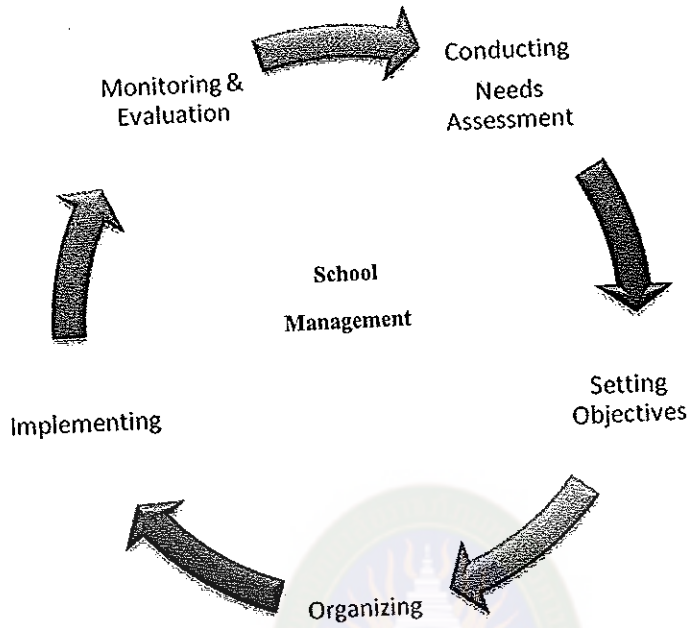


Figure 27 A process in constructing a model to develop school management

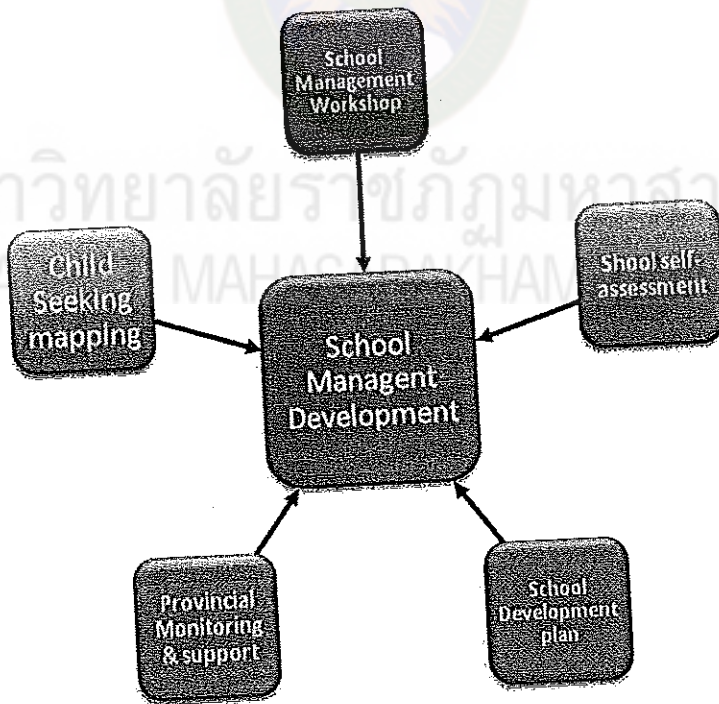


Figure 28 A model to develop school management for Schools of Quality approach



Figure 29 A process in constructing a model to develop participation of community



Figure 30 A model to develop participation of community for Schools of Quality

In conclusion, after the researcher presented the draft development model for implementation Schools of Quality in secondary schools to the experts on education, pedagogy and development to comment, the development model was then constructed based on the comments and advice from the experts on the initial draft model. As a result, the final development model for implementation Schools of Quality in secondary schools consisted of 18 main activities as the following:

1. Leadership: for leadership factor, there are four activities which consist of a training workshop on leadership for school directors in directing and leading the implementation of Schools of Quality approach, feedback activities, coaching and mentoring support from provincial and district education, and sharing best practice among secondary school directors.

2. Teachers and teaching & learning: These two factors are inter-related to each other. As the teacher is person who conducts teaching and facilitating learning, so the activities for these two factors consist of four activities including a training workshop on teaching and learning Schools of Quality approach, promotion of local wisdoms, sharing lessons learned and experience of teachers, and monitoring and supervisory support from provincial and district education.

3. Management: There are five activities which consist of a training workshop on management of Schools of Quality, school self-assessment, school child seeking mapping, school development planning, and monitoring and supervisory support from provincial and district education.

4. Participation of community: There are five activities which consist of an orientation workshop on Schools of Quality approach, school development planning process, supporting teaching and learning local wisdoms, school self-assessment, and school child seeking and mapping.

Phase 3: The findings from experimentation of the development model for implementation Schools of Quality.

