



Networking Model Involving Participation in Education Development: A Case of Demonstration Schools

Adithak Suwiwattanachai¹, Yalisa Tonsorn², Chanasuek Nichanon³, & Sirote Pholpuntin³

¹ Graduate School, Suan Dusit University, Bangkok, 10300 Thailand

² Faculty of Management Science, Suan Dusit University, Bangkok, 10300 Thailand

³ Faculty of Education, Suan Dusit University, Bangkok, 10300 Thailand

Article info

Article history:

Received: 9 September 2019

Revised: 20 September 2019

Accepted: 26 September 2019

Keywords:

Model, Network, Demonstration school

Abstract

This study sought to create a networking model concerning participation in education development, and to assess the applicability of such a model, taking a set of demonstration schools as a case study. Informants included targeted schools' management executives and teachers, representatives from the schools' alumni associations and alumni members, and a group of experts, forming a cohort of 20 individuals in total. Research tools included interviews, applicability assessment, and quantitative data analyses including such statistics as mean, standard deviation, and basic quantitative analysis. Research results are as follows:

(1) Building a network that facilitates participation in education development. Our in-depth interviews seeking to create case-study-based networking model involving participation in education development found that seven components constituted common elements embodied in the cooperative networks for education development across the four demonstration schools studied. The seven common elements were: (1) mutual recognition of shared perspective with regard to the existence of the network; (2) determination of the network's shared vision; (3) identification of the network's shared benefits and interests; (4) identification of each network member's involvement; (5) reciprocal network reinforcement; (6) strategic interdependence; and (7) interactive exchanges among network members.

(2) Our assessment of the applicability of the networking model involving participation in education development found that the proposed model is of high quality in all aspects. The propriety aspect had the highest mean of 4.38 and a standard deviation of 0.23, followed by the evaluation accountability aspect having a mean of 4.29 and a standard deviation of 0.23. The feasibility aspect had the lowest mean of 4.00 and a standard deviation of 0.38.

Introduction

Against the backdrop of constant, fast-paced, and—at times—radical changes in a wide range of global contexts from social, cultural, economic, political, scientific, technological to communication, education continues to be instrumental in improving the quality of life, in pushing countries forward in an interconnected world, and in securing dignified livelihood in a sustainable manner. Countries deemed successful in increasing human potential, such as the United States, Finland, Norway, Sweden and Singapore, have dedicated their investment efforts to human development through effective education reform long before they enjoyed rapid economic growth. Many developed countries have established an outstanding curriculum and a decent education management system, resulting in a high rate of education among the population. Finland, for example, was recognized by the World Economic Forum as having the best education system in the world, both at the elementary level and high-level education. Many distinct features are characteristic of the Finnish education system: (1) learning is predominantly conducted through play, as it is believed that children can learn better through play and self-discovery; (2) rooted in the firm belief that every school is of equally high quality, schools do not compete against one another and there is no tradition of school ranking; (3) emphasis is heavily placed on quality of life, as the Finns believe that happy teachers are good teachers and that Finnish teachers, with a weekly teaching workload of approximately 20 hours, should not be allowed to work too hard; (4) the Finnish education system is governed under common national standards, based on which teachers, while regulated by curricular framework, are encouraged to be creative in class; (5) reflecting the emphasis placed on process, grading system is not introduced until Grade 4 and (6) teachers are a socially recognized and highly respected occupation. In sum, the Finnish education system places emphasis on family and child development according to his/her own potential.

The Second Amendment of the National Education Act of 1999 states that society be involved in education management. Section 9 touches on structural organization and the provision of education services through decentralization of management authority in such areas as academic, budgeting, personnel management, and general administration to relevant Offices of Education District. In addition, it also emphasizes parental roles in overseeing compulsory

education, as well as the roles of all stakeholders—including individuals, families, communities, community organizations, local administrative organizations, private organizations and other institutions—in mobilizing education resources through actively organizing and participating in education management, donating needed assets and resources to education institutions, and sharing the burden of education expenses, as deemed appropriate and necessary (Office of the National Education Commission, 2002).

