

# Activities of Teachers Using Group Leadership for Thinking Skills Development in Two Schools in Chon Buri Province, Thailand

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**Abstract.** The purposes of this study were to investigate the performance of active teachers in two selected schools of ChonBuri province and investigate a process of school development based on group leadership. In order to achieve the research objectives, the researcher utilized a quantitative method to survey opinions of active teachers on their knowledge about performance of teachers in selected schools on group leadership development and asked them to evaluate how to utilize group leadership to develop thinking schools. Rating scale questionnaires were given to 30 active teachers of School C and 25 active teachers of School M. The findings revealed that the active teachers of School C claimed a higher level of agreement to the four areas of performances (challenging tasks, creative group works, and resource management and thinking skills development) than active teachers of school M. the Botanical Model of organizational structure was effectively utilized to represent the school structure for thinking skills development and school growth.

**Keywords:** Group Leadership, Performances, Active Teachers, Botanical Model of Organization, Thinking Skills

## Introduction

The recent changing requirements of the labor market have seen the emergence of a gap between the knowledge and skills generated by the current Thai education and training systems and the knowledge and skills required to develop and maintain the economy of Thailand at an internationally competitive level. (Office of Commercial Services, 2002). During the past century Thailand dispatched quite a large number of bright young men and women to study abroad, mainly in Europe and America. Those intellectuals returned and contributed greatly to the development of the country and many of them have played important roles as key personnel and role models in higher education institutions, while pursuing academic excellence to meet international standards. In education, a lot of college instructors, school administrator etc. also graduated from the west. Therefore, westernization has impacted thinking process and OD in Thailand for a long time. For other countries in SE, six of them were also colonized by the western countries. All of there have shaped the ways of life. Kwang (2001), the author of a thinking book “Why Asians Are Less Creative than Westerners”, proposed a model explaining the uncreative and conforming behavior.

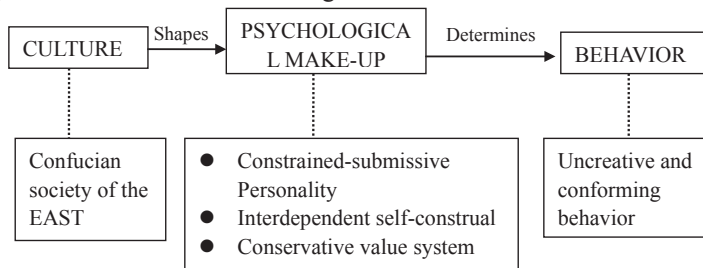


Figure1: A Cultural Model of Uncreative and Conforming Behavior

The model can be utilized to make analysis the behavior of the individual and group in schools. School culture always impacts behavior of administrators and teachers; Bureaucracy also shapes behaviors and styles of leadership in school. Some teachers are active or want to be active in school development. How do these active teachers develop a group? It may be conservative group or leadership group working together to develop their schools. If there is a leadership, how does the group work in a pyramid model with bureaucracy? Is there any model representing the school structure with group leadership?

This paper investigates the practices of active teachers with a model based on the process of thinking skills development.

## Research Objectives

The objectives of this research were:

1. To investigate the performance of teachers related to development of group leadership in selected schools in ChonBuri province.
2. To investigate and describe a process of “thinking school” development based on group leadership and the Botanical Model of organization enhance a thinking school.

## Background

### Thai Education

Thailand is operating under the Education Act of 1999, which is the first Educational Act to become law in the history of Thai education. The Act requires all educational institutions to operate under quality assurance. It is also mandated that parents and the local community have some part to play on the board of educational administration. (Office of the National Education Commission, 1998). The education system in Thailand has started to undergo extensive changes from the time the Education Act was enacted, in August, 2002. The Act also ensures teachers that are treated as professionals, who, on the basis of quality assurance, need to develop themselves throughout their careers. The Act requires all the schools in Thailand to implement the practices described above, therefore, schools will have to develop their school organization to be consistent with the reform. The new kind of organization will be required to support and facilitate the school to bring about this great change in the educational system. The significance of education policy-making creates the need for educational leaders in Thailand to be actively involved in policy-making. To effectively get involved and influence educational policies, educational leaders need to understand the nature of educational politics and policy-making processes. When leaders gain an insight into the nature of the system, they can see how to influence educational policies and the future of Thai education. (Office of the National Education Commission, 1998).

