

Development of Effective Teacher Program: Teamwork Building Program for Thailand's Municipal Schools

Pimpika Chantathai¹, Kowat Tesaputa¹ & Kanokorn Somprach²

¹ Faculty of Education, Maharakham University, Thailand

² Faculty of Education, Khon Kaen University, Thailand

Correspondence: Pimpika Chantathai, Faculty of Education, Maharakham University, Muang Maharakham District, 44150 Maharakham Province, Thailand. Tel: 66-097-945-5663. E-mail: pimpikachan@hotmail.com

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Abstract

This research is aimed to formulate the effective teacher teamwork program in municipal schools in Thailand. Primary survey on current situation and problem was conducted to develop the plan to suggest potential programs. Samples were randomly selected from municipal schools by using multi-stage sampling method in order to investigate their organization's situation and problem. Program for effective teamwork is an approach to enhance their working condition using collaboration of all teachers. Data analysis was the descriptive data using direct observation and questionnaire as data collection tools. Effectiveness of the program was reported in high satisfaction level due to its various applications for certain context. Collaboration was a key factor to enhance program effectiveness because of core values that participants held to achieve mutual goals. Suggestion in future study related to this research deals with administrators and organization's sponsorship for their teachers' awareness in team building for organizational effectiveness. Moreover, application of this research method on other types of organization may yield different research findings worth for investigation.

Keywords: effective team, teacher teamwork program, teaching professional development, team building program, Thailand's municipal schools

1. Introduction

1.1 Introduction to Teamwork in Administration

In the presence, organizational administration in both public and private sectors are shifting their directions in development toward operational strategy that increases its efficiency and effectiveness. External competitiveness in the globalization is also the factor that drives each organization to adapt itself to comply with current situation. Organizational leaders are necessary to adjust the administration approach from the traditional administration which the leaders are sole administrator to be teamwork-driven organization. The efficacy of the team conveys competitiveness of the organization as well. Since complex conditions in administration require certain roles and responsibilities of the teamwork members to achieve the goal, it is crucial that teamwork would be the key success in making the right decision effectively (Covin & Kilmann, 1988; French & Bell, 1984). Teamwork was originally introduced in industry in 1920s, especially fostered by Mayo's research known as the Hawthorn Experiment. Definition of "teamwork" can be coined variously. Generally "teamwork" refers to a group of individuals who assigned to work to achieve a particular task. They are working on the mutual goal. (Francis & Young, 1979; Woodcock, 1989; Parker, 1990; Johnson, 1982). Similarly, Guzzo (1995) also noted the teamwork members were brought together by various goals into an individual team such as management teamwork, quality improvement teamwork, and intervention teamwork. The collaboration may be official or temporary team depending on expectation on efficiency and effectiveness.

1.2 Importance of the Teamwork to Educational Organization

School is an organization that has its typical characteristics. In fact, school objectives aim at student development that is the output of the organization. Curriculum in school has its own educational objectives based on the expectation of parents and teacher. Management of curriculum and instruction highly depends on teamwork of the teachers and administrator who run each school. Planning, operation, evaluation, and decision making in school development require active teamwork (Erawan, 2008). The development of teamwork in

school is widely discussed. Conley (2004) suggested that teamwork forming is various by its purpose such as academic team, special service team, supervision team, and administrative team. Members of each team usually represent each department in school. Sometimes different members join the team by specific mission. Administrator plays the vital role in teamwork formation and supervision. In summary, teamwork is an essential foundation in organizational change, especially in this education reform era. Administrator has supportive impacts on teamwork by establishing mutual mission and encouraging innovation in school to respond social needs. Team members can bring effective decision making to school because they possess the sense of ownership to their organization. This effect is eventually transferable to the changes in curriculum, instruction, and school operation. Most important impact contributes to student proficiency and quality.