Studies exploring the role of community networks in the development of education management raised many issues that emerged among such networks, including: (1) the lack of knowledge and understanding of the network's roles among network members; (2) the lack of understanding of their own roles among network members; (3) vague objectives due to the lack of managerial strategy that would guide the direction of the network; (4) the lack of coordinated efforts due to the fact that network members were not treated on an equal basis; (5) the operation outcome of the network was a result of individual rather than team efforts; (6) communication problems occurred whenever network members engaged in team efforts—i.e. acknowledgement of issues, sharing of ideas, or implementation of such ideas—to expand the scope of activity and (7) boredom and unwillingness to participate in activities caused by repetitive miscommunication (Sonsong & Inrak, 2018).

Founded by respective alumni associations, demonstration schools garner support and cooperation from relevant stakeholders in their education development efforts. Established under the supervision of respective universities' faculty of education, demonstration schools, as an integral part of effective education management, serve as a training ground for students and prospective teachers to polish their practical teaching skills. They commit themselves to the development of education management at early childhood and primary levels that lives up to international standards. Demonstration schools are exemplary of dedication to academic services aimed towards society, partnering schools, and other institutions, and to protecting Thai cultural heritage. In the course of services as exemplary model in terms of providing quality education and improving student quality in such a way that secures valued human resources for Thai society, demonstration schools must, therefore, build upon cutting-edge teaching and learning innovation, which, in turn, can be achieved through research and development. Building an education development

network that involves parental and alumni participation would serve as an exemplary model to achieve such ideal.

While envisioning the importance of such a network, the researchers also realized that, as far as demonstration school is concerned, no networking model for education development exemplary of parental and alumni involvement currently exists and that a possible networking could build upon the strength of the original network that has been supportive of school operation all along. A possible emergence of such a network would help bridge the existing gap, resulting in effective and efficient education development and boosting the level of participation towards a network of all-out participation. For the reasons stated, a networking model involving stakeholders' participation in education development with a set of demonstration schools in Bangkok taken as case study is, therefore, of particular interest to the researchers.

Objectives

1. To create a possible networking model involving stakeholders' participation in education development, with a set of demonstration schools taken as case study.

2. To assess the applicability of the proposed networking model involving stakeholders' participation in education development to the targeted demonstration schools.

Literature review

A networking model ties together the operations of independent entities in a systematic and tangible fashion by voluntarily forging person-to-person, person-to-organization, and organization-to-organization relationships in such a way that are oriented towards common purposes, with the ultimate aim of performing an assigned task. A networking model restructures operational protocols in such a way that secures coordinated efforts in the decision-making, planning, implementation, accountability, follow-up, and evaluation processes, which, together, contribute to the accomplishment of an assignment (Charoenwongsak, 2012). Networking schemes vary according to the scope of activities defined by network members. Classification of networking schemes and identification of relationships help to project a clear-cut image of dynamic relationships among networks. Historical developments of networking in Thai society indicate that networking has come into existence in a variety of sectors, ranging from government, private

business, non-governmental organizations (NGOs), to public, and that networking has been shaped based on elements such as conception, activity, or scheme.

This study applied network management concept of Charoenwongsak (2012) that identified 7 elements of a network model which are (1) shared perspective; (2) shared vision; (3) shared benefits and interests; (4) network members' active involvement; (5) reciprocal network reinforcement; (6) strategic interdependence and (7) interactive exchanges among network members. The researcher interviewed those related to educational development including School's Board of Committee, Parent-Teacher Association and Alumni Association as shown in Figure 1.