Currently, schools have gained empowerment in management from the ministry of education. With more authorities schools need leaders to think and perform based on the needs of the community, the society and the country. Teachers are required to play the roles of leader. The individual leaders are also required to develop group of teachers and group leadership.

### Group Leadership

One commonality present in all of the definitions of teacher leadership is that leadership in a school does not have to be instilled in a single person but rather can be dispersed and shared with all school staff. (Childs-Bowen, Moller, & Scrivner, 2000). Group leadership is the process of providing focus and direction to a specific group of people. Leadership of this type often involves facilitating and guiding the actions of group participants as well as accepting responsibility for the outcome of the group's efforts. There are a number of different approaches to group leadership, with varying styles used in different settings. (Barthelme, 1997).

For pyramid model of school structure, it is rather impossible for teachers with control culture and top-down management to utilize group leadership to develop their school. It is necessary to investigate an innovative model to support thinking schools with challenging practices leading to innovative output and outcome for school benefit. That kind of structure and management is the Botanical Model.

## **Botanical Model**

In the botanical model, the organization is viewed as a living organism. The botanical model would be representative of a tree with many branches representing many divisions. As opposed to the pyramid, the management with more authority will be organized at the bottom instead of the top of the pyramid. In the 21st century new organizational concepts such as “connect” and “collaborate” are emerging. This concept appreciates the fact that intelligence and creativity are dispersed broadly throughout an organization, and in many cases the best decisions are made by the people who are closest to the problem. Connect is an essential concept recognizing that people in the organization can work creatively without going through layers of management and huge bureaucracies. Collaborate refers to solving problems with the readily available help of people who employees know can be of help. It encourages employee involvement and participation which in turn could encourage creativity and innovation in them.

### **The stages of growth in the Botanical model**

The use of trees or plants to represent organization structure and function is not new, but (Chezom, 2009) offered a detailed description of its application to organization growth and change. The growth of an organization with the botanical model is like the growth of a plant. It would initially grow as a small plant with one or two functions. But like the root of the plant if the resources and management support it, it would grow into a healthy, innovative and efficient organization. Creativity plays an important role in the botanical model of an organization. The new branches, the new buds could also represent a new life or a new job or a new service. i.e. creativity which is made possible by the support of the roots or the management at the bottom. The climate of command and control is less than those practiced in the pyramid structure.

The branches, the flowers and the fruits growing on it would represent the productivity. The healthy abundant branches also represent the increased motivation, innovation, efficiency of the employees as a result of the strong support provided by the roots and the trunk which is representative of the management and the structure. And the information flow should be both ways, as in, the top level makes decisions taking into consideration the views of the employees.

Like the flowers pollinate with the help of the birds, butterflies and bees so will the botanical model pollinate the organization too in terms of knowledge and exposure by networking with similar groups or foreign countries and learning and sharing experiences relevant to their context.

The Botanical Model will also take the characteristic of a sweet potato vine which after a few weeks of care usually grows on its own and can fend for itself. The Botanical Model though modeled on a tree would also function in the same way. Unlike in the hierarchical structure where the decisions are made at the top, in the Botanical Model the organization is structured in such a way that it is able to grow and fend for itself with or without the management at the top.

A healthy tree would represent a healthy organization which is efficient and effective. However, the Botanical Model should be subject to review from time to time as the process is living and dynamic and not static. Emerging trends and advances should be followed and adapted as and when necessary to be incorporated and challenges have to be met. (Chezom, 2009).