After having had the development model from Phase 2, the researcher conducted an experimentation by implementing the development model with the target groups in five secondary schools. The five target experimenting schools consisted of 1) Mmong Chao in Phongsaly 2) Nateoy in Luangnamtha 3) Kokpoong in Sekong 4) Nakoysao in Saravan and 5) Sethathirath in Attapeu. The researcher selected these five secondary schools as the target experimenting groups with the following four main reasons:

1. They are the secondary schools interested in experimenting Schools of Quality approach want to implement the approach in their schools.
2. The schools have the readiness to take this experimentation, the school directors and teachers had shown their willingness and good attention to experiment Schools of Quality approach.
3. The communities that the five schools provide service to are willing to provide cooperation and support for the experimenting Schools of Quality approach in their schools.
4. The school location is close the central district and provincial education which is easy for the district and provincial education to monitor and provide supervisory support to the schools.

The researcher implemented the activities and specified in the development model for implementation Schools of Quality in secondary schools in order to develop school leadership, teachers and teaching and learning, school management and participation of community as per the following details:

1. The training workshop on school leadership was conducted on 15-17, August, 2012 at the conference of Kham Nguem Hotel in Thalad of Vientiane province. The participants consisted of 15 participants from the five target experimenting secondary schools. Below is the list of participants for the training workshop on school leadership:

- 1.1 Mr. Chue Tua Tonglao, Director of Mmong Chao, Phongsaly
- 1.2 Mr. Ka Yingher, Vice Director of Mmong Chao, Phongsaly

1.3 Mr. Bounlad Cherportao, Vice Director of Mmong Chao, Phongsaly.

1.4 Ms. Somsy Sirikoun, Director of Nateoy Secondary School,

Luangnamtha.

1.5 Mr. Somphone Akkhaphong, Vice Director of Nateoy, Luangnamtha.

1.6 Mr. Somsanid Bounnakhone, Vice Director of Nateoy, Luangnamtha.

1.7 Mr. Soulisack Aloun, Director of Kokpoong Secondary School, Sekong.

1.8 Ms. Buakham Souphansa, Vice Director of Kokpoon Secondary School,

Sekong.

1.9 Ms. Bounkham Vilavongsa, Deputy Director of Kokpoon Yai

Secondary School, Sekong.

1.10 Mr. Bounthon Vongchampa, Director of Nakoysao Secondary School,

Saravan.

1.11 Mr. Chanthy Khounpadith, Deputy Director of Nakoysao Secondary

School, Saravan.

1.12 Sayavanh Phayboun, Deputy Director of Nakoysao Secondary School,

Saravan.

1.13 Mr. Sonsack Souliseum, Director of Sethathirath Secondary School,

Attapue.

1.14 Ms. Khamla Mani, Deputy Director of Sethathirath Secondary School,

Attapue.

1.15 Mr. Thongphan Keomani, Deputy Director of Sethathirath Secondary

School, Attapue.

The pictures 9 to 14 shown Annex E are the pictures of the training workshop on school leadership for implementation Schools of Quality approach in secondary schools. The training workshop on teaching and learning for implementation Schools of Quality approach in secondary schools was conducted in each school for every teacher in the experimenting target schools as shown in Table 9 below:

Table 9 The schedule of training on teaching and learning school

Venue of training	Date of training	No. of participants
Hmong Chao in Phongsaly	20-22 August, 2012	44 teachers
Nateoy in Luangnamtha	20-22 August, 2012	14 teachers
Kokpoong in Sekong	20-22 August, 2012	15 teachers
Nakoysao in Saravan	20-22 August, 2012	20 teachers
Sethathirath in Attapeu	20-22 August, 2012	46 teachers

A total numbers of 139 teachers were trained on teaching and learning for implementation Schools of Quality approach in secondary schools throughout the course of August, 2012. The training courses were facilitated by provincial and district education of each province. After the training on teaching and learning to implement Schools of Quality approach in secondary schools, the school teachers in the five experimenting target schools implemented the approach in their teaching and facilitating learning process throughout 2012-2013 academic year. It was closely monitored and supervisory supported by provincial and district education. Also, with local community support, the teachers promoted facilitating teaching and learning local wisdoms available within each school context.

Training workshop on school management for implementation Schools of Quality approach in secondary schools.

The school management training workshop for each experimenting target school was conducting for 75 participants representing the team of school directors, administrators, teachers, and community representatives at each school during the course of 24-26 August, 2012 as shown Table 10 below:

Table 10 The schedule of training on school management

Venue of training	Date of training	No. of participants
Hmong Chao in Phongsaly	24-26 August, 2012	15 persons
Nateoy in Luangnamtha	24-26 August, 2012	15 persons
Kokpoong in Sekong	24-26 August, 2012	15 persons
Nakoysao in Saravan	24-26 August, 2012	15 persons
Sethathirath in Attapeu	24-26 August, 2012	15 persons

After the school management training workshop, the school directors together with administrators and teachers prepared for school self-assessment, school child seeking mapping and school development planning activities and conducted the whole development process in the first week of September, 2012.

As shown in the pictures 15 to 18 in Annex E are the samples of the training workshop on school management for school directors and administrators in the five experimenting target schools.

Orientation workshop on Schools of Quality approach for community representatives.