Conceptual framework

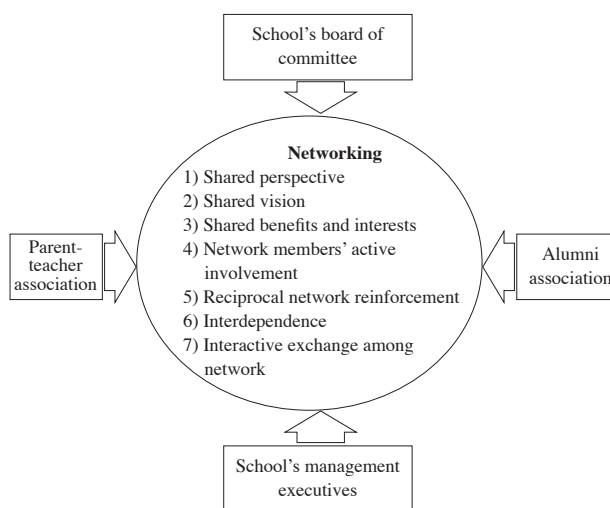


Figure 1 Conceptual framework

Research methodology

Qualitative research was used to address our research objectives: to explore a possible networking model involving stakeholders' participation in education development and to assess the applicability of the proposed networking model. The following describes research methodology in detail.

1. Selection of targeted schools

Employing purposive sampling, the researchers came up with four demonstration schools that met the following predetermined criteria: those falling within the purview of the Office of the Higher Education

Commission (OECD); those located in the targeted education district of Bangkok and its vicinity; those established for 20 years or over; and those equipped with alumni association and parent-teacher association. The four schools targeted were: (1) Kasetsart University Demonstration School, Center for Education Research and Development; (2) Chulalongkorn University Demonstration School (Primary School Department); (3) Ramkhamhaeng University Demonstration School (Primary School Department) and (4) Srinakharinwirot University Prasarnmit Demonstration School (Elementary School Department).

2. Informants

A total of 20 informants from five categories were purposively sampled, according to the criteria determined by the researchers, to give in-depth interviews:

2.1 Four management executives who held a doctoral degree and had more than 4-year experience in education management.

2.2 Four teachers who had at least 5-years working experience in the association.

2.3 Four members of the alumni association, each serving as guardian of the current or former student from each targeted school.

2.4 Four alumni, each having studied and having been the member of each targeted school's Parent-Teacher Association for no less than five years.

2.5 Four experts who had more than 3-years experience in education management.

3. Research tools and construction of tools

The research tools consisted of interviews and applicability assessment. Using semi-structured format, the interviews covered issues related to building a possible networking model involving stakeholders' participation in education development. These issues were identified as: (1) shared perspective; (2) shared vision; (3) shared benefits and interests; (4) network members' active involvement; (5) reciprocal network reinforcement; (6) interdependence and (7) interactive exchanges. The informants were management executives, teachers, guardians and alumni. Applicability assessment identified five aspects that must be considered when assessing the applicability of a networking model: (1) utility aspect; (2) feasibility aspect; (3) propriety aspect; (4) accuracy aspect and (5) evaluation accountability aspect. The information providers to assessment interviews were the four experts.

Samples of questions used in interviews are shown as follows: (1) how does the school participate in

network? (2) how does the school participate in setting the vision for the network? (3) how does the school determine the shared benefit and interests? (4) how does the school set the participation regulation for the members. (5) how does the school support the network? (6) how does the school organize interactive exchanges in the network?

4. Data analysis

The data analysis consists of two parts:

4.1 With regard to qualitative analysis, the researchers transcribed the recorded interviews, grouped together duplicated data or data with similar contents, and summarized important issues. The prepared data was then categorized according to its attributes and ultimate implications, grouped according to relevancy to each element, summarized based on issue, and improved to the researchers' satisfaction. Content analysis was employed throughout the qualitative analytical processes.

4.2 Descriptive statistics, such as mean and standard deviation, were employed to examine the distribution of the variables of interest measured through 5-point assessment scales.