## Research Method

The population of this study was the teachers of School C and School M. There were approximately 140 teachers in School C and 70 teachers in School M at the time of collecting the data. The participants of the study included 55 active teachers which consisted of 30 active teachers of School C and 25 active teachers of School M. They were purposively selected using observation and input from colleagues to identify “active teachers”.

The study area was emphasizing group leadership for teachers, thus it’s necessary to discuss why teachers’ roles are related to challenge tasks, creative group work, resource management and thinking skills development.

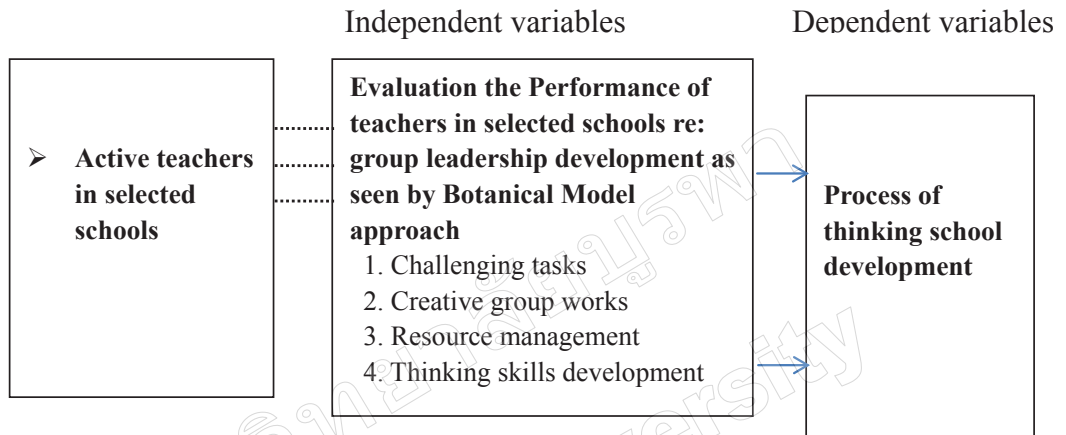


Figure 2: Research Framework of the study

The study utilized a quantitative method to survey opinions of active teachers in selected schools on their opinion about their performance on group leadership development and asks them to evaluate information how to utilize group leadership to develop thinking schools. The research process was divided into two stages. The first stage used observation method to find active teachers. The second stage used questionnaires; the result of which supplemented and verified the results of the first stage.

1. Participant observation by the researcher for selecting key participants (Kawulich, 2005). The researcher observed teachers’ behaviors and selected active teachers by participating in the schools’ meetings. Active teachers were evaluated by the following criteria:

- 1) Teachers who entered the venue before time or on time.
- 2) Teachers who sat in the front of the meeting rooms.
- 3) Teachers who actively asked questions or expressed their views during the meeting.

2. Indirect observation via asking the principals of the schools to suggest some more active teachers.

## Questionnaire and Data Collection

The questionnaire utilized to gather information about the active teachers’ views on performance for group leadership development was designed according to the information reviewed from the related research and literature. The questionnaire was divided into two parts. The questions in the first part were close-ended questions. It was a 4-point rating scale questionnaire to confirm group leadership of teachers developed and some more selected supporting thinking. The questionnaire content consisted of four parts:

1. Challenging tasks 2. Creative of Group works 3. Resource management 4. Thinking skills development

All questions were assessed by using four scales, which were 4 = strongly agree, 3 = agree, 2 = disagree, 1 = strongly disagree.

The open-ended questions were used in the second part of the questionnaire to gather information from the respondents and the Annual of school C and school M. in year 2011 & 2012.

The researcher summarized the process of school development in order to express how the outcome of teacher results relates to school organization using a Botanical Model. Researchers used "Traditional" to represent that which already exists in the departments and institutions (such as, Routine tasks and Official dillies). Researchers used "Creative output" to represent that new innovation and developing department. The number of respondents' answers the questions of the schools C and M. were classified as C. (Creative) or T. (traditional) and placed on the school's respective trees. Views of schools in 2011 and 2012 annually were created and compared.