1.3 Relevant Scholarship

Fortunately, several scholars have put efforts on the development of programs for teacher teamwork such as Knowles (1980), Barr (1990), Houle (1996), Caffarella (2002), and Budd (2009). Development program is the scheme or structure in putting activities systematically. Program is based on theory, concept, and idea related to the development objectives. It aims to enhance teachers' mindset to use for operation in their schools. It is agreeable that the more positive impact that program brings about, the more effectiveness and efficiency would be. Professional attitude and skills are the results of program achievement. This is the rationale for the current research that interests in teacher development using teamwork approach. The results that found could be the initiatives of how schools can elevate their educational quality which is delivered by strong teacher teamwork. Administrators also benefit by overall quality delivery from teachers to students which reflects school's educational management.

1.4 Research Questions on Effective Teacher Program

Research on effective teacher teamwork program derives from two main research questions: 1) What is the current situation and problem in development of teacher teamwork building? 2) What is the preferred teacher teamwork program for municipal schools context? 3) What are the outcomes of program implement on effectiveness? Significance of research primarily facilitated administrator to aware of current situation of teamwork in municipal school and in order to assist decision making in which strategy would be possible to implement the teamwork program. Secondly, result found from schools teamwork survey would become the activity kit for teachers' teamwork development. This would be another benchmark for to evaluation teachers' performance. Overall school administration would also be able to extend the program for schools excellence and to eliminate weakness which finally increases total efficiency and effectiveness.

2. Research Methodology

The scope of research design covers three main stages. 1) Study of current teamwork situation and problem in development the program. Theoretical study was included concepts, theory, and related research on teachers' teamwork development to formulate the elements of effective teamwork. Then five experts were invited to justify the program's validity. Experts were scholars from different areas such as school principal, educational supervisor, and university faculty. All of them hold doctoral degree with over 10 years experience on educational administration. Participants study was conducted on the 394 samples who were represent municipal school teachers from total population of 28,652 teachers in the Thailand's municipal schools. Sample size was taken based on Yamane (1973)'s formula. 2) Program for teacher teamwork development. The draft of the program blueprint was written based on both theoretical study and participants' viewpoints. Manual of the program was validated by seven experts prior to another final revision. 3) Program implementation. Teamwork development program was implemented on 50 municipal school teachers to evaluate the effectiveness of the program as proposed. Each participant was invited voluntarily to receive the training. Evaluation of teamwork development was under the supervision of school director. In addition, participants were asked to report their satisfaction to the teamwork development program.

Table 1. Method of effective teacher teamwork program

Stage	Procedures
Stage 1 Preparation (10 hours)	1.1 Orientation to teamwork development program to teachers and administrator (2 hours) 1.2 Study tour (8 hours) 1.3 Pre-test on knowledge of effective teachers teamwork development (not applicable)

Stage 2 Development (70 hours)	2.1 Training of two learning units. Unit 1: Elements of effective teamwork, Unit 2: Process of teamwork development (32 hours) 2.2 On-the-job learning Collaborative meeting 3 days x 3 hours x 4 weeks (36 hours) 2.3 Summary of learning outcome (2 hours)
Stage 3 Evaluation (20 hours)	3.1 Summary of teamwork development and follow-up (20 hours) 3.2 Post-test on knowledge of effective teachers teamwork development (not applicable) 3.3 Satisfaction evaluation on the program (not applicable)

3. Results

3.1 Demographic Information

Data was collected by using questionnaire to investigate the current state of teachers who working for municipal schools. Demographic data from the participants are included: gender, education background, type of Municipal School, and level of education offered by their schools. The summary is shown in the following table.