Results

1. Networking model involving participation in education development

Seven elements were identified based on interview data collected from stakeholders in education development: (1) mutual recognition of shared perspective with regard to the existence of the network; (2) determination of the network's shared vision; (3) identification of the network's shared benefits and interests; (4) identification of each network member's involvement; (5) reciprocal network reinforcement; (6) strategic interdependence and (7) interactive exchanges among network members. These elements are discussed in detail next.

1.1 Mutual recognition of shared perspective with regard to the existence of the network. A demonstration school has network members who represent the school's four groups of associate members, namely, the School's Board of Committee, the School's Management Executives, Parent-Teacher Association, and Alumni Association. These network members will be selected as the School's Board of Committee, which consist of: (1) Chairman of the Board; (2) Committee Members representing parents; (3) Committee Members representing teachers; (4) Committee Members representing community organizations; (5) Committee

Members representing local administrative organizations; (6) Committee Members representing alumni; (7) Committee Members representing monks or religious organizations in the school neighborhood; (8) Committee Members having expertise in education management and (9) Headmaster. The School's Board of Committee will hold a meeting that seeks to clarify the roles of the School's Management Executives, Parent-Teacher Association and Alumni Association, reaffirming the objectives of the association, determining rules and regulations, spelling out shared vision, as well as communicating the school's activities through such channels as the Internet or newsletter with an aim to keep network members updated of their own roles and of the school's emerging issues. In this connection, the network members must be encouraged to engage themselves in team efforts, starting from such a basic task as defining the objectives; otherwise, networking would turn out to be nominal with no substantial group endeavor as shown in Figure 2

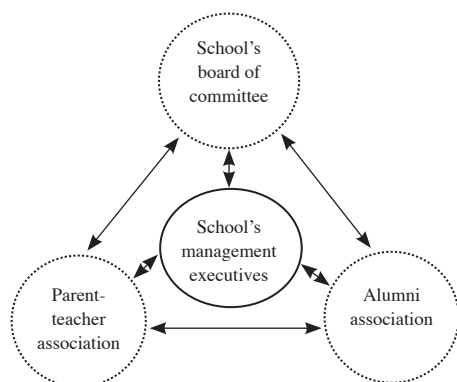


Figure 2 Network members

1.2 Determination of the network's shared vision. Demonstration schools have a common vision of enabling students to attain their highest potential in terms of knowledge, morality and ethics, with the schools serving at the center of learning processes. Each school's vision is described next.

(1) Ramkhamhaeng University Demonstration School (Primary School Department) has a vision of "becoming a role model for modern education management, playing a leadership role in both school management and education management with the ultimate aim of enabling young students to lead a successful life."

(2) Srinakharinwirot University Prasarnmit Demonstration School (Elementary School Department) has a vision of: "stimulating students' integrated child development in line with their ages; enabling students to adapt themselves to current environmental and technological dynamics, to cultivate reading habits, to possess critical thinking and scientific problem-solving skills, to achieve their best in terms of morality, ethics and knowledge while leading a happy life that builds on love, generosity and understanding; and serving as an exemplary model for early childhood education management in accordance with suggested guidelines for developing critical-thinking-focused schools."

(3) Chulalongkorn University Demonstration School (Primary School Department) has a vision of: "becoming an international education institution focusing on continued accumulation of knowledge, introduction of innovation, and provision of effective school management; boosting the potential of students, teachers and school personnel to global standards; and aiming for a widely acclaimed source of flexible education management resilient to changes."

(4) Kasetsart University Demonstration School, Center for Educational Research and Development has a vision of: "becoming an organization equipped with excellence in education management; producing a universally recognized role model for teachers; discovering a new frontier of knowledge; producing students of global citizenry quality who can compete in a creative economy in a sustainable manner, building on enriched Thai cultural attributes."