## Data Collection Process

The researcher gave the paper of questionnaires to every respondent; then collected the paper within two to three weeks. If the purposively selected respondents did not reply, the researcher sent the paper to them again.

## Data Analysis

Mean scores of items were ordered to examine the relative importance of the items as perceived by active teachers of the two schools.

The results of data analysis were interpreted as follows:

1.00 - 2.00 = Low agreement for school development

2.01 - 3.00 = Moderate agreement for school development

3.01 - 4.00 = High agreement for school development

The second research question objective of describing the process of school development based on group leadership and Botanical Model of organization to enhance thinking schools was carried out by summarizing the annual productions of school C and school M which support the process of school development.

## Findings

The performances of active teachers based on group leadership development.

Research question 1: What are performances of active teachers based on development of group leadership in selected schools in Chon Buri province?

To answer research question 1, the 55 participants were asked to specify their performances towards the pre-defined opinions in the survey questionnaire. They responded on a four-point scale from '1' (Strongly disagree) to '4' (Strongly agree) on the questionnaire. Mean scores, Standard Deviations, Rank and Level for each opinion was calculated.

Table 1: Means, Standard Deviation and rank of performance as perceived by active teachers of the two schools

Performances of active teachers	School C (N1 =30)			School M. (N2=25)		
	Mean	S.D.	Rank	Mean	S.D.	Rank
Challenging Tasks	3.22	.69	3	2.94	.58	4
Creative Group Works	3.57	.51	1	3.01	.48	3
Resource Management	3.36	.59	2	3.03	.50	2
Thinking Skills Development	3.13	.70	4	3.12	.57	1

The data in Table showed that the 30 active teachers of School C gave the highest mean score (mean =3.57) to the item about working in creative groups. The lowest mean score (mean =3.13) was

given to thinking skills development.

The 25 active teachers of school M gave the highest mean score (mean =3.12) to thinking skills development and the lowest mean score (mean =2.94) was given to challenge tasks.

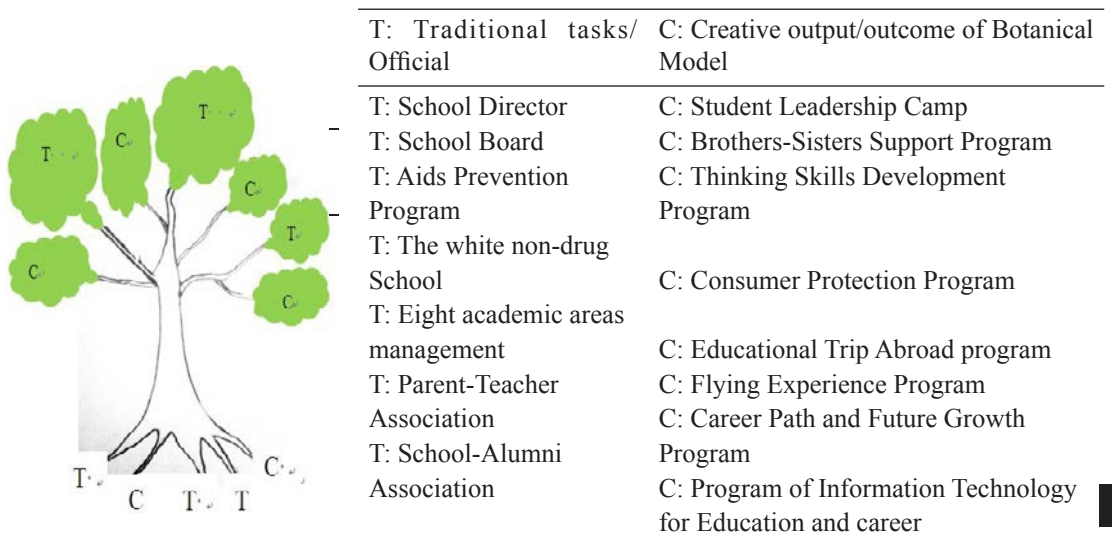
The process of school development based on group leadership and Botanical Model of organization to enhance thinking schools

Research Question 2: What was a process of school development based on group leadership and Botanical Model of organization to enhance thinking schools?