The orientation workshop for all of the experimenting target school was conducted during the last week of August, 2012. The orientation workshop was conducted in each experimenting target school as shown in Table 10 below:

Table 11 The schedule of training on Schools of Quality orientation

Venue of training	Date of training	No. of participants
Hmong Chao in Phongsaly	27-29 August, 2012	15 persons
Nateoy in Luangnamtha	27-29 August, 2012	15 persons
Kokpoong in Sekong	27-29 August, 2012	15 persons
Nakoysao in Saravan	27-29 August, 2012	15 persons
Sethathirath in Attapeu	27-29 August, 2012	15 persons

After the orientation workshop, the community representatives together with the school directors, administrators and teachers conducted school self-assessment, school child seeking mapping and school development planning activities and conducted the whole development process in the first two weeks of September 2012.

As shown in Pictures 35 to 48 in Annex E are pictures of community representatives or pupil parent association representatives together with school directors, teachers actively participated in the school development activities including school self-assessment, school child seeking and mapping, school improvement planning.

The result finding from experimentation and evaluation of a development model for implementation of Schools of Quality in secondary schools in Lao

PDR

After experimental implementation the development model in the five target schools throughout the 2012-2013 academic year or for ten months, the researcher evaluated the result of the implementation of the development model of Schools of Quality in secondary schools by measuring from the six dimensions of Schools of Quality criteria by comparing the level of the performance of the experimenting target schools prior to implementing Schools of Quality approach and the level of the school performance after

having had implemented Schools of Quality approach for ten months. The result of the evaluation is shown in Table 12 below:

Table 12 The Level of Success based on the 6 Dimensions of Schools of Quality (SoQ)

Name of school	No. of SoQ Dimensions	Level of Success	
		Pretest	Posttest
Hmong Chao	6	2.33	4.42
Nateoy	6	1.92	4.08
Kokpoong	6	1.75	4.75
Nakhoysao	6	1.58	4.82
Sethathirath	6	2.47	4.78

Table 13 The hypothesis testing result from experimentation of the development model for the pretest and posttest by using Wilcoxon Signed Ranks Test

	No of Schools	Mean	Std. Deviation	Z	p
Pre-test	5	2.01	.37901	-2.032 ^M	.043*
Post-test	5	4.57	.31686		

*At statistically significant level of .05

From Table 13, it is a testing of hypothesis using the Wilcoxon Signed Rank Test. The researcher presented the comparison of the level of success in implementation Schools of Quality approach by comparing the result before the experimentation of the model with the result after experimentation of the model. The finding showed that the levels of success in implementation Schools of Quality between the pretest and posttest at the significant level of

.05 were statistically different. The level of success in implementation Schools of Quality approach in secondary schools after the experimental implementation was higher than the level of success before the experimental implementation of the development model. This represented that all of the five experimenting target schools implemented the development model constructed by the researcher and improved the level of success in implementation Schools of Quality approach.

As a result from the researcher's observation from monitoring and supervisory support of the five experimental implementing target schools, it was found that the school directors, teachers, administrators and students were very enthusiastic and active in implementing Schools of Quality approach within their schools. Also, the community members had more active involvement in school improvement in terms of providing support to school development planning, and participation in school activities, such as school self-assessment and school child seeking and mapping.

The school directors had built a very good relationship with the local villagers within their school catchment area. The pupil parents and community representatives had actively involved in school development process, particularly in school child seeking and mapping activity. The school directors actively paid much more attention on supporting multiple teaching and learning technique to school teachers. In the same time, school directors got very good support from both provincial and district education on how to improve the implementation Schools of Quality approach in their schools. The school directors of the five experimenting target schools shared lessons learned and their experience in implementing Schools of Quality approach in their schools to other school directors at the monthly district meeting on the regular basis.

The school teachers used Schools of Quality teaching and learning approach promoting child-centered teaching, active and cooperative learning. The teaching and learning process went on very well. The school teachers exchanged their lessons learned and experience together in applying each technique into their teaching and facilitating learning on the monthly basis. By applying action learning, students were more active in questioning and searching for answers by themselves with little assistance from their teachers. This was

obviously changed the way the school teachers normally did in their teaching in the Lao PDR where teachers dominated in the whole process of instruction and learning of students. The students cheerfully and actively enjoyed their school practical activities like planting trees around their school sites, learning how to cook traditional snack called “Khao Tom” or rice with banana in banana leaf, and how to make the bamboo fish traps with elderly community experts’ wisdoms. Also, the school students were more working in group in their group assignment and as a result their interpersonal interaction with other students were more as friendly as buddies than normal friends.

Another observation was that the pupil parent association and community representative were very active in school planning and implementation of Schools of Quality in their schools. They together with school directors and teachers as well as students labored in school renovation like fixing the school fence, school building roofing and repairing school sanitation facilities. With these observations, it showed that Schools of Quality approach was most welcomed by both in the experimental implementing target schools and their communities. This showed the positive sign for scaling up the approach to other secondary schools, especially in lower secondary schools throughout the country.



Figure 31: A development model of Schools of Quality for secondary schools in Lao PDR.