1.3 Identification of the network's shared benefits and interests. In close cooperation with other network members—i.e. the School's Management Executives, Parent-Teacher Association and Alumni Association, each School's Board of Committee lays out an organizational structure conducive to active engagement in designated activities or projects, examines a budgetary plan on projects as proposed by the School, helps to raise funds, authorizes power of execution to designated staff members, and commits all network members to work to the utmost benefits of students. In doing so, alumni members are invited to get involved in either giving a speaking session, holding an exhibition, or giving a special lecture, creating an opportunity for current students to keep themselves updated, to gain access to invaluable experiences, and to associate themselves with alumni members. Such alumni involvements also provide room for alumni

members and teachers to engage in reciprocal sharing of information from their respective fields.

1.4 Identification of each network member's involvement. The modus operandi of the network functions on the basis of network members' voluntary involvement in teamwork efforts in order to achieve some form of desired outcome. Voluntary involvement implies that no subgroup within the network has total control over the network's entire operation. The network recognizes the importance of shaping students' attributes that meet moral and ethical standards laid out in the curriculum. Therefore, it seeks to organize extracurricular activities or engagements that would provide students with skills needed for their everyday lives, eventually leading to the students forming desired attributes. Activities or projects organized throughout academic year are as follows:

1) Ramkhamhaeng University Demonstration School (Primary School Department) holds two categories of activities/projects:

1.1) Activities/projects aimed to encourage students' involvement, such as (1) Sathit Academy Project, (2) Yu Rak Khrai Chak Pai Khit Thueng Project, (3) Sathit Chaturamit Soccer Competition and (4) "Lan Pho Khun Games" Sporting Event;

1.2) Activities/projects organized by and aimed to strengthen the network, i.e. (1) Bowling Competition organized by Parent-Teacher Association, (2) Community Health Promotion Exercise Program and (3) Sathit Ram Prathom Charity Walk Project.

2) Srinakharinwirot University Prasarnmit Demonstration School (Elementary School Department) holds two categories of activities/projects:

2.1) Activities/projects aimed to encourage students' involvement, i.e. (1) Sathit Academy Project, (2) "Ruamjai Sathit Samakkhi Doen-Wing Prathom Sathit Prasarnmit" Walking and Running Event, (3) Prasarnmit Ramayana Masked Play, (4) Sathit Samakkhi Sporting Event, (5) Children's Day Activity sponsored by the Parent-Teacher Association and (6) English Language Skill Improvement Activity organized by the Parent-Teacher Association in association with the Network of Volunteer Parents;

2.2) Activities/projects aimed to strengthen the network, i.e. (1) Ruam Jai Sathit Prasarnmit Charity Golf Tournament and (2) Happy Family Day Event.

3) Chulalongkorn University Demonstration School (Primary School Department) holds two categories

of activities/projects:

3.1) Activities/projects aimed to encourage students' involvement, i.e. (1) Sathit Academy Project, (2) "Welcome First Graders" Activity, in association with the Parent-Teacher Association, (3) The British Council's Learning English with Native Speakers, organized by the Parent-Teacher Association, (4) Fund Raising for the Production of Learning Materials (such as books on scientific processes) organized by the Parent-Teacher Association, (5) Religious Practice Project, (6) Art Potential Enhancement Project, (7) Learning Exchange Activities among Sister Schools Project and (8) Academic Activities;

3.2) Activities/projects aimed to strengthen the network, i.e. (1) New Year's Activities, (2) Charity Rally Activities and (3) Farewell Soccer Dedicated to Retiring Teachers.

4) Kasetsart University Demonstration School, Center for Educational Research and Development holds two categories of activities/projects:

4.1) Activities/projects aimed to encourage students' involvement, i.e. (1) Sathit Academy Project, (2) KUS Waste Bank Project, (3) Alms-giving Activity, (4) Learning Circuit Activity by the Parent-Teacher Association, (5) Sathit Kaset Morality and Ethics Enhancement Camp, (6) Sathit Creative Thinking Camp and (7) Music in the Garden Event;

4.2) Activities/projects aimed to strengthen the network, i.e. (1) Sathit Kaset Samphan Bowling Competition organized by the Parent-Teacher Association, (2) Sathit Kaset Samphan Soccer Event (KUS CUP) organized by the Parent-Teacher Association and (3) "Thot Phapa Kan Sueksa," a Buddhist religious event of making an off-season offering of robes to monks, organized by the Parent-Teacher Association.