1) All secondary education schools may have different divisions or sections, different school and different functions depending on the policy for management and the thinking of the school director and active teachers.

The data analysis revealed the following process developments of school C. Their concepts, the practice and their perception rated in the levels of agree and strongly agree to shape the school structure as a Botanical Model.

1. Exchanging experiences among teachers in the group.
  2. Having intention to develop oneself continuously to be a professional teacher.
  3. Being interested in self-development for group mutual learning.
  4. Being responsible for new ideas of group work performance.
  5. Being responsible for mutual learning among group members.
  6. Accepting the ideas of the colleagues is the most important asset.
  7. During school meeting for teacher, the chair should encourage all teachers to make comment and participate or actions.
  8. All teachers of eight academic areas management should be encouraged to propose how to develop thinking skills for students.
- For school M the process developments were (in rank order):
1. Exchanging experiences among teachers in the group.
  2. Having intention to develop oneself continuously to be a professional teacher.
  3. Being interested in self-development for group mutual learning.
  4. Being responsible for new ideas of group work performance.
  5. Accepting the ideas of the colleagues is the most important asset.
  6. Enjoying doing brain storming among colleagues for resources management.
  7. All department head should support policy for teachers to be innovative to help solve problems and develop the school.
  8. There should be suggestion box for school development recommendation from students.
- 2) According to Botanical Model of organization the following are guidelines for utilizing of the Model.

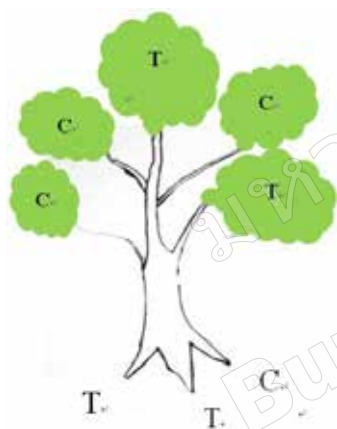


(Figure 3: Botanical Structure of School C Based on Traditional and Creative)

Figure 2 represents the concept of the Botanical model. The branches represent the different departments; the leaves reflect the productivity, development, the motivation and innovation of the teachers. The strong trunk represents structure which is strong and robust and allows the tree to grow healthy. The roots represent the role that management should play-being an advocate and providing strong support but allowing the branches to spread out and grow.

The structure of the School C can be represented as the tree. The top executives perform their tasks as the roots of the tree including other their power position of organizations. The strength of the organizations are like the root of the tree, to search for water and food for the tree. What we have above is a simple organization structure Figure school C. It has all the Traditional tasks and creative output within the school and on the bottom it has who holds the top position in each department of the school. (e.g. T is represents: school Director, school Board, Aids Prevention Program, The white Non-drug School, Eight academic areas management, Parent-Teacher Association and School-Alumni Association). C is represents: Student Leadership Camp, Brothers-Sisters Support Program, Thinking Skills Development Program, Consumer Protection Program, Educational Trip Abroad program, Flying Experience Program Career Path and Future Growth Program and Program of Information Technology for Education and career).

This is just one way that organization structure Figure are displayed. Some can have more levels, or departments within departments, up to just about any size. In the case of the school, the school directors perform their tasks as the root of the tree at the bottom of the organization not at the top as the Pyramid Model.