Table 2. Demographic data of the participant and their schools

Type of Data	Category	Number	Percentage
1 Gender	Male	85	23
	Female	290	77
	Total	375	100
2 Education	Bachelor degree	251	67
	Master's degree	122	33
	Doctoral degree	2	1
	Total	375	100
3 Municipal School Type	Metropolitan municipal	20	5
	District municipal	90	24
	Provincial municipal	265	71
	Total	375	100
Level of Education	Kindergarten	25	7
	Primary	280	75
	Secondary 20	20	5
	Kindergarten and Primary	20	5
	Kindergarten, Primary, and Lower Secondary	15	4
	Primary and Lower Secondary	10	3
	Primary, Lower, and Higher Secondary	5	1
	Total	375	100

3.2 Elements of Effective Teacher Teamwork

Respondents reported four aspects of effective teacher teamwork elements which are included: team identity, value and teamwork behavior, organization, and process of teamwork development. The data was measured by

mean and standard deviation.

Four main elements of effective teacher teamwork were operated at the same level. The most focused element was on organization aspect because of its influential on managing the teachers in school. In addition, organizational policy plays as the important role to support teacher gathering to achieve mutual goal (Collinson, 2006; Geijssel, 2009; Griffith, 2003). The following four tables define each element in sub-categories to investigate the significant of the operation by individual area.

Table 3. Four elements of effective teacher teamwork

Elements of Effective Teacher Teamwork	Current State		
	\bar{x}	S.D.	Level of Operation
1 Team identity	2.48	0.50	Low
2 Value and teamwork behavior	2.46	0.52	Low
3 Organization	2.49	0.50	Low
4 Process of teamwork development	2.47	0.50	Low

Note. Level of Operation: Extremely Low \bar{x} = 1.0-1.51; Low \bar{x} = 1.51-2.50; Moderate \bar{x} = 2.51-3.50; High \bar{x} = 3.5-4.50; Extremely High \bar{x} = 4.51-5.00.

Table 4. Elements of effective teacher teamwork in the team identity element by sub-categories and level of operation

Element 1	\bar{x}	S.D.	Level of Operation
Team identity			
1.1 Team members collaboratively analyze the situation	2.47	0.54	Low
1.2 Team members bring the result of analysis to formulate the team vision and goal.	2.45	0.50	Low
1.3 Team members set up goals and approach to achieve expected results	2.47	0.50	Low
1.4 Team members accept opinions of each other	2.48	0.50	Low
1.5 Team members motivate each other to follow operational plan of the project or activity	2.45	0.50	Low
1.6 Team members exchange knowledge with each other	2.49	0.50	Low
1.7 Team members are self-esteem in their capacity to achieve the goal	2.46	0.50	Low
1.8 Team members are proud of teamwork and have self-value contribution	2.46	0.50	Low
1.9 Team members actually have skills and knowledge in operation	2.61	0.49	Moderate

Note. Level of Operation: Extremely Low \bar{x} = 1.0-1.51; Low \bar{x} = 1.51- .50; Moderate \bar{x} = 2.51- .50; High \bar{x} = 3.51-4.50; Extremely High \bar{x} = 4.51- 5.00.

According to the result, team members considered themselves positively with high productivity and capacity in operation the duties. This element shows that self-concept brings team members with self esteem. It can be said that collaboration would result the teachers for better motivation, increased efficacy, and positive self-esteem (Jos. Blase & Jo. Blase, 2000). On the other hand, goal setting and team motivation needed special attention because these sub-elements affect how team accomplishes the goal.

Table 5. Elements of effective teacher teamwork in the value and teamwork behavior element by sub-categories and level of operation

Element 2		\bar{x}	S.D.	Level of Operation
Value and teamwork behavior				
2.1	Team members communicate with clear, transparent manner with less communication breakdown	2.48	0.50	Low
2.2	Team members share information in the team	2.46	0.50	Low
2.3	Team members regularly hold a meeting for discussion	2.45	0.50	Low
2.4	Team members have feedback within the team	2.44	0.50	Low
2.5	Team members realize roles and responsibility of leader and members	2.47	0.50	Low
2.6	Team members possess value of achievement to complete the task on due date	2.46	0.50	Low
2.7	Team members are enthusiastic to mission	2.46	0.50	Low
2.8	Team members accept consensus and group decision making	2.40	0.50	Low
2.9	Team members solve problem collectively	2.44	0.50	Low
2.10	Team members are willing to listen to different opinions of the others	2.47	0.50	Low
2.11	Team members integrate various ideas for teamwork and decision making	2.48	0.50	Low
2.12	Team members trust each other in the same team	2.46	0.50	Low
2.13	Team members are united in team	2.49	0.59	Low
2.14	Team members work in fellowship atmosphere with factual expression	2.50	0.60	Low
2.15	Team members are willing to cooperate with generosity	2.52	0.57	Low
2.16	Team members praise for the success or team achievement	2.48	0.50	Low
2.17	Team members create pleasure atmosphere for team	2.43	0.52	Low