1.5 Reciprocal network reinforcement. The network constantly hosts the School's Board of Committee meetings, with the School offering venue and facilities support. As a source of ideas to be fed into planning, policy making, and implementation guidelines, which, together, contribute to the success of any activity, meetings are, therefore, an important event that must be carried out by the network. Meetings are a network-sponsored activity that convenes members for the purposes of exchanging knowledge and ideas, tackling an issue, defining the network's scope of work, raising funds, and allocating budget to the School, among others.

1.6 Strategic interdependence. Coercing interdependence on its members in terms of knowledge

sharing and carrying out activities is instrumental in turning a network into a powerful entity, as each member becomes convinced that he/she is an integral part of an interdependent network group. In addition, knowledge sharing is very important as it invokes reciprocity, i.e. mobilization and sharing of resources to achieve a mission; knowledge sharing, therefore, project guidelines, procedures, as well as modus operandi of a network. Active involvement and knowledge sharing are instrumental in pushing forward network-organized activities. The network sets aside operating budget, as requested by the School, in such aspects as academic, personnel, and information technology, and channels the budget through network members in charge of relevant activities/projects, enabling the realization of the network’s planned operation.

1.7 Interactive exchanges among network members. The network constantly: holds interactive exchange sessions among the School’s Management Executives, Parent-Teacher Association, and Alumni Association; initiates organized activities such as organized correspondence or informal dialogues; sets up venues intended for exchange of ideas; holds joint seminar sessions; and sponsors a wide range of activities that seek to strengthen closer relationships among teachers, parents and students.

In conclusion, networking model is operated by having shared activities constantly because activities attract members to participate in educational development and allows network members to have interactive exchanges and develop their relations. Therefore, the permanence of the network is built by having constant activities. Each school shares a common way of building their network as shown in Figure 3

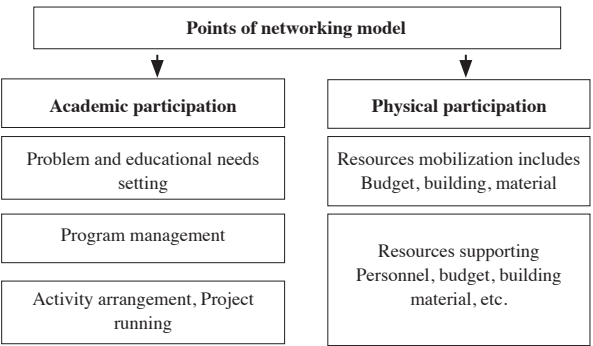


Figure 3 Points of networking model

1.8 Applicability assessment of the proposed networking model involving participation in education development. Applicability assessment conducted by the experts on the proposed networking model involving participation in education development with regard to five aspects—i.e. (1) utility, (2) feasibility, (3) propriety, (4) accuracy and (5) evaluation accountability—found that the model was of high quality in all aspects. Specifically, the propriety aspect yielded the highest mean of 4.38 and a standard deviation is 0.23, followed by the evaluation accountability aspect with a mean of 4.29 and a standard deviation of 0.23. The feasibility aspect gave the lowest mean of 4.00, with a standard deviation of 0.38.

The first element of participation in education development, i.e. shared perspective, the proposed model had the highest means of 4.33 and 4.33 on the utility and propriety aspects of applicability, with related standard deviations of 0.58 and 0.58, respectively. Other aspects shared an equal level of mean values.

The second element, i.e. shared vision, the proposed model had the highest mean of 4.24 on the feasibility aspect of applicability, with related standard deviation of 0.92, followed by the utility aspect with mean value of 4.17 and standard deviation of 0.71. The accuracy aspect was found to have the lowest mean of 3.55, with a standard deviation of 1.16.