T: Traditional tasks /Official	C: Creative output/outcome of Botanical Model
T: School Director	C: Sufficient Economy Program
T: School Board	C: Student Leadership Camp
T: Eight academic areas management	C: Wide World Knowledge Investigation Program
T: Non-Drug School management	C: Knowledge Investigation Program
T: Student Supporting Development	C: Ethical and Transparency management

(Figure 4: Botanical Structure of School M Based on Traditional and Creative)

This also represents the concept of the Botanical model. The branches represent the different department, the productivity, development, the motivation and innovation of the teachers.

Involving the entire workforce in a bottom up strategic management, the model can build morale and a sense of ownership of a school’s direction among departments of all levels. That administrative staff, teachers and students will be more actively engaged in the work and strive harder to reach objectives. This strategic model can also cause a development of ideas and make it easy to sort through the information to come up with an effective plan for reaching school goals.

### Conclusion

All organizations are living things like the trees or crop in the school of botany. Although, they are in the same species, their structures may be different.

In the case of a thinking school, all public schools of secondary education may have different structures although they are in the same province. The trees with the same species may have different branches, different taste of fruits and different leaves.

All secondary education schools may have different divisions or sections, different schools and different functions depending on the policy for management and the power of thinking of the school directors and active teachers including their students and their parents.

## Discussion

### Challenge Tasks

The following items were listed as challenge tasks. Item 4 “You have the intention to develop yourself continuously to be a professional teacher.” Responses showed active teachers perceived high agreement on challenging tasks, with the intention to develop themselves as professional teachers. This reinforces on ‘internal’ perspective by arguing that teachers should assume individual responsibility for their ongoing professional development as an ‘essential expression of their professionalism’ (GTCNI, 2007, p. 46). Similarly, (TCI, 2011, p. 20) states that ‘Individual teachers should actively shape their own professional development’. Item 1 stated “You are able to help set up the school objectives to be an International standard school.” Responses from teachers at the two schools indicated that teachers thought the school objectives should meet International standards for education. It illustrated that teachers perceived this task would be the most difficult task to perform.

### Creative Group Work

Item 13 said “You have interest in self-development for group mutual learning.” Showed active teachers perceived high agreement for group mutual learning, are the responsibility for initiating ideas of group works. Some of the ideas provide a benchmark against which our experience may be compared. It is necessary to find the best choice of media for the stages of idea generation and idea evaluation in the creative process in order to support distributed creative group work in the best possible way (Runco & Chand 1995). Ellis et al. (1991) defined groupware as a group of people engaged in a common task; they finish the job by sharing information and supported by computer technology. Nevertheless, prior research has shown that group work in general suffers from several losses such as information overload, production blocking, free riding, evaluation apprehension and production matching (Nunamaker et al. 1991, Dennis & Valacich 1993).

Item 17 the teachers from School M mentioned “Encouraging teachers use intelligence to create new concept in the group is the good way”. However, the item’s mean score of teachers from School M was lower than School C, indicating that many School M teachers only moderately agree with the opinion. According to Sasson (2007), many professional literature leans to creative thinking is a genetic issue, there are tips and tools available for teachers to encourage more creative thinking, such as: asking question, presenting options, and provoking thought and imaginative responses among the audience. The facilitator must take great care that any product or activity does not judge, alienate, or patronize participants, nor offer single solutions.

### Resource Management

Item 23 said “You help your colleague for classroom information technology.” The teachers from School C. accepted helping the colleague for classroom information technology. However, the item’s mean score of teachers from School M. was lower than School C. Many School M teachers only moderately agree with the opinion. The Ministry of Education Standards Department (MESD, 2002, P.12) said, “Technology has positive effect for meaningful learning. With training, support, and advice, and collaborate for the colleagues, they will move towards more effectively integrating ICT into their teaching and learning.” Item 26 said “You enjoy doing brainstorming among colleagues for resources management.” And responses showed all teachers enjoy doing brainstorming among colleagues, such as brainstorming for exploring ideas, but decisions and choices are made as a team. Successful collaboration leads to mutual growth, learning, and respect. (MESD, 2002. p.14)