Note. Level of Operation: Extremely Low \bar{x} = 1.0-1.51; Low \bar{x} = 1.51-2.50; Moderate \bar{x} = 2.51-3.50; High \bar{x} = 3.51-4.50; Extremely High \bar{x} = 4.51-5.00.

Surprisingly, it was clearly seen that ‘generosity’ was highly considered by team members. According to survey studies, teamwork requires generosity, openness, and thoughtfulness to aspire ideal teamwork which also enhances legitimacy of managerial authority (Knights & McCabe, 2009; Stewart & Alrutz, 2012; Thomas, 2002). Thai culture, similarly, is based on generosity from the culture of faith and donation. However, democracy was observed from this survey by seeing that consensus and group decision making were needed. Effective teamwork development program is better to include the sub-element of democratic decision making in the program (Creighton, 2005).

Table 6. Elements of effective teacher teamwork in the organization element by sub-categories and level of operation

Element 3		\bar{x}	S.D.	Level of Operation
Organization				
3.1	Administrator supports necessary resources	2.46	0.50	Low
3.2	Administrator encourages using technology application for management and instruction	2.43	0.50	Low
3.3	Organization provides remuneration package by income and incentive for team achievement	2.54	0.50	Moderate
3.4	Organization provides opportunity to create innovation and develop professional	2.48	0.50	Low

3.5	Organization supplies moral support for team members	2.47	0.50	Low
3.6	Organization encourages factors contributing to sustainable teamwork	2.45	0.50	Low
3.7	Organization clearly defines remuneration system for team achievement	2.53	0.50	Moderate
3.8	Organization establishes schools network within the elementary education level	2.46	0.50	Low
3.9	Organization establishes external network with other educational institute such as university and government agency	2.61	0.49	Moderate

Note. Level of Operation: Extremely Low $\bar{x} = 1.0-1.51$; Low $\bar{x} = 1.51-2.50$; Moderate $\bar{x} = 2.51-3.50$; High $\bar{x} = 3.51-4.50$; Extremely High $\bar{x} = 4.51-5.00$.

Organization considered as the external institutions where team related to. For such local municipal schools in this study, they valued the most on local organizations such as university and government agency. There are higher educational institutes nearby in the region such as research University, local university, and technical institute. Collaboration with the Ministry of Education also supports effective team working. However, the weak point of organization support was on technology of management. They lacked of IT infrastructure support from organization. Intellectual teamwork, virtual teamwork, and information management are necessary for organization (Galegher et al., 2014; Gibson & Cohen, 2003).

Table 7. Elements of effective teacher teamwork in the process of teamwork development element by sub-categories and level of operation

Element 4		\bar{x}	S.D.	Level of Operation
Process of teamwork development				
4.1	Team members set up team objectives	2.43	0.50	Low
4.2	Team members define operation procedures	2.44	0.50	Low
4.3	Team members define roles and responsibility	2.43	0.50	Low
4.4	Team members understand their roles and responsibility	2.43	0.50	Low
4.5	Team members develop operational plan	2.40	0.49	Low
4.6	Team members operate according to the operational	2.51	0.50	Moderate
4.7	Team members endeavor to work with full capacity	2.50	0.50	Moderate
4.8	Team members actively participate in every work evaluation	2.44	0.50	Low
4.9	Team members involve with revision and feedback	2.54	0.50	Moderate
4.10	Team members participate in problem solving and work improvement	2.52	0.50	Moderate

Note. Level of Operation: Extremely Low $\bar{x} = 1.0-1.51$; Low $\bar{x} = 1.51-2.50$; Moderate $\bar{x} = 2.51-3.50$; High $\bar{x} = 3.51-4.50$; Extremely High $\bar{x} = 4.51-5.00$.