The third element, i.e. shared benefits and interests, the proposed model had the highest mean of 4.67 on the propriety aspect of applicability, with related standard deviation of 0.58. Other aspects shared an equal level of mean values.

The fourth element, i.e. network members’ active involvement, the proposed model had the highest means of 4.33 and 4.33 on the propriety and evaluation accountability aspects of applicability, with related standard deviations of 0.58 and 1.15, respectively. Other aspects shared an equal level of mean values.

The fifth element, i.e. reciprocal network reinforcement, the proposed model had the highest means of 4.67 and 4.67 on the propriety and evaluation accountability aspects of applicability, with related standard deviations of 0.58 and 0.58, respectively.

The sixth element, i.e. interdependence, the proposed model had an equal level of mean values on all aspects of applicability, i.e. utility, feasibility, propriety, accuracy, and evaluation accountability.

The seventh element, i.e. interactive exchanges, the proposed model had the highest means

of 4.00 and 4.00 on the propriety and evaluation accountability aspects of applicability, with related standard deviations of 0.21 and 1.00, respectively. Other aspects shared an equal level of mean values. Assessment results are shown in Table 1.

Table 1 Applicability assessment of the proposed networking model involving participation in education development

Elements of participation in educational management		Aspects of applicability assessment									
		Utility		Feasibility		Propriety		Accuracy		Evaluation Accountability	
		\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.	\bar{x}	S.D.
1	Shared perspective	4.33	0.58	4.00	0.21	4.33	0.58	4.00	0.12	4.00	1.00
2	Shared vision	4.33	0.58	3.33	0.58	4.33	0.58	4.00	0.12	4.3	0.58
3	Shared benefits and interests	4.33	0.58	4.33	0.58	4.67	0.58	4.33	0.58	4.33	0.58
4	Network members' active involvement	4.00	1.00	4.00	1.00	4.33	0.58	4.00	0.12	4.33	1.15
5	Reciprocal network reinforcement	4.33	0.58	4.33	0.58	4.67	0.58	4.33	0.58	4.67	0.58
6	Interdependence	4.33	0.58	4.33	0.58	4.33	0.58	4.33	0.58	4.33	0.58
7	Interactive Exchanges	3.67	0.58	3.67	0.58	4.00	0.21	3.67	0.58	4.00	1.00
Overall Statistics		4.19	0.26	4.00	0.38	4.38	0.23	4.10	0.25	4.29	0.23

Discussions

This study seeks to investigate a networking model concerning participation in education development, and to assess the applicability of such a model, taking a set of demonstration schools as a case study. The results are discussed next.

1. Networking model involving participation in education development.

Our investigation into the proposed networking model involving participation in education development for the four targeted demonstration schools identified seven elements: (1) mutual recognition of shared perspective with regard to the existence of the network; (2) determination of the network's shared vision; (3) identification of the network's shared benefits and interests; (4) identification of each network member's involvement; (5) reciprocal network reinforcement; (6) strategic interdependence and (7) interactive exchanges among network members. These elements are consistent with those previously developed, considered valid yet appropriate, and actually applied to education network management with highest mean values, such as ones proposed by Iamdee, Chaiyakit, Ngaorangsee, & Chanchalo (2013) who, in the context of Office of Primary Education District, developed a networking model encouraging participation in education management that consists of four elements: (1) network organization; (2) network management; (3) practical use

of network and (4) network sustainability. Also, our identified elements are in accordance with a study by Thepkraiwan (2011) which maintains that a cooperative network which brings success to quality education management must bear the following elements: (1) core activities that enhance network's operational effectiveness; (2) a clear scope and mission for education management; (3) appropriate techniques/methods employed to boost the potential of network members; (4) network empowering procedure; (5) good network leadership and (6) performance and feedback. In addition, as an important finding, our proposed networking model found that working under closely coordinated efforts contributes to education development as network members with clearly defined roles seek to carry out their duties in accordance with specified objectives. This particular finding is in line with a study by Saunphakdee, Chatrurachiwin, & Chaemchoi (2016), which indicates that working under a well-networked environment is the most important factor contributing to sustainable development, as each network member is enabled to better employ communication and information/experience exchanging mechanisms, make use of networked efforts, and wield bargaining power in an attempt to achieve common goals.