## Thinking Skills Development

“All teachers of eight academic areas management should be encouraged to propose how to develop thinking skills for students.” Item 32 showed eight academic areas management should be encouraged to propose how to develop thinking skills for students. The Office of Commercial Services (OCS, 2002 p.16) stated “Teachers should encourage the thinking skills of learners such as reasoning, decision making, reflecting, making inferences and problem solving. These types of activities encourage students to engage cognitively and emotionally with the learning tasks.” This is a significant departure from recall and reproduction type of learning which is most associated with the teacher-centered didactic approach. Item 33 “Different opinions among teachers lead to conflict.” School C teachers and School M teachers didn’t agree. They thought different opinions among teachers can’t lead to conflict. According to (Cynthia, Megan, & Lynne, 2003), conflict is a natural part of collective human experience. In our efforts to cooperate with one another people have differences of opinion about how best to accomplish our common goals. (Cynthia, Megan, & Lynne, 2003). Each person seeks to protect individual interests within these efforts and forestall outside influences, fearing discord in the face of these conflicting forces. Conflict is often unsettling. It can leave participants shaken and ill at ease, so it is often avoided and suppressed. Yet conflict, when well managed, breathes life and energy into relationships and can cause individuals to be much more innovative and productive. Differences of opinion, individual interests, outside influences, even active discord all have the capacity to inform and advance our collective efforts. Each might provide a provocative stimulus, moving us to think more deeply and, ultimately, to act more prudently. Thus, conflict can become a necessary locus of energy, rather than a source of harm. (Cynthia, Megan, & Lynne, 2003).

## The Botanical Model

In response to second question “Can school development be based on group leadership and Botanical Model of organization to enhance thinking schools?” the findings clearly show that the Botanical model helps to understand not only the structure of both Schools, but also their development and it helps to understand the functions effects of teacher activity in relation to the administrations.

The trees represent the structure of the schools and show how the various programs (Traditional and creative) are both needed. We can see that school C had more emphasis on traditional tasks but still has much creative output. School C has a more substantial base of support (roots) which includes both traditional and creative people and departments. In this case, the school directors perform their tasks as the root of the tree, at the bottom of the organization activities, not the top of a pyramid model. Also we see that School C is larger and thus can grow faster.

School M is also a living school. However, the structure is different. This is a smaller school, and there are more interdependencies. Perhaps the balance of programs and power is more delicate. However, there are still both creative and traditional outputs.

## Recommendations

The first recommendation is for directors of schools to make policy and provide guidelines to utilize group leadership to develop thinking school. The second recommendation is for school teachers to pay more attention to methods of group work development to use thinking skills based on development of group leadership. It is rather impossible to launch thinking skills development program for the whole school. It is better to create innovative practice in group thinking or specific classes of each level. For a secondary school of grade 1 to grade 6, there may be only 2 groups or classes in the first year. They are one group of first year students (Matayom 1 in Thailand) and one group of fourth year students (Matayom 4). Then, for the next 3 years, the innovative proactive of thinking skills development may be incorporated into all 6 levels.

It is also recommended to develop a process of school development based on group leadership

and a Botanical Model of organization to enhance thinking schools. This might include identifying teachers or directors who aspire to membership of a leadership team and all members of such groups.

Any teachers in any schools may develop themselves to be active teachers and to join in a social group or specific group supported by the Director. The development of a thinking school or Botanical Model of school structure is based on teacher performance. The output or outcomes of the practice are normally accepted by the school management. The teachers themselves can also organize their practice and achievement as offices papers to be submitted to higher authority for their career growth.

To be successful for the first steps of thinking school development, the following actions are recommended

1. Having intention to develop oneself continuously to be a professional teacher.
2. Being responsible for new ideas of group work performance.
3. Developing of innovation of teaching methods continuously.
4. Developing of thinking skills for students.

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