The most important sub-elements for process in teamwork development included revision of the process accomplishment. Team needed to monitor how effective of the operation been conducted. Feedback was the most important characteristic to predict participation of the team members (McCarthy & Garavan, 2001; Peterson & Behfar, 2003). Yet, teamwork program had insufficient roles on developing operational plan. This was the result of administration where sharing vision is vague to members.

4. Discussion

4.1 School Teamwork Development Program

The program on teamwork development for teacher efficiency in the municipal school would be useful for professional and application. Since its effectiveness for competency development, this is recommended based on five aspects: operational effectiveness, service excellence, self-development, teamwork, and teacher ethics (Office of the Basic Education Commission 2010). According to the core competency, teamwork is highly emphasized for teacher professional development to achieve the national standard. On the local context in

provincial municipal, the program was used effectively as the comprehension level in teamwork development raised above 80% after the post-test. The criteria of 80% was evaluated by how much the teachers showed comprehension gain after passing the teamwork development program. Evaluation of teamwork development had also increased to the 80% level by observing from the outcomes and satisfaction level through team working. This outcome has proved the last research question which emphasizes on the outcome of the program.

Table 8. The level of comprehension from the pre-test compared to the post-test after the School Teamwork Development Program

Teacher	Pre-Test (30)		Post-Test (30)		Teacher	Pre-Test (30)		Post-Test (30)	
1	21	70.00%	27	90.00%	26	15	50.00%	24	80.00%
2	18	60.00%	25	83.33%	27	16	53.33%	26	86.67%
3	20	66.67%	26	86.67%	28	19	63.33%	27	90.00%
4	16	53.33%	25	83.33%	29	18	60.00%	28	93.33%
5	18	60.00%	25	83.33%	30	16	53.33%	25	83.33%
6	22	73.33%	24	80.00%	31	19	63.33%	25	83.33%
7	16	53.33%	24	80.00%	32	18	60.00%	26	86.67%
8	17	56.67%	24	80.00%	33	20	66.67%	28	93.33%
9	17	56.67%	24	80.00%	34	15	50.00%	24	80.00%
10	20	66.67%	26	86.67%	35	19	63.33%	25	83.33%
11	15	50.00%	25	83.33%	36	20	66.67%	26	86.67%
12	16	53.33%	24	80.00%	37	19	63.33%	24	80.00%
13	19	63.33%	24	80.00%	38	17	56.67%	25	83.33%
14	18	60.00%	25	83.33%	39	16	53.33%	26	86.67%
15	16	53.33%	25	83.33%	40	15	50.00%	24	80.00%
16	21	70.00%	28	93.33%	41	17	56.67%	27	90.00%
17	18	60.00%	25	83.33%	42	19	63.33%	27	90.00%
18	20	66.67%	24	80.00%	43	22	73.33%	28	93.33%
19	16	53.33%	24	80.00%	44	20	66.67%	25	83.33%
20	15	50.00%	26	86.67%	45	19	63.33%	26	86.67%
21	22	73.33%	25	83.33%	46	15	50.00%	24	80.00%
22	16	53.33%	26	86.67%	47	16	53.33%	24	80.00%
23	17	56.67%	25	83.33%	48	18	60.00%	26	86.67%
24	17	56.67%	26	86.67%	49	17	56.67%	25	83.33%
25	20	66.67%	27	90.00%	50	18	60.00%	24	80.00%
					Mean	17.88	59.60%	25.36	84.53%