2. Applicability assessment of the proposed networking model involving participation in education development.

Applicability assessment on the proposed networking model involving participation in education development with regard to five aspects-i.e. (1) utility, (2) feasibility, (3) propriety, (4) accuracy and (5) evaluation accountability-found that the model was of high quality in all aspects. Specifically, the propriety aspect of applicability yielded the highest mean, followed by the evaluation accountability aspect, indicating that the proposed networking model is focused on related rules, regulations, morality, and ethics in its assessment, taking into careful consideration strengths, weaknesses and limitations and eventually leading to convincing conclusions in compliance with established principles, yet indicating the model's applicability in terms of evaluation accountability, which focuses on improvement of and accountability for the assessment process and products. This underscores the fact that the proposed networking model bears strength in terms of specifying rules/regulations and determining accountability. In addition, it was found that the proposed model involves an information-generating process that meets the

needs of assessors, ensuring that benefits arising from applicability assessment are in response to the needs of stakeholders in a timely, inclusive, and applicable manner. One of the important conditions that led to the appropriate generation of the proposed networking model was the fact that the researchers based their building and development of the model on a strong case study of well-networked demonstration schools. Also, the success was due to the fact that the networking model development was systematically carried out in accordance with well-established principles of model development. Furthermore, the proposed model was examined by experts with professional expertise in cooperative networking and development of education management. Such an elaborate model-building process eventually led to an effective networking model in line with the cooperative networks developed in the context of municipal schools by Saunphakdee, Chatrurachiwin, & Chaemchoi (2016), who maintain that an effective, practical, inclusive and reliable networking model for the development of education management that yields the highest level of applicability must be developed based on strong conceptual and theoretical foundations, and assessed by professional expertise. Finally, it was found that the sixth element, interdependence, shared an equal level of applicability across all the five aspects: utility, feasibility, propriety, accuracy, and evaluation accountability.

Suggestions

1. Suggestions for application

1.1 Prior to the real application of the networking model involving participation in education management, a preview session should be introduced in order to secure mutual understanding and provide guidelines for effective implementation to relevant personnel.

1.2 Agencies involved in education management may apply the model to create networks of cooperation among schools in the neighborhood, or among schools in different areas but with a similar context. In any case, the structure of each element should be made flexible in accordance with the context of each school.

2. Suggestions for further research

Future research efforts should be focused on possible directions—and their problems—for network development involving participation of schools, parents and alumni in pursuit of improved learning potential and greater operational effectiveness of the network.

References

- Charoenwongsak, K. (2012). Network management: an important strategy for the success of education reform. *Management and Development Mahasarakarm University*, 4(1), 192-207.
- Iamdee, S., Chaiyakit, M., Ngaorangsee K., & Chanchalo. S. (2013). Development of networking management system encouraging participation in educational management: A case of Office of Primary Education District. *Journal of Education Naresuan University*, 15, 216-224.
- Office of the National Education Commission. (2002). *National Education Act of 1999 (Second Amendment)*. Bangkok: Phrik Wan Graphic.
- Saunphakdee, B., Chatrurachiwin, C., & Chaemchoi, S. (2016). Formations of cooperative networks aimed to develop educational management in schools under the supervision of municipality. *Journal of Education Naresuan University*, 18(4), 99-113.
- Sonsong, N., & Inrak. S. (2018). Participatory management conducted by the network for promoting the management of provincial secondary education. *Suan Dusit Graduate School Academic Journal*, 14(1), 115-132.
- Thepkraiwan P. (2011). *The development of a collaborative networking model in pursuit of quality education management in small primary schools*. (Doctoral dissertation, Khon Kaen University). KKKU Library.