Effectiveness is worth discussing because the improvement of their operation suggests the organizational influence. Previously, planning for operation was conducted individually since each teacher was overloaded with teaching and extra-curricular hours. After teamwork program was introduced, the team members organized their roles and responsibility collaboratively. They shared vision and objectives to reach to desired outcome by mutual procedures. From four main elements, it found that team identity is significant because it affects the willingness to initiate new ideas, creativity, and innovation. The school would be beneficial from the identity by efficient operation planning from various stakeholders such as administrator, teachers, and staff. Teamwork planning enhances operation from analysis of internal and external situation in order to develop strategic plan for a better

vision, mission, and objective for certain institution. From team planning approach, members would collaboratively join operation according to the strategy. It was observable that they developed their teamwork value and professional behavior from changes in communication style, critical mindset, problem solving, and conflict management. These changes were beneficial to school management.

Organization element was developed by the contribution of teamwork program by effectiveness in project planning in school activities. The team members exchanged skills and knowledge in various arrays both internal and external. They shared core values in achieving organizational and team's objectives. The team mechanism initiated from team formation, objectives setting, brain storming, operation planning, and implementation of plan. This was the essential values of being an efficient team. Evaluation of effective teamwork was observed from school projects supervision by each of their objectives.

Overall teacher satisfactory level also indicated the effectiveness of teamwork. They seemed that teamwork highly satisfied their expectation. Two aspects of evaluation included procedures of team development program and attitudes toward the program. Prior to the development, teacher faced several professional obstacles such as excessive teaching loads, extra-curricular activities, vague job description, and un-organizing of the team network. After the implementation of the program, it found their development in working in team and enhanced individual satisfaction.

5. Suggestion and Conclusion

5.1 Suggestions for Teamwork Efficacy Program for Thailand's Municipal Schools

The program could enhance the effectiveness of teacher teamwork in several aspects and elements, but it still needs modification to be a truly effective program. The suggestion of this research could be summarized as the followings. 1) Time for operation was insufficient. The program conducted 63 hours of operation but the actual observation suggested that changes needed to be seen during longer period, especially on-the-job training and needed holistic approach for observation. 2) Evaluation should include different stakeholders in the form of committee such as teachers association, parents' board, and school administrative board. 3) Budget allocation was controlled by municipal office. School was sometimes limited its teamwork operation by the regulation of budget. The more transparency between school and the municipal office was necessary.

In addition, there are three factors that support the success of the program involved with teachers, content, and support. 1) Teachers in the team members should devote to their goals in order to develop individual effectiveness. They also needed to participate actively in daily basis. 2) Content and procedures of the program should be practical. The practicality should be based on local context of the teachers who were in the development program. Content also needed to involve with needs and potentials of the teachers in order to achieve the objectives of the program. Procedures of the program reflected its participant skills and expected results. Evaluation criteria had to be the concordance of its procedures. Trainers were another factor contributing to its success by content and procedures they delivered. 3) Supports from administrator should be sufficient. The supports were included resources, budget, and awareness to teamwork building. Development cycle was also support teamwork from organization perspective. This based on the daily practice and on-the-job training within the school administration strategy. School should include teamwork building in its policy of teacher professional development such as training program, study group, and mentoring. All of possible solutions could be integrated within a single program.

5.2 Suggestions for Education Administration and Future Research

Suggestion for the department of education of city municipal should cover the system of evaluation that focuses on teamwork program and application of teamwork practice into teachers' daily routines. These systems later become the standard for teacher development. In addition, the national level as of local administration department would be able to employ similar program to other municipal schools nation-wide. The sample program would also be a standard for budget allocation for schools where they interested. The researcher who found this research worth studying is welcome to imitate methodology on other schools. It is suggested that the program should be the longitudinal study over academic year for the maintaining outcome. System of administration study related to the program in teacher teamwork development is suggested because competency of teacher is highly a quality aspect to develop the school.

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